

Attachment C

**Modifications to the Original Regulatory Proposal, as
Proposed to the Board at the December 11, 2008 Hearing**

**PROPOSED REGULATION FOR IN-USE ON-ROAD DIESEL
VEHICLES SCHEDULED FOR CONSIDERATION BY THE
BOARD IN DECEMBER 2008 WITH PROPOSED MODIFIED
TEXT**

Shown on the following pages are proposed modifications to the original proposed regulation set forth in Appendix A to the Staff Report: Initial Statement of Reasons, which was released October 24, 2008. Text proposed for adoption during the 45-day notice period is shown without underline as permitted in title 1, California Code of Regulations, section 8. Text proposed for amendment is shown in underline for additions and ~~strikeout~~ for deletions.

Appendix A

Proposed Regulation for In-Use On-Road Diesel Vehicles

PROPOSED REGULATION ORDER

Adopt the following section of title 13, California Code of Regulations, to read as set forth in the following pages.

Section 2025. Regulation to Reduce Emissions of Diesel Particulate Matter, Oxides of Nitrogen and Other Criteria Pollutants, and Greenhouse Gases from In-Use Heavy Duty Diesel-Fueled Vehicles

Amend the following sections of title 13, California Code of Regulations, described in Appendix B.

Section 1956.8 Exhaust Emissions Standards and Test Procedures – 1985 and Subsequent Model Heavy-Duty Engines and Vehicles.

Section 2020. Purpose and Definitions of Diesel Particulate Matter Control Measures.

Section 2022 Diesel Particulate Matter Control Measure for Municipality or Utility On-road Heavy-duty Diesel-fueled Vehicles

Section 2022.1 Determining Compliance for a Municipality or Utility

Section 2027 In-Use On-Road Diesel-Fueled Heavy-Duty Drayage Trucks

Section 2449 General Requirements for In-Use Off-Road Diesel-Fueled Fleets

Section 2456 Portable Engine and Equipment Registration

Section 2479 Regulation for Mobile Cargo Handling Equipment at Port and Intermodal Rail Yards

Section 2485 Airborne Toxic Control Measure to Limit Diesel Fueled Commercial Motor Vehicle Idling

Amend the following sections of title 17, California Code of Regulations, to read as set forth in Appendix B.

Section 93116 Airborne Toxic Control Measure for Diesel Particulate Matter from Portable Engines Rated at 50 Horsepower and Greater

**DRAFT PROPOSED REGULATION TO REDUCE EMISSIONS OF
DIESEL PARTICULATE MATTER, AND OTHER POLLUTANTS
FROM IN-USE HEAVY-DUTY DIESEL-FUELED VEHICLES**

Adopt new section 2025, in title 13, article 4.5, chapter 1, California Code of Regulations (CCR) to read as follows: (Note that the entire text of section 2025 set forth below is new language proposed to be added to the California Code of Regulations.)

Section 2025. Regulation to Reduce Emissions of Diesel Particulate Matter, Oxides of Nitrogen and Other Criteria Pollutants, and Greenhouse Gases from In-Use Heavy-Duty Diesel-Fueled Vehicles

(a) *Purpose.*

The purpose of this regulation is to reduce emissions of diesel particulate matter (PM), oxides of nitrogen and other criteria pollutants, and greenhouse gases from in-use diesel-fueled vehicles.

(b) *Scope and Applicability.*

- (1) Except as provided in subsection (c), this regulation applies to any person, business, federal government agency, school district or school transportation provider that owns or operates, leases, or rents, affected vehicles that operate in California. The regulation also applies to persons that sell affected vehicles in California. Affected vehicles are those that operate on diesel-fuel, dual-fuel, or alternative diesel-fuel that are registered to be driven on public highways, were originally designed to be driven on public highways whether or not they are registered, yard trucks with off-road engines, both engines of two engine sweepers, schoolbuses, and have a manufacturer's gross vehicle weight rating (GVWR) greater than 14,000 pounds. Affected vehicles also include shuttle vehicles defined in section 2025(d)(64).

(c) *Exemptions*

This regulation does not apply to:

- (1) Vehicles subject to the solid waste collection vehicle rule commencing with title 13, CCR, section 2021;
- (2) On-road diesel-fueled heavy-duty vehicles over 14,000 pounds owned or operated by a municipality, that comply with the Best Available Control Technology (BACT) requirements of title 13, section 2022.1(a)(1);
- (3) Vehicles subject to the fleet rule for transit agencies commencing with title 13, CCR, section 2023;
- (4) Vehicles subject to the rule for mobile cargo handling equipment at ports and intermodal rail yards commencing with title 13, CCR, section 2479;
- (5) Military tactical support vehicles, as described in title 13, CCR, section 1905;

- (6) Authorized emergency vehicles as described in California Vehicle Code (Veh. Code), section 165;
- (7) Off-road vehicles subject to title 13, CCR, sections 2401, 2411, 2421, 2432, and 2449;
- (8) Dedicated snow-removal vehicles as defined in section 2025(d)(14)
- (9) Two-engine cranes as defined in title 13, CCR, section 2449(c)(56).
- (10) Historic vehicles as defined in section 2025(d)(35); and
- (11) Motor homes for non-commercial private use.

(d) *Definitions*

For purposes of this regulation, the following definitions apply:

- (1) “*2010 Model Year NOx Emissions Equivalent*” means:
 - (A) Emissions from an engine certified to the 2004 model year heavy-duty diesel engine emissions standard that is equipped with a verified diesel emission control strategy (VDECS) that reduces NOx exhaust emissions by more than 85 percent; or
 - (B) Emissions from an engine certified to the 2007 model year heavy-duty diesel engine emissions standard that is equipped with a VDECS that reduces NOx exhaust emissions by more than 70 percent.
- (2) “*2007 Model Year NOx Emissions Equivalent*” means:
 - (A) Emissions from an engine certified to the 2003 or prior model year heavy-duty diesel engine emissions standard that is equipped with a VDECS that reduces NOx exhaust emissions by at least 70 percent; or
 - (B) Emissions from an engine certified to the 2004 through 2006 model year heavy-duty diesel engine emissions standard that is equipped with a VDECS that reduces NOx exhaust emissions by at least 40 percent; or
 - (C) Emissions from a 2004 model year NOx emissions equivalent heavy duty diesel engine, as defined in section 2025(d)(3)(A), that is equipped with a VDECS that reduces NOx exhaust emissions by at least 40 percent.
- (3) “*2004 Model Year NOx Emissions Equivalent*”
 - (A) Emissions from an engine certified to the 2003 or prior model year heavy duty diesel engine that was built to 2004 engine emission standards and was not used in any manufacturer’s averaging, banking and trading program.
 - (B) Emissions from a pre-2004 model year heavy duty diesel engine that is equipped with a VDECS that reduces NOx exhaust emissions by at least 55 percent.
- (4) “*Agricultural Operations*” means:

- (A) The activity of growing or harvesting crops for the primary purpose of making a profit or providing a livelihood including any horticultural, viticultural, aquacultural, forestry, dairy, livestock, poultry, bee or farm product. Raising plants at nurseries that sell exclusively retail are not included, or
- (B) The cutting or removing of both of timber, other solid wood products, including Christmas trees, and biomass from forestlands for commercial purposes. The services also include all the work incidental thereto, including but not limited to, construction and maintenance of roads, fuel breaks, firebreaks, stream crossings, landings, skid trails, beds for falling trees, fire hazard abatement, and site preparation that involves disturbance of soil or burning of vegetation following forest removal activities. Forest operations include the cutting or removal of trees, tops, limbs and or brush which is processed into lumber and other wood products, and or for landscaping materials, or biomass for electrical power generation. Forest operations do not include conversion of forestlands to other land uses such as residential or commercial developments.

(5) "Agricultural Vehicle" means;

- (A) An on-road vehicle, or a tractor-trailer combination, specially designed for the purposes of delivering fertilizer or crop protection chemicals that is required to display a hazardous material placard and exclusively delivers fertilizer or crop protection chemicals for use in agricultural operations from a distribution center to a farm, and is owned by a business holding a valid fertilizer or pest control license.
 - 1. Owners of such vehicles must hold;
 - a. a valid pest control dealer license issued by the California Department of Pesticide Regulation as required under Food & Agricultural Code, Division 6, Chapter 7, Article 6, Section 12101 or,
 - b. a valid fertilizing materials license issued by the California Department of Food and Agriculture as required under Food & Agricultural Code, Division 7, Chapter 5, Article 4, Section 14591(a) and,
 - 2. Such vehicles must exclusively carry products defined under one of the following, and be required to display an appropriate placard, as required by the United States Department of Transportation:
 - a. 49 CFR, CHAPTER 1, PART 173.127 (Division 5.1), or
 - b. 49 CFR, CHAPTER 1, PART 173.132 (Division 6.1), or
 - c. 49 CFR, CHAPTER 1, PART 173.115 Class 2, (Division 2.1, 2.2, and 2.3),
 - d. 49 CFR, CHAPTER 1, PART 173.136 Class 8,
 - e. 49 CFR, CHAPTER 1, PART 173.140 Class 9.

- (B) A vehicle owned by a farming business, not operated for compensation, and used exclusively in agricultural operations. This includes supply trucks, cattle trucks, and other vehicles, but excludes vehicles that do not directly support farming operations such as personal use vehicles, vehicles rented or leased out, or vehicles used in a transportation business, or
 - (C) A vehicle not owned by a farming business that is exclusively engaged in agricultural operations. This includes manure spreaders, hay dispensing trucks, water trucks, bedding trucks and others, but excludes vehicles that supply any products, materials, personnel, or equipment to the farm except as allowed in (A) above, or
 - (D) A vehicle that exclusively transports any horticultural, viticultural, aquacultural, forestry, dairy, livestock, poultry, bee or farm products such as raw, unprocessed crops, livestock, fish, or fowl from the farm to the first point of processing after harvest.
- (6) *“Alternative Diesel Fuel”* means any fuel used in diesel engines that is not a reformulated diesel fuel as defined in sections 2281 and 2282 of title 13, CCR, and does not require engine or fuel system modifications for the engine to operate, other than minor modifications (e.g., recalibration of the engine fuel control) that may enhance performance. Examples of alternative diesel fuels include, but are not limited to, biodiesel, Fischer-Tropsch fuels, and emulsions of water in diesel fuel. Natural gas is not an alternative diesel fuel. An emission control strategy using a fuel additive will be treated as an alternative diesel fuel based strategy unless:
- (A) the additive is supplied to the engine fuel by an on-board dosing mechanism, or
 - (B) the additive is directly mixed into the base fuel inside the fuel tank of the engine, or
 - (C) the additive and base fuel are not mixed until engine fueling commences, and no more additive plus base fuel combination is mixed than required for a single fueling of a single engine or vehicle.
- (7) *“Alternative Fuel”* means natural gas, propane, ethanol, methanol, gasoline (when used in hybrid electric vehicles only), hydrogen, electricity, fuel cells, or advanced technologies that do not rely on diesel fuel. *“Alternative fuel”* also means any of these fuels used in combination with each other or in combination with other non-diesel fuels.
- (8) *“Alternative-Fueled Engine”* means an engine that is exclusively fueled with a fuel meeting the definition of alternative fuel.
- (9) *“Best Available Control Technology BACT Standard”* (BACT) means the exhaust PM and NOx standards that must be met according to the requirements of section 2025(f).

- (10) “*Commercial Vehicle*” means a motor vehicle or combination of motor vehicles as defined in California Veh. Code, section 260.
- (11) “*Common Ownership or Control*” means being owned or managed day to day by the same person, corporation, partnership, or association. Vehicles managed by the same directors, officers, or managers, or by corporations controlled by the same majority stockholders are considered to be under common ownership or control even if their title is held by different business entities. Common ownership or control of a federal government vehicle shall be the primary responsibility of the unit that is directly responsible for its day to day operational control.
- (12) “*Compliance Year*” means January 1 through December 31 of a calendar year.
- (13) “*Compression Ignition Engine*” means an internal combustion engine with operating characteristics significantly similar to the theoretical diesel combustion cycle. The regulation of power by controlling fuel supply in lieu of a throttle is indicative of a compression ignition engine.
- (14) “*Dedicated Snow Removal Vehicle*” means a vehicle that has permanently affixed snow removal equipment such as a snow blower or auger and is operated exclusively to remove snow from public roads, private roads, or other paths to allow on-road vehicle access.
- (15) “*Diesel Fuel*” has the same meaning as defined in title 13, CCR, sections 2281 and 2282.
- (16) “*Diesel Particulate Filter*” means an emission control technology that reduces diesel particulate matter emissions by directing the exhaust through a filter that physically captures particles but permits gases to flow through. Periodically, the collected particles are either physically removed or oxidized (burned off) in a process called regeneration.
- (17) “*Diesel Particulate Matter (PM)*” means the particles found in the exhaust of diesel-fueled compression ignition engines. Diesel PM may agglomerate and adsorb other species to form structures of complex physical and chemical properties.
- (18) “*Diesel PM Index*” for the purposes of section 2025(h)(3)(B) means an indicator of the overall PM emission rate.
- (19) “*Diesel PM Target Rate*” means the diesel PM fleet average that a specific fleet must meet in a compliance year in order to show compliance with the fleet average requirements.
- (20) “*Drayage Truck*” is the same as defined in title 13, CCR. Section 2027.
- (21) “*Dual-Fuel Engine*” means any compression ignition engine that is engineered and designed to operate on a combination of alternative fuels, such as compressed natural gas (CNG) or liquefied petroleum gas (LPG) and diesel fuel or an alternative diesel fuel. These engines have two separate fuel systems, which inject both fuels simultaneously into the engine combustion chamber. A dual-fuel engine is not an alternative-fuel engine.

(22) “*Electronic Tracking System*”

- (A) The tracking device must acquire date, time, and engine-on data at a minimum of 15 minute intervals, with no more than 30 minute data gaps. The tracking device must also acquire location data for vehicles claiming to operate exclusively in NOx-exempt areas and for vehicles that must document low use in California when their total miles of operation exceed 1,000 miles and total hours of operation exceed 100 hours.
- (B) The tracking records must be collected by an independent entity with no business relationship to the owners of the vehicles being tracked, other than to provide the tracking service.

(23) “*Emergency Vehicle*” is as defined in California Veh. Code, section 27156.2.

(24) “*Emergency Operation*” means operation of a vehicle to help alleviate an immediate threat to public health or safety. Examples of emergency operation include repairing or preventing damage to roads, buildings, terrain, and infrastructure as a result of an earthquake, flood, storm, fire, terrorism, or other infrequent act of nature. Emergency operation includes emergency support vehicle travel to and from an emergency event when dispatched by a governmental emergency management agency. Routine operation to prevent public health risks does not constitute emergency operation.

(25) “*Emergency Support Vehicle*” means a vehicle that has been dispatched by a governmental emergency agency that is used to transport services or supplies in connection with an emergency operation.

(26) “*Emission Factor*” means diesel PM or oxides of nitrogen (NOx) emission rate in grams per mile (g/mile) as shown in Appendix A. For engines that have been retrofit with VDECS, the PM Emission Factor is reduced by 50 percent for a level 2 VDECS, and 85 percent for a level 3 VDECS; the NOx Emission Factor is reduced by the percentage NOx emission reductions that are verified, if any. The PM Emission Factor is not reduced for a level 1 VDECS.

(27) “*Executive Officer*” means the Executive Officer of the ARB or his or her authorized representative.

(28) “*Farm*” means a physical location the primary purpose of which is making a profit or providing a livelihood from;

- (A) horticultural, viticultural, aquacultural, forestry or crops or plants that are grown and harvested at the location, (Nurseries that sell exclusively retail are not farms), or

- (B) raising, breeding, grazing, feeding, or milking animals, fish, fowl, or bees.

(29) “*Farming Business*” means the cultivating, operating, or managing a farm for profit, either as owner or tenant. A farming business does not include businesses that derive their principal source of income from providing agricultural services such as soil preparation, veterinary, farm labor, or management for a fee or on a contract basis, or are engaged in the business of breeding, raising, and caring for dogs, cats, or other pet animals.

- (30) “*First Point of Processing*” means the location where harvested crops, bees, fowl, fish, livestock, animals, or their products are altered from their original state, packaged, or prepared for transportation. Such locations include, but are not limited to, packinghouses, slaughterhouses, cotton gins, nut hullers/shellers and processors, dehydrators, lumber mills, feed and grain mills, and biomass facilities located at a first processing facility, such as a saw mills, or biomass facilities that receive more than half of its waste in the form of unprocessed agricultural materials. First point of processing does not include locations where subsequent processing, canning, or similar activities occur.
- (31) “*Fleet*” means vehicles traveling in California that are subject to this regulation owned by a person, business, or government agency. A fleet consists of one or more vehicles.
- (A) “*Agricultural Fleet*” means a fleet utilizing the agricultural fleet provision in section 2025(n). A fleet owner utilizing the agricultural fleet provisions must include all vehicles under common ownership or control in the agricultural fleet including those vehicles that are not agricultural vehicles. Fleets not utilizing the agricultural fleet provision must comply with section 2025(e).
- (B) “*Federal Fleets*” means vehicles in fleets owned by a department, agency, or instrumentality of the federal government of the United States of America and its departments, divisions, public corporations, or public agencies. With respect to the Department of Defense and its service branches, federal fleets may be managed regionally, locally, or a combination of regional and local management. There may be multiple federal fleets within a military service or an installation.
- (C) “*Rental or Leased Fleets*” means vehicles that are owned by a person (rental or leasing entity) for the purpose of renting or leasing, as defined in California Uniform Commercial Code, section 10103(a)(10) such vehicles to other persons (renters or lessees) for use or operation.
1. Prior to the effective date of this regulation, vehicles subject to this regulation that are owned by a rental or leasing entity and rented or leased to the same renter or lessee for a duration of at least one year, are considered part of the fleet of the renter or lessee rather than the rental or leasing entity, unless the parties to the lease modify the terms of the rental or lease agreement in writing.
 2. After the effective date of this regulation, vehicles that are subsequently rented or leased by the rental or leasing entity to the same renter or lessee for a period of one year or more may be excluded from the rental or leasing entity’s fleet and included in the fleet of the renter or lessee only if the written rental or lease agreement or amendment thereto specifically delineates such an arrangement.

3. Irrespective of the regulation's effective date, vehicles that are rented or leased for a period of less than one year must be included in the fleet of the rental or leasing entity.
 4. Unless the parties to a lease or rental agreement otherwise agree in writing, a vehicle leased or rented is considered part of the fleet of the rental or leasing entity if the written agreement prohibits the lessee or renter from modifying the leased or rented vehicle to comply with this regulation.
 - (D) "*Fleet Size*" means the total number of vehicles under common ownership or control even if they are part of different subsidiaries, divisions, or other organizational structures of a company or agency.
 - (E) "*Schoolbus Fleet*" means a fleet comprised only of vehicles that meet the definition of schoolbus given in section 2025(d)(63).
 - (F) "*Schoolbus Sub-Fleet*" means the schoolbuses in a fleet comprised of schoolbuses and vehicles other than schoolbuses.
 - (G) "*Small Fleet*" means a fleet with three or fewer vehicles. When determining fleet size, all of the vehicles under common ownership and control must be counted.
- (32) "*Heavy-Duty Pilot Ignition Engine*" means an engine designed to operate using an alternative fuel, except that diesel fuel is used for pilot ignition at an average ratio of no more than one part diesel fuel to ten parts total fuel on an energy equivalent basis. An engine that can operate or idle solely on diesel fuel at any time does not meet this definition.
- (33) "*Heavy Heavy-Duty Diesel Vehicle (HHD)*" for the purposes of this regulation, means a diesel motor vehicle having a manufacturer's gross vehicle weight rating greater than 33,000 pounds or a truck-tractor regardless of GVWR, or a motorcoach.
- (34) "*Highest Level VDECS*" means the highest level VDECS verified by ARB under its Verification Procedure, Warranty and In-Use Compliance Requirements for In-Use Strategies to Control Emissions from Diesel Engines (Verification Procedure), title 13, CCR, sections 2700-2710, for a specific engine as of 10 months prior to the compliance date, which the diesel emission-control strategy manufacturer and authorized diesel emission-control strategy dealer agree can be used on a specific engine and vehicle combination without jeopardizing the original engine warranty in effect at the time of application.
- (A) The highest level VDECS is determined solely on verified diesel PM reductions. Plus designations do not affect the diesel PM level assigned to a VDECS; that is, a level 3 Plus is the same diesel PM level as level 3.
 - (B) A level 2 VDECS shall not be considered the highest level VDECS as long as a level 3 VDECS can be retrofit on a vehicle in the fleet.
 - (C) Level 1 devices are never considered highest level VDECS for the purpose of this regulation.

- (35) “*Historic Vehicle*” means a vehicle that qualifies for a historical vehicle license plate pursuant to the California Veh. Code, section 5004, and is operated or moved over the highway primarily for the purpose of historical exhibition or other historic vehicle club activities.
- (36) “*Hybrid Vehicle*” means a vehicle that has a combination of an engine and onboard energy storage systems that provide for one or more of the following processes: motive power for starting the vehicle from a stop, motive power for accelerating the vehicle, recapture of energy when the vehicle decelerates. The energy storage systems can be electric, hydraulic, pneumatic or of any other type that recovers its energy directly or indirectly from the engine. In addition, the onboard energy storage systems of the hybrid vehicle can have the capability to supplement its energy from an external power source.
- (37) “*International Registration Plan (IRP)*” is a registration reciprocity agreement among states of the United States and provinces of Canada providing for payment of license fees on the basis of total distance operated in all jurisdictions.
- (38) “*Limited-Mileage Agricultural Vehicle*” means until January 1, 2017, an agricultural vehicle with a properly functioning odometer installed at all times, that operates less than the miles per calendar year specified below, based on the model year of the installed engine starting January 1, 2010:
- (A) A pre-1996 model year engine that is operated fewer than 15,000 miles; or
 - (B) A 1996 through 2005 model year engine that is operated fewer than 20,000 miles; or
 - (C) A 2006 or newer model year engine that is operated fewer than 25,000 miles.
- (39) “*Low-Mileage Agricultural Vehicle*” means until January 1, 2023, an agricultural vehicle that continuously operates less than 10,000 miles per calendar year starting January 1, 2010. From January 1, 2010, such vehicles must have a properly functioning odometer installed at all times.
- (40) “*Low-use Schoolbus*” means a schoolbus whose propulsion engine was operated in California for fewer than 1,000 miles during the preceding 12-month period from January 1 to the end of December. Such vehicles must have a properly functioning odometer installed at all times but are not required to have an hour-meter.
- (41) “*Low-use Vehicle*” means a vehicle whose propulsion engine was operated in California for fewer than 1,000 miles and less than 100 hours during the preceding 12-month period from January 1 to the end of December. Such vehicles must have a properly functioning odometer installed at all times.
- (42) “*Medium Heavy-Duty Diesel Vehicle (MHD)*” for the purposes of this regulation, means a diesel motor vehicle having a manufacturer's gross vehicle weight rating less than or equal to 33,000 pounds excluding truck-tractors regardless of GVWR.
- (43) “*Military Tactical Vehicle*” means a vehicle that meets military specifications, is owned by the U.S. Department of Defense and/or the U.S. military services or its

allies, and is used in combat, combat support, combat service support, tactical or relief operations or training for such operations.

(44) “Motorcoach (MC)” is a for hire, on-road motor vehicle having an under floor luggage compartment separate from the passenger cabin used for conveying passengers, is at least 35 feet in length, and is designed for and has seating capacity for 40 or more passengers.

(44)(45) “Motor Carrier” is the same as defined in California Veh. Code section 408 for fleets other than those that are comprised entirely of schoolbuses, which for the purposes of this regulation, means the registered owner, lessee, licensee, school district superintendent, or bailee of any schoolbus, who operates or directs the operation of any such bus on either a for-hire or not-for-hire basis.

(45)(46) “Motor Home” means a single vehicular unit designed for human habitation for recreational or emergency occupancy and built on, or permanently attached to, a self-propelled motor vehicle chassis, chassis cab, or van, which becomes an integral part of the completed vehicle.

(46)(47) “New Fleet” means a fleet that is acquired or that enters California after January 1, 2011. Such fleets may include new businesses or out-of-state businesses that bring vehicles into California for the first time after January 1, 2011.

(47)(48) “Non-Commercial Use” means any use or activity where a fee is not charged and the purpose is not the sale of a good or service, and the use or activity is not intended to produce a profit.

(48)(49) “NOx BACT” means an on-road engine newly manufactured in 2010 or later or a 2010 emissions-equivalent engine as defined in section 2025(d)(1) or a Tier 4 Final Engine.

(49)(50) “NOx Exempt Areas” are the following counties – Alpine, Colusa, Del Norte, Glenn, Humboldt, Lake, Lassen, Mendocino, Modoc, Monterey, Plumas, San Benito, San Luis Obispo, Santa Barbara, Santa Cruz, Shasta, Sierra, Siskiyou, Trinity, Tehama, and Yuba.

(50)(51) “NOx Exempt Vehicle” is any vehicle identified in this section in paragraphs (A) through (E) ~~(D)~~ below that is exempt from the NOx performance requirements for the compliance years specified in section 2025(q).

A NOx exempt vehicle is:

- (A) A schoolbus as defined in section 2025(d)(63); or
- (B) A vehicle subject to this regulation that operates exclusively in the NOx exempt areas defined in section 2025(d)(50); or
- (C) A vehicle subject to this regulation that is granted a compliance extension under the early action provision of section 2025(q)(7); or
- (D) A NOx mileage exempt vehicle, as defined in section 2025(d)(53).
- (E) A motorcoach as defined in section 2025(d)(44).

~~(51)~~(52) “*NOx Index*” for the purposes of section 2025(h)(2)(B) means an indicator of a fleet’s overall NOx emission rate.

~~(52)~~(53) “*NOx Mileage Exempt Vehicle*” is exempt from the NOx performance requirements during the compliance years specified in section 2025(q),(1), and (h) regardless of where the vehicle is operated and is limited to:

- (A) A heavy heavy-duty diesel yard truck or other heavy heavy-duty diesel vehicle that has a power take off system to perform work in a stationary mode, that is operated fewer than 7,500 miles and less than 250 hours per year;
- (B) A medium heavy-duty diesel yard truck or other medium heavy-duty diesel vehicle that has a power take off system to perform work in a stationary mode that is operated fewer than 5,000 miles and less than 175 hours per year;
- (C) A heavy heavy-duty diesel vehicle that does not have a power take off system and does not perform work in a stationary mode and is operated fewer than 7,500 miles per year, with no hours limitation; or
- (D) A medium heavy-duty diesel vehicle that does not have a power take off system and does not perform work in a stationary mode and is operated fewer than 5,000 miles per year, with no hours limitation.

~~(53)~~(54) “*NOx Target Rate*” means the NOx fleet average that a specific fleet must meet in a compliance year in order to show compliance with the fleet average requirements.

~~(54)~~(55) “*Oxides of Nitrogen (NOx)*” means compounds of nitric oxide, nitrogen dioxide, and other oxides of nitrogen. Nitrogen oxides are typically created during combustion processes and are major contributors to smog formation and acid deposition, and to the formation of particulate matter.

~~(55)~~(56) “*Owner*” means either (A) the person registered as the owner or lessee of a vehicle by the California Department of Motor Vehicles (DMV), or its equivalent in another state, province, or country; or (B) a person shown by the registered owner to be legally responsible for the vehicle's maintenance. The person identified as the owner on the registration document or title carried on the vehicle at the time a citation is issued shall be deemed the owner unless that person demonstrates that another person is the owner of or legally responsible for the vehicle. Owners include persons listed on the registration document as the lessee of the vehicle. Owner also includes organizations within the federal government for vehicles not registered in any state or local jurisdiction and operated by a branch, agency or other department of the federal government. For the federal government, the owner shall be the entity required to maintain accountability for the vehicle or the organization that is shown by the accountable entity to be responsible for the vehicle’s maintenance.

~~(56)~~(57) “*Person*” means an individual, corporation, business trust, estate, trust, partnership, limited liability company, association, joint venture, government,

governmental subdivision, agency, or instrumentality, public corporation, or any other legal or commercial entity.

~~(57)~~(58) *“PM BACT”* means:

- (A) An engine equipped with the highest level VDECS for PM or an engine originally equipped with a diesel particulate filter.
- (B) From January 1, 2011 through January 1, 2017, the Executive Officer may annually grant a one-year extension of the compliance deadline based on the evaluation of information submitted pursuant to section 2025(s)(7) that a vehicle’s engine cannot be equipped with the highest level VDECS for PM provided all other vehicles are in compliance with the PM BACT requirements of the compliance year.
- (C) By January 1, 2018, any vehicle that is not equipped with the highest level VDECS for PM must be replaced or have its engine replaced with one than can be equipped with the highest level VDECS for PM.

~~(58)~~(59) *“Governmental Agency”* means any federal, state, or local governmental agency, including, public schools, water districts, or any other entity with taxing authority.

~~(59)~~(60) *“Registered and Driven Safely On-Road”* means a vehicle that meets the requirements to be registered for on-road operation in California Veh. Code division 3, chap. 1, article 1, section 4000 et seq. (i.e., required to be registered or could be registered), and the requirements to be driven safely on-road in “Equipment of Vehicles” requirements in Veh. Code division 12, chap. 1, sections 24000 et seq. and “Size, Weight, and Load” requirements in Veh. Code division 15, sections 35000 et seq, or a vehicle defined as an implement of husbandry as defined in California Veh. Code division 16, chap. 1, section 36000 et seq.

~~(60)~~(61) *“Repower”* means to replace the engine in a vehicle with a newer engine certified to lower emission standards for PM or NOx or both as applicable.

~~(61)~~(62) *“Responsible Official”* means one of the following:

- (A) For a corporation: A president, secretary, treasurer, or vice president of the corporation in charge of a principal business function, their delegate, designee, or any other person who performs similar policy or decision-making functions for the corporation;
- (B) For a partnership or sole proprietorship: a general partner or the proprietor, respectively;
- (C) For a municipality, state, federal, or other governmental agency: either a principal executive officer or ranking elected official. For the purposes of this part, a principal executive officer of a federal agency includes the chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., a Regional Administrator of the U.S. EPA). For the purposes of the Department of Defense Military

Services, a commanding officer of an installation, base or tenant organization.

~~(62)~~(63) *“Schoolbus”* is a motor vehicle as defined in California Veh. Code, section 545.

~~(63)~~(64) *“Shuttle vehicle”* means a diesel-powered motor vehicle of any gross vehicle weight rating with a capacity of 10 or more passengers, routinely driving an average of 10 trips per day to or from airport terminals, marine terminals, and rail based stations.

~~(64)~~(65) *“Specialty Agricultural Vehicle”* means, until January 1, 2023, certain types of agricultural vehicles having the following body types that have received confirmation by the Executive Officer that it will be treated as a specialty agricultural vehicle:

- (A) A nurse rig is a motor truck designed or modified to be used exclusively for the fueling, repairing, or loading of an airplane or helicopter used for the dusting, spraying, fertilizing, or seeding of crops;
- (B) A cotton module mover which is a motortruck, or a truck tractor, in combination with a semitrailer, that is equipped with a self-loading bed and is designed and used exclusively to transport field manufactured cotton modules to a cotton gin;
- (C) A vehicle equipped with a water tank owned by a farmer, not operated for compensation, and used exclusively in agricultural operations to provide dust suppression on dirt roads providing access to agricultural fields and for the transportation of water for crop or tree irrigation;
- (D) A feed truck or mixer-feed truck, designed for dispensing food to livestock that is owned by a cattle or calf feedlot and exclusively used at such feedlot. Does not include a feed truck or mixer-feed truck used at other locations where cattle and calves exist such as dairies.

~~(65)~~(66) *“Three Day Pass”* means a fleet may operate a vehicle for single three day period each year in California without meeting the requirements of section 2025(e) provided that prior to entering California the vehicle owner has reported the information in section 2025(s)(3) and (s)(4) and the date the vehicle will be entering California.

~~(66)~~(67) *“Tier 0 Engine”* means an engine not subject to the requirements in title 13, CCR, section 2423; Title 40, Code of Federal Regulations (CFR), Part 89; or Title 40, CFR, Part 1039.

~~(67)~~(68) *“Tier 4 Final Engine”* means an engine subject to the final after-treatment-based Tier 4 emission standards in title 13, CCR, section 2423(b)(1)(B) and/or Title 40, CFR, Part 1039.101. This also includes engines certified under the averaging, banking, and trading program with respect to the Tier 4 FEL listed in title 13, CCR, section 2423(b)(2)(B) and/or Title 40, CFR, Part 1039.101

~~(68)~~(69) “*Truck-Tractor*” means a motor vehicle with a driver's cab and an engine, fitted with a coupling at the rear known as a fifth-wheel, and designed to pull a large trailer or semi-trailer on the open highway. Is also known as a bobtail.

~~(69)~~(70) “*Unique Vehicle*” means a vehicle for which:

- (A) a used vehicle that performs a similar function with a 2007 NOx equivalent emissions engine or cleaner is not available, and
- (B) a suitable cab and chassis upon which the truck bed could be mount is not available, and
- (C) a verified NOx emissions control device that could reduce the vehicle's exhaust NOx emissions is either installed or not available, and
- (D) the vehicle's engine is equipped with the highest level VDECS.

~~(70)~~(71) “*Utility*” is the same as defined in title 13, CCR, section 2022(b).

~~(71)~~(72) “*Verified Diesel Emission Control Strategy*” (VDECS) means an emissions control strategy, designed primarily for the reduction of diesel PM emissions, which has been verified pursuant to the Verification Procedures. VDECS can be verified to achieve level 1 diesel PM reductions (25 percent), level 2 diesel PM reductions (50 percent), or level 3 diesel PM reductions (85 percent). VDECS may also be verified to achieve NOx reductions. See also definition of Highest Level VDECS.

~~(72)~~(73) “*VDECS Failure*” means the condition of not achieving the emissions reductions to which the VDECS is verified. Such condition could be due to inappropriate installation, damage, or deterioration during use. If a level 3 VDECS is emitting visible smoke, it is assumed to have failed.

~~(73)~~(74) “*Yard Truck*” means a vehicle, with an on-road or off-road engine that is specifically designed to move trailers around freight yards. Yard trucks are also known as yard goats, yard dogs, trailer spotters or jockeys.

(e) *Performance Requirements*

Beginning with the applicable effective dates, a fleet owner must comply with the following requirements of this regulation:

- (1) The fleet owner must comply with the best available control technology (BACT) requirements of section 2025(f) or the BACT percentage limits of section 2025(g) or the fleet average requirements of section 2025(h). The compliance option need not be the same for each pollutant. The fleet owner may also opt to comply with the early compliance provision of section 2025(q)(7)
- (2) Schoolbus fleets, as defined in section 2025(d)(31)(E), must comply with the performance requirements of section 2025(j) and are exempt from NOx performance requirements as provided therein.
- (3) Each fleet that includes schoolbuses and other vehicles must meet the following requirements:

- (A) The schoolbus sub-fleet as defined in section 2025(d)(31)(F) must meet the requirements of section 2025(j).
 - (B) The remaining vehicles, excluding the schoolbus sub-fleet, must comply with the performance requirements of section 2025(e)(1) above; or the owner may include the schoolbus sub-fleet in the determination of compliance with the performance requirements of section 2025(e)(1). Schoolbuses used in this determination are still exempt from the NOx performance requirements. However, the owner may not use non-schoolbus vehicles to satisfy the schoolbus sub-fleet requirements of section 2025(j).
- (4) A drayage truck or utility vehicle must comply with the requirements of section 2025(k).
 - (5) Although the total number of vehicles under common ownership or control is determinative of fleet size, if some of the vehicles within the fleet are under the control of different responsible officials because they are part of different subsidiaries, divisions, or other organizational structures of a company or agency, the fleet owner may elect to have the vehicles under separate control comply and report compliance with the fleet averaging performance requirements or the BACT percentage limits requirements independently of other vehicles in the general "common ownership or control fleet."
 - (6) A fleet may meet the performance requirements of section 2025(e) by applying a VDECS that will achieve PM or NOx reductions or both as required, replacing an engine, or replacing a vehicle.
 - (7) Except as provided below in (B), the following is required for all fleet owners who elect to utilize the BACT percent limits option of section 2025(g), the fleet averaging option of section 2025(h), the optional requirements for small fleets of section 2025(i), the agricultural provisions of section 2025(n), the retired vehicle provisions of section 2025(l), or the exemptions or credits of sections 2025(q)(1), (2), (8), and (9):
 - (A)
 1. a valid California motor carrier of property number,
 2. a valid identification number assigned by the United States Secretary of the Department of Transportation, or
 3. a valid operating authority number issued by the Public Utilities Commission, or
 4. other applicable valid operating authority number approved by the Executive Officer.
 - (B) this requirement does not apply to anyone who owns personal, non-commercial, or unregistered motor vehicles.
 - (8) A vehicle, other than a schoolbus, that is exempt from the NOx performance requirements must comply with the requirements of section 2025(q)(1).

- (9) Small fleets may elect to meet the optional small fleet requirements of section 2025(i).
 - (10) All information specified in section 2025(s) must be reported to the Executive Officer.
 - (11) Records must be kept as specified in section 2025(t).
 - (12) Once a vehicle is required to be in compliance with this regulation, it must remain in compliance at all times that it is operating in California.
- (f) *Best Available Control Technology (BACT) Requirements*

Starting January 1, 2011, a fleet owner who elects to utilize the provisions of section 2025(f) to comply with either the PM BACT, NOx BACT, or both requirements must meet the applicable requirements set forth in sections (d) (58) or (49) for each vehicle within its fleet in accordance with the compliance schedule shown in Table 1. Each year the fleet must meet the requirements of all prior years on the schedule.

Table 1: Best Available Control Technology Compliance Schedule

<i>Compliance Deadline, as of January 1</i>	<i>Engine Model Years</i>	<i>BACT Requirements</i>
2011	Pre-1994	PM BACT
2012	2003 – 2004	PM BACT
2013	2005 – 2006	PM BACT
	1994 – 1999	NOx and PM BACT
2014	2000 – 2002	NOx and PM BACT
	All other model years	PM BACT
2015	Pre-1994	NOx and PM BACT
2016	2003 - 2004	NOx and PM BACT
2017	2005 – 2006	NOx and PM BACT
2018	All pre-2007	NOx and PM BACT
2019	All pre-2007	NOx and PM BACT
2020	All pre-2007	NOx and PM BACT
2021	2007 or equivalent	NOx and PM BACT
2022	2008	NOx and PM BACT
2023	2009	NOx and PM BACT

- (g) *BACT Percentage Limits.*
- (1) A fleet owner who elects to utilize the provisions of section 2025(g) for PM, NOx, or both must comply with the applicable performance requirements in sections (g)(2), (3), and (4) below and the reporting requirements of section 2025(s).

- (2) By January 1 of each compliance year, the fleet must meet PM BACT for the percentage of propulsion engines in the fleet as set forth in Table 2.
- (3) By January 1 of each compliance year, the fleet must meet NOx BACT for the percentage of engines in the fleet as set forth in Table 2.
- (4) If the calculated number of engines in each model year group required to be brought into compliance with the BACT percentage limits is not equal to a whole number, the owner shall round up to a whole number when the fractional part of the required number of engines is equal to or greater than 0.5, and round down if less than 0.5.

Table 2: Percent of Total Fleet That Must Comply with PM and NOx BACT

Compliance Deadline as of January 1	Percent of Total Fleet Complying with BACT	
	PM BACT	NOx BACT
2011	25%	NA
2012	50%	NA
2013	75%	25%
2014	100%	50%
2015	100%	50%
2016	100%	60%
2017	100%	80%
2018	100%	80%
2019	100%	80%
2020	100%	90%
2021	100%	90%
2022	100%	90%
2023	100%	100%

(h) *Fleet Averaging Option*

- (1) A fleet owner who elects to be subject to provisions of section 2025(h) for compliance with the fleet average requirement for PM, NOx, or both must comply with the applicable fleet averaging requirements of sections (h)(2) and (3) below and the reporting requirements of section 2025(s).

(2) *NOx Fleet Average.*

- (A) A fleet owner must demonstrate that on January 1 of each compliance year, starting in 2013 and ending on January 1, 2023, the calculated NOx Index of the applicable portion of the fleet was less than or equal to the calculated NOx Target Rate.

NOx exempt vehicles, as defined in section 2025(d)(51), need not be included in the calculation of the NOx Index or the NOx fleet average for those years that the vehicle is exempt.

(B) NOx Index: The following equation is to be used to calculate the NOx Index.

$$NOx\ Index = \frac{Sum\ of\ EF_{(HHD)} + Sum\ of\ EF_{(MHD)}}{Total\ number\ of\ vehicles\ subject\ to\ the\ NOx\ requirements}$$

Where:

EF_(HHD) = The NOx emission factor as specified in Appendix A for each heavy heavy duty (HHD) vehicle subject to the NOx requirements, or adjusted as applicable according to paragraphs 1. and 2. below.

EF_(MHD) = The NOx emission factor as defined in Appendix A for each medium heavy duty (MHD) vehicle subject to the NOx requirements, or adjusted as applicable, according to paragraphs 1. and 2. below.

1. For engines that have been retrofit with VDECS, the NOx emission factor is reduced by the percentage NOx emission reductions that are verified, except for 2010 model year NOx emissions equivalent engines, which shall use the emissions factor for 2010 and newer engines in Table A-2 in Appendix A.
2. The fleet owner may exclude 2010 model year engines equipped with a diesel particulate filter (DPF) from the fleet average calculation for any compliance year, and may exclude 2007 model year engines equipped with a DPF from the fleet average calculation through January 1, 2013.

(C) NOx Target Rate: The following equation is to be used to calculate the NOx Target Rate.

$$NOx\ Target\ Rate = \frac{Sum\ of\ Target_{(HHD)} + Sum\ of\ Target_{(MHD)} + Sum\ of\ Target_{(MC)}}{Total\ number\ of\ vehicles\ subject\ to\ the\ NOx\ requirements}$$

Where:

Target_(HHD) = The NOx target from Table 3 for each HHD vehicle subject to the NOx requirements.

Target_(MHD) = The NOx target from Table 3 for each MHD vehicle subject to the NOx requirements.

Target_(MC) = The NOx target from Table 3 for each MC vehicle subject to the NOx requirements.

*Table 3: Fleet NOx Targets
to be Used to Calculate NOx Target Rates (g/mile)*

<i>Compliance Deadline, as of January 1</i>	<i>Fleet NOx Targets for each compliance deadline</i>		
	MHD	HHD	MC
2013	8.5	14.4	<u>N/A</u>
2014	5.8	9.8	<u>N/A</u>
2015	5.8	9.8	<u>N/A</u>
2016	4.6	7.8	<u>N/A</u>
2017	4.0	6.0	<u>9.8</u>
2018	4.0	6.0	<u>9.8</u>
2019	4.0	6.0	<u>9.8</u>
2020	3.2	4.4	<u>9.8</u>
2021	3.2	4.4	<u>4.4</u>
2022	1.6	3.0	<u>3.0</u>
2023	0.8	1.6	<u>1.6</u>

(3) PM Fleet Average.

(A) A fleet owner must demonstrate that on January 1 of each year, starting in 2011 and ending on January 1, 2023, the PM Index of the applicable portion of the fleet was less than or equal to the calculated PM Target Rate.

(B) PM Index. The following equation is to be used to calculate the PM Index:

$$PM\ Index = \frac{Sum\ of\ PMEF_{(HHD)} + Sum\ of\ PMEF_{(MHD)}}{Total\ number\ of\ vehicles\ subject\ to\ the\ PM\ fleet\ averaging\ requirement}$$

Where:

$PMEF_{(HHD)}$ = The PM emission factor (g/mile) as specified in Appendix A for each heavy heavy duty (HHD) vehicle or adjusted according to paragraph 1. below, as applicable.

$PMEF_{(MHD)}$ = The PM emission factor (g/mile) as specified in Appendix A for each medium heavy duty (MHD) vehicle or adjusted as applicable according to paragraph 1. below.

1. For an engine that has been retrofit with a VDECS, the PM Emission Factor is reduced 50 percent for a level 2 VDECS, and 85 percent for a level 3 VDECS; the PM Emission Factor is not reduced for a level 1 VDECS

(C) PM Target Rate: The following equation is to be used to calculate the PM Target Rate

$$PM \text{ Target Rate} = \frac{\text{Sum of } PMTarget_{(HHD)} + \text{Sum of } PM \text{ Target}_{(MHD)}}{\text{Total number of vehicles subject to the PM fleet averaging requirement}}$$

Where:

$PMTarget_{(HHD)}$ = The PM target (g/mile) from Table 4 for each HHD vehicle subject to the PM fleet averaging requirements.

$PMTarget_{(MHD)}$ = The PM target (g/mile) from Table 4 for each MHD vehicle subject to the PM fleet averaging requirements.

*Table 4: Fleet PM Targets
to be Used to Calculate PM Target Rates (g/mile)*

Compliance Deadline, as of January 1	Fleet PM Targets for each compliance deadline	
	MHD	HHD
2011	0.38	0.710
2012	0.29	0.530
2013	0.17	0.320
2014	0.06	0.110
2015	0.06	0.110
2016	0.06	0.110
2017	0.06	0.110
2018	0.06	0.110
2019	0.06	0.110
2020	0.06	0.110
2021	0.06	0.110
2022	0.06	0.110
2023	0.06	0.110

(i) *Optional Requirements for Small Fleets*

Small fleet owners that elect to comply with either section 2025((i)(1) or section 2025(i)(2) below will be subject to the reporting requirements of section 2025(s).

In lieu of the performance requirements of sections 2025(e) through (h), the owner of a small fleet may comply by having the following:

(1) *Fleets with One Vehicle*

A vehicle with a 2004 model year NOx emissions equivalent or newer engine equipped with the highest level VDECS for reducing PM emissions by January 1, 2013. This vehicle would not be subject to being replaced until January 1, 2018.

- (2) *Fleets with Two Vehicles*
 - (A) One vehicle with a 2004 model year NOx emissions equivalent or newer engine equipped with the highest level VDECS by January 1, 2013. This vehicle would not be subject to being replaced until January 1, 2018.
 - (B) The other vehicle must meet the requirements of section 2025(f) by January 1, 2014.
- (3) *Fleets with Three Vehicles*
 - (A) One vehicle with a 2004 model year NOx emissions equivalent or newer engine equipped with the highest level VDECS by January 1, 2013. This vehicle would not be subject to being replaced until January 1, 2018.
 - (B) The other vehicles must meet the requirements of section 2025(f) by January 1, 2014 or
 - (C) If by January 1, 2014, the second vehicle is equipped with a 2010 model year emissions equivalent or newer engine, the third vehicle is exempt from the PM and NOx performance requirements of section 2025(e) until January 1, 2016 when it must meet the requirements of 2025(e).
- (j) *Requirements for Schoolbuses*

Beginning with the applicable effective dates set forth below, a schoolbus fleet, as defined in section 2025(d)(31)(E), and a schoolbus sub-fleet as defined in section 2025(d)(31)(F) must comply with the following requirements of this regulation.

- (1) Any schoolbus manufactured before April 1, 1977, must be retired from service no later than January 1, 2012.
- (2) Each schoolbus fleet or schoolbus sub-fleet must comply with the best available control technology (BACT) requirements of section 2025(j)(4) or the PM BACT percentage limit requirements of 2025(g) or the PM fleet averaging option of 2025(h)(3).
- (3) By January 1, 2014, all diesel-fueled schoolbuses shall be retrofit with the highest level VDECS available. ~~to be used on any engine used in schoolbuses regardless of the compliance option chosen.~~ Engines equipped with a diesel particulate filter by the engine manufacturer as original equipment are considered in compliance with this requirement.
- (4) Each schoolbus fleet or schoolbus sub-fleet owner who chooses the BACT option must meet the PM BACT as defined in section 2025(d)(58) according to the compliance schedule shown in Table 5.
- (5) If a schoolbus engine cannot be retrofit with highest level VDECS for PM then the engine shall be replaced with an engine that can be retrofit with the highest level VDECS by January 1, 2018. The schoolbus must be included in the compliance method calculation described in section 2025(j)(2) and the reporting and record requirements in section 2025(j)(9).

- (6) After a schoolbus has been retrofit with a VDECS, it must receive a safety inspection from an authorized employee of the department of the California Highway Patrol, as required by title 13, California Code of Regulations (CCR) section 1272(c), prior to its return to service.

Table 5: Best Available Control Technology Compliance Schedule for Schoolbus Fleets

<i>Compliance Deadline, as of January 1</i>	<i>Engine Model Years</i>
2011	2000 and newer
2012	1994 – 1999
2013	1987 – 1993
2014	Pre-1987

(7) *Special Provisions for Schoolbuses*

- (A) An owner of a schoolbus fleet or schoolbus sub-fleet may be granted credit for hybrid schoolbuses or alternative fuel schoolbuses according to the provisions of sections 2025(q)(8) and (9), respectively.

(B) *Low-use Schoolbuses*

1. Schoolbuses that meet the definition of a low-use schoolbus are exempt from the performance requirements of section 2025(j)(2) but the owner must keep records and meet the reporting requirements in accordance with sections 2025(j)(9) and (10).
2. Low-use schoolbuses need not be included when determining compliance with the BACT percent limits of section 2025(g) or when calculating PM fleet average indices or target rates for the fleet averaging option of section 2025(h)(3).
3. Schoolbuses that formerly met the low-use schoolbus definition, but for which mileage subsequently increases to 1,000 miles or greater, must immediately meet the performance requirements of section 2025(f), or (g) or (h) as required for the immediately preceding compliance deadline.

- (C) Schoolbuses that were retrofit on or before December 31, 2005 with a level 2 VDECS, which was highest level VDECS at the time of installation, are considered in compliance with this requirement.

- (8) Schoolbuses registered as historic vehicles, as defined in section 2025(d)(35) are not subject to the regulation.

(9) *Reporting Requirements for Schoolbus Fleets and Schoolbus Sub-Fleets*

- (A) The owner of a schoolbus fleet or a schoolbus sub-fleet is subject to the reporting requirements in subsection (B) below if complying with the PM BACT percentage limit requirements of 2025(g) or the PM fleet

averaging option of 2025(h)(3) or any of the special provisions in section 2025(q).

- (B) From January 1, 2011 through January 1, 2014, the schoolbus fleet owner must report the information required in section 2025(s), except for the information required under subsections 2025(s)(8)(C), 2025(s)(8)(E) or (s)(12)(C).

(10) *Record Keeping Requirements for Schoolbus Fleets and Schoolbus Sub-Fleets*

The owner of a schoolbus fleet or a schoolbus sub-fleet shall maintain copies of the information reported under section 2025(j)(9) and the records specified in section 2025(t) as applicable.

- (11) Schoolbus fleets and schoolbus sub-fleets are subject to the applicable requirements of sections 2025(u) through (aa).

(k) *Requirements for Drayage Trucks and Utility Vehicles*

- (1) A drayage truck as defined in section 2025(d)(20), with a 2004 model year engine must be equipped with the highest level VDECS for PM by January 1, 2012 and a 2005-2006 model year engine must be equipped with the highest level VDECS for PM by January 1, 2013.
- (2) Starting in January 1, 2021, all drayage truck and utility vehicle owners must comply with the BACT requirements of section 2025(f).

(l) *Retired Vehicle Provision*

- (1) Retirement Credit – Any fleet that retires a vehicle that would otherwise meet the applicability criteria of section 2025(b) without replacing it will be granted a retirement credit until January 1, 2014.
- (2) Beginning January 1, 2011, fleets that qualify for the retirement credit will be granted credit equivalent to one 2010 vehicle for each retired vehicle for purposes of complying under section 2025(g), BACT percent limits, or (h), fleet averaging.
- (3) The number of retirement credits will be the difference between the total number of actual vehicles in the fleet on January 1 of each compliance year and the total number of vehicles as of January 1, 2009.
- (4) To qualify for retirement credit, the retired vehicle must have driven at least 1,000 miles in California during the year the vehicle was retired and have been registered for that year in California or in the home jurisdiction of one of the International Registration Plan member jurisdictions.
- (5) Any fleet utilizing the retirement credit provision must comply with the reporting requirements of section 2025(s) beginning January 1, 2010, for all vehicles in the fleet as of January 1, 2009.

(m) Requirements for Motorcoaches

Motorcoaches are exempt from the NOx performance requirements until January 1, 2017. Beginning January 1, 2017, fleets with motorcoaches complying under section 2025(h), the fleet averaging option, would include the MC NOx target value from Table 3 when calculating the NOx target rate.

~~(n)~~ Requirements for Agricultural Fleets

- (1) Beginning January 1, 2011, vehicles meeting the definitions of limited-mileage agricultural vehicles, or low-mileage agricultural vehicles, shall be exempt from the performance requirements of sections 2025(f), (g), and (h) for the periods specified in the definitions, provided that such vehicles meet the conditions set forth below. Provisions for specialty agricultural vehicles, as defined in section 2025(d)(65), are provided below. To qualify for any of these provisions, such vehicles must be operational and functional, including being able to start without assistance and able to move under its own power. Vehicles that are being used for parts are not included in these provisions.
- (2) For all other vehicles in the agricultural fleet, beginning January 1, 2011, the fleet owner must comply with the best available control technology (BACT) requirements of section 2025(f), the BACT Percentage Limits of section 2025(g), or the fleet average requirements of section 2025(h).
- (3) Agricultural fleet owners must report and comply with the requirements of section 2025(s) and 2025(t) for all of their vehicles, regardless of whether the vehicle is an agricultural vehicle or not.
- (4) Within 30 days of replacing a low-mileage, limited-mileage, or specialty agricultural vehicle, the agricultural fleet owner must report the required information in section 2025(s)(10)(E).
- (5) All vehicles must comply with the requirements of section 2025(e) for the next compliance date upon it being discovered that any vehicle in the agricultural fleet does not comply with any of the requirements of this agricultural fleet provision.
- (6) Requirements for limited-mileage agricultural vehicles
 - (A) The maximum number of limited-mileage agricultural vehicles in any agricultural fleet shall be established by the number of limited-mileage vehicles in the agricultural fleet as of January 1, 2009, as reported in section 2025(s)(10). This number shall not increase.
 - (B) A limited-mileage agricultural vehicle may be replaced by another vehicle so long as the replacement vehicle is equipped with an engine that is at least one model year newer than the engine in the vehicle it replaced, and provided the original vehicle is scrapped, rendered inoperable, or sold out of the agricultural fleet. This requirement does not apply to engine replacements.

- (C) When a limited-mileage agricultural vehicle is replaced, the sum of the miles accrued on the original vehicle in that calendar year, up to the time of replacement, plus the mileage accrued on the replacement vehicle for the remainder of the calendar year (beginning with the date of replacement) must remain below the mileage thresholds established in section 2025(d)(38) based on the model year of the engine in the replacement vehicle.
 - (D) Beginning January 1, 2017, all limited-mileage agricultural vehicles must comply with the best available control technology (BACT) requirements of section 2025(f) or the fleet average requirements of section 2025(h).
 - (E) A vehicle that formerly met the limited-mileage agricultural vehicle definition, but whose use increases above the mileage thresholds established in section 2025(d)(38) based on the model year of the engine, must immediately meet the performance requirements of section 2025(f) or (h) for the immediately preceding compliance deadline.
 - 1. In addition, the vehicle may not be replaced and the number of limited-mileage agricultural vehicles in the agricultural fleet, as established in section 2025(n)(6)(A) above, shall be reduced by one.
 - (F) A merger of two or more agricultural fleets having designated limited mileage vehicles may not result in more designated limited mileage vehicles after the merger occurs than the sum of the total limited mileage vehicles from each individual agricultural fleet included in the merger.
- (7) Requirements for low-mileage agricultural vehicles
- (A) The maximum number of low-mileage agricultural vehicles in each agricultural fleet shall be established by the number of low-mileage vehicles in the agricultural fleet as of January 1, 2009, as reported in section 2025(s)(10). This number shall not increase.
 - (B) A low-mileage agricultural vehicle may be replaced with another vehicle if the replacement vehicle is equipped with an engine that is at least one model year newer than the engine in the vehicle being replaced, and provided the original vehicle is scrapped, rendered inoperable, or sold out of the agricultural fleet. This requirement does apply to engine replacements.
 - (C) When a low-mileage agricultural vehicle is replaced, the sum of the miles accrued on the original vehicle in that calendar year, up to the time of replacement, plus the mileage accrued on the replacement vehicle for the remainder of the calendar year (beginning with the date of replacement) must remain below the mileage threshold established in section 2025(d)(39).
 - (D) Beginning January 1, 2023, all low-mileage agricultural vehicles must comply with the best available control technology (BACT) requirements of section 2025(f).

- (E) Irrespective of section 2025(l)(5)(a)(7)(A), until January 1, 2017, a vehicle that formerly met the low-mileage agricultural vehicle definition, but whose use increases above the mileage thresholds established in section 2025(d)(38) based on the model year of the engine, must immediately meet the performance requirements of section 2025(f) or (h) for the immediately preceding compliance deadline. The vehicle may not be replaced in the future with a substitute low-mileage agricultural vehicle, and the number of low-mileage agricultural vehicles in the agricultural fleet, as established in section 2025(n)(1)(7)(A) above, shall be reduced by one.
 - (F) A merger of two or more agricultural fleets having designated low-mileage vehicles may not result in more designated low-mileage vehicles after the merger occurs than the sum of the total low-mileage vehicles from each individual agricultural fleet included in the merger.
 - (G) Until January 1, 2017, an agricultural fleet owner may change the status of a low-mileage vehicle to a limited-mileage vehicle provided the vehicle continues to meet the definition of a limited-mileage vehicle. The low-mileage vehicle may not be replaced and the number of low-mileage agricultural vehicles in the agricultural fleet, as established in section 2025(n)(7)(A) above, shall be reduced by one
- (8) Requirements for specialty agricultural vehicles
- (A) Specialty agricultural vehicles, as defined in section 2025(d)(65), are exempt from the performance requirements of sections 2025(f), (g), and (h) until January 1, 2023.
 - (B) The Executive Officer will approve a vehicle as qualifying as a specialty agricultural vehicle under the following conditions:
 1. The total number of specialty agricultural vehicles in the San Joaquin Valley Air Basin does not exceed 1,100, and
 2. The total number of specialty agricultural vehicles in the state does not exceed 2,200.
 - (C) All vehicles with the body types described in section 2025(d)(65) that have not been approved must meet the requirements of section 2025(f).
 1. In such an instance, the agricultural fleet operator shall be notified in writing by the Executive Officer that the reported vehicle is not eligible as a specialty agricultural vehicle.
- (9) Labeling Requirements for Agricultural Vehicles
- (A) Within thirty days of the reporting date, fleet owners must permanently affix or paint an AG identification label on each low-mileage, limited-mileage, and specialty agricultural in the fleet according to the following specification:

1. The letters AG shall be black on a white background. Both letters shall be at least three inches high on a five by eight inch background,
2. The label shall be located in clear view on the left and right door of the vehicle.

| (m)(o) *Requirements for Two-Engine Sweepers*

- (1) Two-engine sweepers must comply with section 2025(e) and install the highest level VDEC on the auxiliary engine of the sweeper when the propulsion engine is required to meet the PM BACT as defined in section 2025(d) (58) or when the vehicle is used to meet the requirements of section 2025(g) or 2025(h).
- (2) Two-engine sweepers may not operate any Tier 0 auxiliary engine, 50 hp or more, more than ~~450~~250 hours per year starting January 1, 2010 until January 1, 2014 and 100 hours per year thereafter.
- (3) Labeling Requirements for Two-Engine Sweepers with Tier 0 Auxiliary Engines
 - (A) Within 30 days of the reporting date, fleet owners must permanently affix or paint an SW identification label on each two engine sweeper in the fleet if using BACT percentage limits or fleet averaging upon reporting. An SW identification label must be in clear view on left and right door according to the following specification:
 - (B) The letters SW shall be black on a white background. Both letters shall be at least three inches high on a five by eight inch background.

| (n)(p) *Requirements for a New Fleet and Adding Vehicles to a Fleet.*

- (1) *New Fleet Requirements.* Owners of new fleets must meet the requirements of section 2025(e) and sections 2025(f), (g), or (h) as applicable, immediately upon purchasing vehicles subject to the regulation or bringing such vehicles into the State of California for the first time after January 1, 2011. New fleets meeting the requirements of sections 2025(g) or (h) must report vehicles subject to the regulation to ARB within 30 days of purchasing or bringing such vehicles into the State, in accordance with the requirements in section 2025(s).
- (2) *Adding Vehicles to a Fleet.* If a fleet does not meet the BACT requirements of section 2025(f), before the fleet may operate a newly added vehicle in California, it must within 30 days of adding the vehicle file a report with the Executive Officer that it has added a new vehicle, and demonstrate that the fleet, as newly constituted, complies with the requirements of sections 2025(p)(2)(A) and (B) below.
 - (A) A fleet owner who elects to utilize the BACT percentage limits option of section 2025(g) may not add vehicles that cause the percentage calculated for the fleet to fall below the percentage required for the previous compliance date.
 - (B) A fleet owner who elects to utilize the fleet averaging requirements of section 2025(h) may not add vehicles that cause the fleet to exceed the

fleet average target rates for the immediately preceding compliance deadline.

(e)(g) Exemptions, Compliance Extensions, and Credits.

A fleet owner may be granted an extension to a compliance deadline if:

- (1) *Exemption from NOx Performance Requirements.* Upon providing documentation demonstrating compliance with the conditions listed below in paragraphs (A) through (D)~~(C)~~, the Executive Officer will exempt the vehicles identified in those paragraphs from the NOx performance requirements of sections 2025(f), (g), or (h). If an exemption is granted, all such vehicles affected will continue to be subject to the PM performance requirements of section 2025(f), (g), or (h) and the record keeping and reporting requirements of this regulation.

- (A) A vehicle that meets the definition of NOx mileage exempt vehicle, as defined in section (d)(53), prior to January 1, 2021.

If a vehicle is used both for emergency operations, as defined in section 2025(d)(24), and for other purposes, the owner does not need to consider the hours of operation or the mileage the vehicle accrues when used for emergency operations in a compliance year, in determining whether the vehicle meets the definition of a NOx mileage exempt vehicle for that compliance year.

- (B) A vehicle that operates solely in the NOx exempt areas defined in section (d)(50) prior to January 1, 2021. A NOx-exempt vehicle is allowed to travel outside of the NOx-exempt area only for repairs or other service to the vehicle. The vehicle owner must obtain a work order from the facility that describes the service and shows the date of the service and location of the facility.

- (C) Schoolbuses as defined in section 2025(d)(63).

- (D) Motorcoaches as defined in section 2025(d)(44) prior to January 1, 2017.

- (2) *Exemption for Cab-Over-Engine Truck Tractors.* Upon providing documentation demonstrating compliance with the conditions listed below in paragraphs (A) through (E), the Executive Officer will not require the type of vehicle listed in paragraph (A) to be replaced in order to meet the fleet's NOx performance requirements prior to January 1, 2018:

- (A) The vehicle is a truck-tractor where the cab sits over the engine on the chassis and it is used exclusively to pull 57-foot trailers

- (B) The PM performance requirement for the vehicle has been met and,

- (C) The engine installed in the vehicle is at least a 2004 model year NOx emissions equivalent and,

- (D) On the compliance date, all vehicles in the fleet that do not qualify for the exemption under this section have met the requirements of section 2025(e) and,

- (E) The law limiting the total length of a combination vehicle to 65 feet as described in section 35401(a) of the California Vehicle Code has not been amended prior to January 1, 2010 to increase the length restriction.
- (3) *Provisions for Unique Vehicles.* Upon providing documentation demonstrating that a vehicle meets the definition of a unique vehicle as defined in section 2025(d)(70), the Executive Officer will not require the vehicle to be replaced in order to meet the NOx performance requirements prior to January 1, 2021, but will still be required to be included in the fleet if using the fleet averaging or BACT percentage limits option. On the compliance date, all vehicles in the fleet that do not qualify for the exemption under this section must meet the requirements of sections 2025(f), (g), or (h).
- (4) *Exemption for Low-Use Vehicles and Three Day Pass Vehicles.*
- (A) Low-use vehicles are exempt from the performance requirements of section 2025(e) but the owner must keep records and meet the reporting requirements in accordance with sections 2025(s) and (t). To be considered a low-use vehicle, the fleet owner must submit engine operation data from a properly functioning odometer and non-resettable hour meter unless they have a three day pass. Low-use vehicles need not be included when determining compliance with the BACT percent limits of section 2025(g) or when calculating fleet average indices and target rates for the fleet averaging option of section 2025(h).
- (B) Vehicles used both for emergency operations as defined in section 2025(d)(24), and for other purposes, do not need to consider the hours of operation or mileage the vehicle accrues when used for emergency operations in determining whether the vehicle meets the definition of a low-use vehicle. If the vehicle meets the low-use definition of section 2025(d)(41), it is exempt from the performance requirements of section 2025(e), but it is subject to the requirements of section 2025(q)(4) for low-use vehicles.
- (C) Vehicles that formerly met the low-use vehicle definition, but whose use increases to 100 hours per year or greater or whose mileage increases to 1,000 miles or greater, must immediately meet the performance requirements of section 2025(f), or (g) or (h) for the immediately preceding compliance deadline unless it takes advantage of one of the exemptions listed in section 2025(q).
- (D) Three day pass vehicles may operate in California for the specified three day period provided a request is made to the Executive Officer and permission is granted prior to the operation in California.
- (5) *Exemption for Vehicles Awaiting Sale* – Vehicles in the possession of dealers, financing companies, or other entities who do not intend to operate the vehicle in California or offer the vehicle for hire for operation in California, that are operated only to demonstrate functionality to potential buyers or to move short distances

while awaiting sale or for maintenance purposes, are exempt from all requirements in section 2025.

- (6) *Exemption for Vehicles Used Solely on San Nicolas or San Clemente Islands* - Vehicles used solely on San Nicolas or San Clemente Islands are exempt from all requirements in section 2025. If the land use plans for the islands are changed to allow use by the general public of the islands, this exemption shall no longer be applicable.

- (7) *Compliance Extension Based on Early Action.*

If a fleet owner installs the highest level VDECS for PM on one or more vehicles before January 1, 2010, the owner would be exempt from the NOx BACT requirements of sections 2025(f), the NOx BACT percent limits of section 2025(g) and the NOx and PM fleet averaging requirements of section 2025(h) until January 1, 2014 for each vehicle that has been retrofit early.

- (8) *Credit for Hybrid Vehicles*

(A) Prior to January 1, 2018, upon presentation of proper documentation, the Executive Officer shall grant an owner credit, as set forth in (B) below, towards compliance with the fleet average for using hybrid vehicles defined in section 2025(d)(36) if the owner can demonstrate that the manufacturer has improved the fuel economy of the hybrid vehicle by at least 20 percent compared to a diesel vehicle of the same model year that performs a similar function and has a similar configuration to that of the hybrid vehicle.

(B) Upon approval by the Executive Officer, the fleet shall receive for each compliance year prior to 2017, a credit that double counts the number of hybrid vehicles in the fleet that may be used to calculate the PM and NOx indices and target rates for the percent limits requirements of section 2025(g) and for the fleet averaging option of section 2025(h).

- (9) *Credit for Alternative Fuel Vehicles* - Upon presentation of proper documentation, the Executive Officer will grant a fleet credit for using vehicles equipped with alternative fuel or heavy-duty pilot ignition engines, in calculating the NOx and PM fleet averages under section 2025(h). Upon approval, the fleet would be allowed to use the NOx emission factor for the engine model year to which the alternative or heavy-duty pilot ignition engines have been certified in calculating the NOx index and zero for the PM index.

- (10) *Compliance Extension for Emissions Control Device Manufacturer Delays:*

An owner who has purchased, but has not received, a VDECS, a replacement engine, or vehicle in order to comply with this regulation will be excused from immediate compliance if the VDECS or vehicles have not been received due to manufacturing delays as long as all the conditions below are met:

(A) Except for VDECS purchased to replace a failed or damaged VDECS, the VEDCS or vehicle was purchased, or the owner and seller had entered

into contractual agreement for the purchase, at least four months prior to the required compliance date; in the case of VDECS purchased to replace a failed or damaged VDECS, the fleet owner and seller had entered into contractual agreement for the purchase within 60 days of the VDECS failure.

- (B) The owner has identified the vehicle to be equipped with the VDECS or replaced upon receipt of the replacement VEDCS or vehicle.
- (C) Proof of purchase, such as a purchase order, down payment, or signed contract for the sale, including specifications for each VDECS, must be maintained by the owner and provided to an agent or employee of ARB upon request.
- (D) The new or retrofit vehicles are immediately placed into operation upon receipt.

(11) *Change in Exemption Status.* A fleet owner of a vehicle that formerly qualified for any of the compliance extensions or exemptions granted in section 2025(q) or 2025(o) but whose status has changed so that it no longer meets the applicable definition, must immediately bring the fleet into compliance with performance requirements of section 2025(f), or (g), or (h) for the immediately preceding compliance deadline, and must notify the Executive Officer of the change in status within 30 days from the date of the change.

(p)(r) *Special Provisions for VDECS and Experimental Diesel Emission Control Strategies*

(1) *VDECS Requirements*

- (A) *VDECS Installation.* Before installing a VDECS on a vehicle, the owner must ensure that:
 - 1. The VDECS is verified for use with the engine and vehicle, as described in the Executive Order for the VDECS.
 - 2. Use of the vehicle is consistent with the conditions of the Executive Order for the VDECS.
 - 3. The VDECS is installed in a verified configuration.
 - 4. The engine to be retrofit meets engine manufacturer's specifications for installation of the VDECS.
 - 5. The VDECS label will be visible after installation.
- (B) *VDECS Maintenance.* If a fleet owner installs a VDECS to meet the requirements of section 2025(e), the VDECS must remain installed until the VDECS fails or is damaged or is replaced with a similar or higher level VDECS. Requirements for VDECS failure or damage are in section 2025(q)(9)(r)(2). The owner of a vehicle retrofit with a VDECS must ensure that the VDECS and engine are properly maintained as recommended by the respective manufacturers.

(2) *Failure or Damage of a VDECS.*

In the event of a failure or damage of a diesel emission control strategy, the following conditions apply:

- (A) Failure or Damage During the Warranty Period. If a VDECS fails or is damaged within its warranty period, and the VDECS manufacturer or authorized dealer determines that it cannot be repaired, the owner must replace the VDECS with the same level or higher level VDECS for the vehicle within 90 days of the failure.
- (B) Failure or Damage Outside of Warranty Period. If a VDECS fails or is damaged outside of its warranty period and cannot be repaired, and if the fleet could not meet an applicable target for the most recent compliance date without the failed VDECS, then within 90 days of the failure, the owner must replace the failed VDECS with the highest level VDECS available for the engine at time of failure.

(3) *Fuel-Based Strategy VDECS.*

- (A) If a fleet owner determines that the highest level VDECS for a large percentage of the fleet would be a level 2 fuel verified as a diesel emission control strategy, and implementation of this VDECS would require installation of a dedicated storage tank, then the owner shall request prior approval from the Executive Officer to allow use of the level 2 fuel-based strategy across its fleet.
- (B) Waiver for Discontinuation of Fuel Verified as a Diesel Emission Control Strategy. If a fleet owner has relied upon a fuel verified as a diesel emission control strategy to meet an applicable performance requirement and has to discontinue use of the fuel due to circumstances beyond the fleet owner's control, the fleet owner shall apply to the Executive Officer no later than 30 days after discontinuing use of the fuel for a compliance waiver of up to two years to provide the fleet owner time to return to compliance with the applicable performance requirements. The Executive Officer shall respond to the request within 30 days and grant the request upon finding that the application is complete, outlines the compliance strategy to be used, and that all reporting requirements have been met.

(4) *Use of Experimental Diesel Emission Control Strategies.*

- (A) If a fleet owner wishes to use an experimental or non-verified diesel emission control strategy to support the verification of a non-verified diesel emission control strategy, the owner must first obtain approval from the Executive Officer for a compliance extension. To obtain approval, the owner must demonstrate either that (1) a VDECS is not available or not feasible for their vehicle or application, or (2) that use of the non-verified strategy is needed to generate data to support verification of the strategy.
 1. The application must include emissions data and a detailed description of the control technology demonstrating the experimental control strategy achieves at least a level 2 diesel PM emission

reduction, vehicle and engine data, and odometer readings as described in sections 2025(s)(4), 2025(s)(5), and 2025(s)(8)(B).

2. The Executive will treat the strategy as follows:
 - a. As a level 2 VDECS if the application demonstrates that the strategy achieves at least 50 percent reduction in diesel PM.
 - b. As a level 3 VDECS if the application demonstrates that the strategy achieves at least 85 percent reductions in diesel PM.
3. If the application demonstrates that the strategy achieves a NOx reduction of over 15 percent, the NOx reduction will be counted.

(B) Upon approval by the Executive Officer, each vehicle engine retrofit with the experimental strategy will be allowed to operate for a specified time period necessary to make a determination that the experimental strategy can achieve the projected emissions reductions. The vehicle equipped with the experimental strategy will be considered to be in compliance under section 2025(f), (g), or (h) during the specified time period. The fleet owner shall keep documentation of this use in records as specified by the Executive Officer.

(C) The fleet owner must bring the fleet into compliance under section 2025(f), (g), and (h) prior to the expiration of the experimental diesel emission control strategy extension.

- (5) *VDECS That Impairs Safe Operation of Vehicle* - A fleet owner may request that the Executive Officer find that a VDECS should not be considered the highest level VDECS available because (A) it cannot be safely installed or operated in a particular vehicle application, or (B) its use would make compliance with occupational safety and health requirements, or an ongoing local air district permit condition impossible.

If a VDECS manufacturer states that there is no safe or appropriate method of mounting its VDECS on the requesting party's vehicle, then the VDECS will not be considered safe. In the absence of such a declaration by the VDECS manufacturer, the requesting party shall provide other documentation to support its claims.

Documentation may include published reports and other findings of federal, state or local government agencies, independent testing laboratories, engine manufacturers, or other equally reliable sources. The request will only be approved if the requesting party has made a thorough effort to find a safe method for installing and operating the VDECS, including various locations for VDECS mounting, and use of an actively regenerated VDECS. The Executive Officer shall review the documentation submitted and any other reliable information that he or she wishes to consider and shall make his or her determination based upon the totality of the evidence.

Upon finding that a VDECS cannot be installed without violating the safety standards prescribed under title 8, CCR by the California Department of Industrial Relations, Division of Occupational Safety and Health, or comparable federal or state law where the vehicle operates, the Executive Officer shall issue a determination that there is no

highest level VDECS available. The Executive Officer shall inform the requesting party, in writing, of his or her determination, within 60 days of receipt of the request.

Parties may appeal the Executive Officer's determination as described in (A) and (B) below. During the appeal process described in (A) and (B) below, the requesting party may request the administrative law judge to stay compliance until a final decision is issued. If the stay is granted and the Executive Officer denies the requesting party's request, the requesting party has six months from the date of the Executive Officer's final written decision to bring his or her fleet back into compliance.

(A) Appeals – Hearing Procedures

1. Any party whose request has been denied may request a hearing for the Executive Officer to reconsider the action taken by sending a request in writing to the Executive Officer. A request for hearing shall include, at a minimum, the following:
 - a. name of the requesting party;
 - b. copy of the Executive Officer's written notification of denial;
 - c. a concise statement of the issues to be raised, with supporting facts, setting forth the basis for challenging the denial (conclusory allegations will not suffice);
 - d. a brief summary of evidence in support of the statement of facts required in c. above; and
 - e. the signature of an authorized person requesting the hearing
2. A request for a hearing shall be filed within 30 days from the date of issuance of the notice of the denial.
3. A hearing requested pursuant to this section shall be heard by a qualified and impartial hearing officer appointed by the Executive Officer. The hearing officer may be an employee of the ARB, but may not be any employee who was involved with the denial at issue. In a request for reconsideration, the hearing officer, after reviewing the request for hearing and supporting documentation provided under paragraph 1. above, shall grant the request for a hearing if he or she finds that the request raises a genuine and substantial question of law or fact.
4. If a hearing is granted, the hearing officer shall schedule and hold, as soon as practicable, a hearing at a time and place determined by the hearing officer.
5. Upon appointment, the hearing officer shall establish a hearing file. The file shall consist of the following:
 - a. the determination issued by the Executive Officer which is the subject of the request for hearing;
 - b. the request for hearing and the supporting documents that are submitted with it;

- c. all documents relating to and relied upon by the Executive Officer in making the initial determination to deny the requesting party's original claim; and
 - d. correspondence and other documents material to the hearing.
6. The hearing file shall be available for inspection by the applicant at the office of the hearing officer.
 7. An applicant may appear in person or be represented by counsel or by any other duly-authorized representative.
 8. The ARB may be represented by staff or counsel familiar with the regulation and may present rebuttal evidence.
 9. Technical rules of evidence shall not apply to the hearing, except that relevant evidence may be admitted and given probative effect only if it is the kind of evidence upon which reasonable persons are accustomed to relying in the conduct of serious affairs. No action shall be overturned based solely on hearsay evidence, unless the hearsay evidence would be admissible in a court of law under a legally recognized exception to the hearsay rule.
 10. Declarations may be used upon stipulation by the parties.
 11. The hearing shall be recorded either electronically or by a certified shorthand reporter.
 12. The hearing officer shall consider the totality of the circumstances of the denial, including but not limited to, credibility of witnesses, authenticity and reliability of documents, and qualifications of experts. The hearing officer may also consider relevant past conduct of the applicant including any prior incidents involving other ARB programs.
 13. The hearing officer's written decision shall set forth findings of fact and conclusions of law as necessary.
 14. Within 30 days of the conclusion of a hearing, the hearing officer shall submit a written proposed decision, including proposed finding as well as a copy of any material submitted by the hearing participants as part of that hearing and relied on by the hearing officer, to the Executive Officer. The hearing officer may recommend to the Executive Officer any of the following:
 - a. uphold the denial as issued;
 - b. modify the denial; or
 - c. overturn the denial in its entirety.
 15. The Executive Officer shall render a final written decision within 60 working days of the last day of hearing. The Executive Officer may do any of the following based on substantial evidence in the record:
 - a. adopt the hearing officer's proposed decision;
 - b. modify the hearing officer's proposed decision; or

- c. render a decision without regard to the hearing officer's proposed decision.

(B) Appeals – Hearing Conducted by Written Submission.

In lieu of the hearing procedure set forth in (A) above, an applicant may request that the hearing be conducted solely by written submission. In such case the requestor must submit a written explanation of the basis for the appeal and provide supporting documents within 20 days of making the request. Subsequent to such a submission the following shall transpire:

1. ARB staff shall submit a written response to the requestor's submission and documents in support of the Executive Officer's action no later than 10 days after receipt of the requestor's submission;
2. The applicant may submit one rebuttal statement which may include supporting information, as attachment(s), but limited to the issues previously raised;
3. If the applicant submits a rebuttal, ARB staff may submit one rebuttal statement which may include supporting information, as attachment(s), but limited to the issues previously raised; and
4. The hearing officer shall be designated in the same manner as set forth in section 2025(r)(5)(A)3 above. The hearing officer shall receive all statements and documents and submit a proposed written decision and such other documents as described in section 2025(r)(5)(A)13 above to the Executive Officer no later than 30 working days after the final deadline for submission of papers. The Executive Officer's final decision shall be mailed to the applicant no later than 60 days after the final deadline for submission of papers.
5. The Executive Officer shall render a final written decision within 60 working days of the last day of hearing. The Executive Officer may do any of the following:
 3. adopt the hearing officer's proposed decision;
 4. modify the hearing officer's proposed decision; or
 5. render a decision without regard to the hearing officer's proposed decision.

| (g)(s) Reporting

The owner of a fleet is subject to the reporting requirements of section 2025(s) if the owner has elected to utilize the BACT percent limits option of section 2025(g), the fleet averaging option of section 2025(h), or the special provisions and compliance extensions of section 2025(q).

All fleet owners utilizing any of the exemptions, compliance extensions, or credit in section 2025(q) must report and comply with the requirements of section 2025(s) and

2025(t) for all of their vehicles, regardless of whether the vehicle is utilizing of the special provisions or not.

- (1) The owner must notify the Executive Officer of the compliance option that it has selected in writing by January 31, 2010 and by January 31 of every subsequent compliance year. The notification must include the name of the responsible official and the location where the records will be kept. If the records will be kept outside California, the owner must also comply with section 2025(u). If a fleet owner opts to comply with fleet averaging performance requirements separately for different divisions or subsidiaries according to section 2025(e)(5), then the company or agency may report separately for the different portions of the fleet.
- (2) Each year, fleet owners subject to the reporting requirement must report on their fleet as it was on January 1 of the current compliance year. They must submit the applicable information set forth in sections 2025(s)(1) through (11) by January 31 following each compliance date. Owners must report annually until the reporting requirement expires or fleets may stop reporting the year after the BACT requirements of section 2025(f) have been met. Fleets may submit information by mail or electronically.
- (3) *Owner Contact Information:* Compliance reports must include the information in (A) through (L) below.
 - (A) Fleet owner's name,
 - (B) Name of company or agency,
 - (C) Motor carrier identification number,
 - (D) Corporate parent name (if applicable),
 - (E) Corporate parent taxpayer identification number (if applicable),
 - (F) Company taxpayer identification number,
 - (G) Street address and mailing address,
 - (H) Name of responsible person,
 - (I) Title of responsible person,
 - (J) Contact name,
 - (K) Contact telephone number,
 - (L) Contact email address (if available).
- (4) *Vehicle Information.*

Fleet owners must provide to the Executive Officer a list of all vehicles subject to the reporting requirements along with the information listed in (A) through (L) below for each vehicle:

 - (A) Vehicle type,
 - (B) Vehicle identification number,
 - (C) Vehicle manufacturer,

- (D) Vehicle model;
- (E) Gross vehicle weight rating as defined in sections 2025(d)(33) or 2025(d)(42)
- (F) Vehicle model year,
- (G) License plate number,
- (H) Where the vehicle is registered and type of registration plate;
- (I) Whether the vehicle will be designated as a low-use vehicle;
 1. For vehicles designated as low-use, fleet owners must report the information listed in section 2025(s)(8).
 2. Report whether the low-use status is based on mileage or hours of operation.
- (J) Whether the vehicle is used for emergency operations;
 1. For low-use or mileage exempt vehicles used in emergency operations, fleet owners must report the information listed in section 2025(s)(11).
- (K) Whether the vehicle is a sweeper, specialty agricultural vehicle, cab-over-engine truck tractor, or unique vehicle as defined in sections 2025(o) and 2025(q);
- (L) Whether the vehicle is a hybrid vehicle as defined in section 2025(d)(36).
- (M) Whether the vehicle is an alternative-fueled vehicle as defined in section 2025(d)(8).

(5) *Engine Information.*

The following information for each engine that propels a vehicle reported per section 2025(s)(4) must be reported to the Executive Officer:

- (A) Engine manufacturer,
- (B) Engine model,
- (C) Engine family,
- (D) Engine serial number, and
- (E) Engine model year.

(6) *Verified Diesel Emission Control Strategies.*

For each VDECS that is installed on an engine listed per section 2025(s)(5), the fleet owner must report the following information to the Executive Officer.

- (A) Type of VDECS installed,
- (B) VDECS manufacturer,
- (C) VDECS family name,
- (D) Serial number,
- (E) Date installed.

(7) *Availability of Highest Level VDECS*

If appropriate, the following information must be submitted to the Executive Officer with a request for an extension based on the unavailability of highest level VDECS:

- (A) Owner contact information, vehicle, and engine information listed in sections 2025(s)(3), (4), and (5).
- (B) Description of the reason for the compliance extension request for each engine or engine-vehicle combination.
- (C) If the VDECS would void the engine warranty, provide a statement from the engine manufacturer or authorized dealer.
- (D) If no verified VDECS is commercially available, provide a list of manufacturers that have been contacted and the manufacturers' responses to a request to purchase.
- (E) Documentation must be submitted on January 31 following the compliance deadline for each year that the owner is claiming non-availability of the highest VDECS.

(8) *Low-Use Vehicles.*

For vehicles that are designated as low-use, the fleet owner must report the following information to the Executive Officer annually for as long as the fleet owns or operates the vehicle:

- (A) Owner, vehicle, and engine information identified in sections 2025 (s)(1) through (5);
- (B) Mileage from odometer readings from a properly functioning odometer taken on January 1 and December 31 of the compliance year.
- (C) Hour-meter readings from a properly functioning hour-meter taken on January 1 and December 31 of the compliance year.
- (D) The dates of the odometer and hour-meter readings. In the event that the odometer meter is replaced, the original odometer reading and the new odometer reading and the date of replacement must be reported.
- (E) The owner of a vehicle operating both inside and outside of California must provide records from a tracking system as defined in section (d)(22) that can acquire date, time, engine-on, and location data. The owner may use other documentation of operation and location, such as IRP records.

(9) Fleets Requesting Vehicle Retirement Credit

Fleets requesting vehicle retirement credits must report the information required in sections 2025(s)(1) through (7) for all vehicles in the fleet as of January 1, 2009 by January 1, 2010 and every January 1 thereafter.

For each vehicle for which a retirement credit is requested, fleet owners must report the following information to the Executive Officer beginning January 1, 2010 through January 1, 2014.

- (A) Information required in sections 2025(s)(1) through (5)
- (B) Copy of the retired vehicle's registration
- (C) Copy of the vehicle's ownership documentation
- (D) Copy of the bill of sale of the retired vehicle or any other form of vehicle transference approved by the Executive Officer

(9)(10) Vehicles in Agricultural Fleets.

For all vehicles owned as of January 1, 2009, an agricultural fleet owner must report the information in this section to the Executive Officer for all vehicles (including vehicles that do not qualify as agricultural vehicles) by January 31, ~~2009~~2010 and every year thereafter. For each vehicle in an agricultural fleet, the agricultural fleet owner must report the following information until January 1, 2023:

- (A) Information required in sections 2025(s)(1) through(5).
- (B) Whether the vehicle is a low-mileage, limited-mileage, or specialty agricultural vehicle, or is none of these.
- (C) Identify which specialty vehicle from 2025(d)(65) is being claimed.
- (D) Mileage from a properly functioning odometer taken on January 1, 2011 and every January 1 thereafter. In the event that the odometer is replaced, the original odometer reading, the new odometer reading, and the date the odometer was replaced.
- (E) For a low, limited, or specialty agricultural vehicle being replaced the owner, vehicle, and engine information in sections 2025(s)(1) through (6), the mileage of the vehicle being replaced and added, and the date the mileage reading were taken.

(10)(11) Vehicles used in emergency operation.

A fleet owner must provide the following information to the Executive Officer to qualify a vehicle's usage as emergency operation:

- (A) Owner, vehicle, and engine information identified in sections 2025 (s)(1) through (6);
- (B) Odometer readings from a properly functioning odometer to document travel to and from the emergency event. In the event that the odometer meter is replaced the original odometer reading and the new odometer reading and the date of replacement must be reported; and
- (C) Records to document dispatch by the responsible emergency management personnel.

(11)(12) *Vehicles Exempt from the NOx Performance Standard.*

(A) Exemption Based on Early Action.

The owner must provide the following information to the Executive Officer by January 1, 2010.

1. Owner, vehicle, and engine information listed in sections 2025(s)(1) through (5)
2. Information listed in section 2025(s)(6) for the VDECS.

(B) NOx Mileage Exempt Vehicles.

The owner must provide the following information to the Executive Officer by January 31, 2010 and every year thereafter to demonstrate compliance with the requirements of section 2025(q)(1).

1. Owner, vehicle, and engine information listed in sections 2025 (s)(1) through (7)
2. Mileage and hours of use readings on January 1 and December 31 of the compliance year taken from a properly functioning odometer and hour-meter for vehicles meeting the definition of sections 2025(d)(53)(A) or (B) and mileage only readings for vehicles meeting the definitions of 2025(d)(53)(C) or (D). The owner must keep on record the mileage and usage records generated by the tracking system to meet the record keeping requirements of section 2025(t).
A NOx mileage exempt vehicle that does not perform work in stationary mode need not report hours of use.
3. Evidence that the owner filed a Heavy Highway Vehicle Use Tax Return and was granted a suspension of the tax based on mileage use for the vehicle during the current compliance period.

(C) Vehicles operating exclusively in NOx-exempt areas.

The owner must provide the following information to the Executive Officer by January 31, 2010 to demonstrate compliance with the requirements of section 2025(q)(1):

1. Owner, vehicle, engine information, and VDECS listed in sections 2025(s)(1) through(7);
2. Records from a tracking system that tracks usage and location in a monthly report format approved by ARB. The system must at a minimum meet the performance requirements as defined in section 2025(d)(22) and provide the information listed therein.

(D) Unique Vehicles.

1. The owner must provide the following information to the Executive Officer by January 1, 2010 to demonstrate compliance with the requirements of section 2025(q)(3).
2. 1. Owner, vehicle, and engine information listed in sections 2025(s)(1) through (7).

3. 2. Photos and a complete description of the vehicle and its function.
4. 3. A complete explanation of why the vehicle qualifies as a unique vehicle.
5. 3. Names and phone numbers of sources contacted during the search for a replacement vehicle.

3.(E) 4. Letters from contacted VDEC vendors stating that retrofit technology is unavailable for the unique vehicle.

(12)(13) Compliance Certification.

All reports submitted to ARB, must be accompanied with a certification signed by a responsible official or a designee thereof that the information reported is accurate and that the fleet is in compliance with the regulation. If a designee signs the compliance certification, a written statement signed by the responsible official designating the designee must be attached to the compliance certification and submitted to the Executive Officer.

(13)(14) Changes Since Last Reporting – The fleet owner or responsible person must report to the Executive Officer any additions, deletions, or changes to the fleet since the last annual report filed. Such changes shall include, among other things, changes in the fleet’s compliance option, vehicles removed from the fleet, vehicles added to the fleet through purchase or by bringing into California, and vehicles newly defined as low-use, or recently repowered or retrofit. If there are no changes, the fleet owner shall indicate there have been no changes.

(14)(15) New Fleet Reporting. New fleets that elect to utilize the BACT percent limits option of section 2025(g) or the fleet averaging option of section 2025(h) must submit the information in section 2025(s)(1) through (5) to the Executive Officer within 30 days of purchasing or bringing such vehicles into the State. Beginning the first January 1 that is more than 30 days after the date of purchase or bringing a vehicle into the State, new fleets must comply with the reporting requirements in section 2025(s).

(t) Record Keeping.

- (1) The owner of a fleet shall maintain the following records specified in sections 2025(t)(4) through (11) as applicable. The owner shall provide these records to an agent or employee of the ARB within five business days upon request.
- (2) The owner of a fleet subject to the reporting requirements of section 2025(s) shall maintain copies of the information reported under section 2025(s), as well as the records described in sections 2025(t)(4) through (11) below.
- (3) Motor Carrier or Broker
 - (A) Bills of lading and other documentation identifying the motor carrier or broker who hired or dispatched the vehicle and the vehicle dispatched.
- (4) Agricultural Fleets

- (A) Fleets utilizing the agricultural fleet provision must keep and make available upon request proof that all agricultural vehicles were used exclusively in agricultural operations. This may include records used to support proof to other governmental agencies that the primary business function was agricultural. Such documentation may include IRS or Board of Equalization tax forms or bills of lading.
- (B) Records must be maintained for each agricultural vehicle demonstrating that the vehicle was operational, functional and capable of performing the duty for which it was designed. This could include maintenance records, mileage records, or licensing records, emissions testing records, or any other source of data approved by the Executive Officer.
- (C) The agricultural fleet owner must keep bills of lading for delivery of fertilizer or crop protection products by an agricultural vehicle to a farm. Such records must demonstrate that the operation of the vehicle for the preceding calendar year was used exclusively to deliver such products to farms.
- (D) Proof of transference of ownership of any low or limited-mileage agricultural vehicles that is added to or removed from the fleet.
- (E) Proof of ownership of the vehicles including title, registration, or bills of sale.
- (5) *Changes Since Last Reporting Period* – Document any additions, deletions, or changes to the fleet since the last reporting. Documentation may include bills of sale, purchase orders, or other documentation.
- (6) *Electronic Tracking* – For fleets using electronic tracking systems as defined in section 2025(d)(22) , summary and detailed records must be kept at the business office or terminal location for the fleet. The records must provide;
 - (A) Vehicle identification number of the vehicle being tracked;
 - (B) Monthly and annual mileage accrued in California;
 - (C) Monthly and annual mileage accrued in the NOx Exempt Areas if claiming the vehicle operates exclusively in NOx-exempt areas, and
 - (D) Monthly and annual hours of engine operation accrued in California except for vehicles that do not use PTO to perform work in a stationary mode.
- (7) *VDECS Failure* – Maintain records of any VDECS failure and replacement.
- (8) *Fuel-based Strategy* – Documentation of any approval from ARB Executive Officer to use a fuel strategy as in section 2025(q)(3) and the most recent two years' worth of records of purchase that demonstrate usage.
- (9) *Experimental Diesel Emission Control Strategy* – For fleets using an experimental diesel PM control strategy, record of approval from the Executive Officer for use of the experimental diesel control strategy, the test plan and test data used in the experimental diesel control strategy application, and other records as specified in the approval.

(10) *Manufacturer Delay* – For any vehicle or VDECS for which the fleet owner is utilizing the equipment manufacturer delay provision in section 2025(q)(10), proof of purchase, such as a purchase order or signed contract for the sale, including engine specifications for each applicable piece of equipment or vehicle.

(11) *Maintenance of VDECS Records*

(A) VDECS Documentation. For each engine requiring a VDECS to comply with the regulation, the owner shall keep the following documentation in the vehicle and provide it upon request to an agent or employee of the ARB

1. A statement signed by the installer at the time of installation of the VDECS affirming that the VDECS was installed by an authorized installer, and providing the following information for each engine:
 - a. The name of the person installing the device
 - b. The date the device was installed
 - c. Type of VDECS installed,
 - d. Manufacturer
 - e. VDECS family name,
 - f. Serial number,
 - g. Its verification level and year of verification.

| (s)(u) *Audit of Records*

The vehicle owner must make records available to ARB at its request for audit to verify the accuracy of the records. In the event the records are not made available within 30 days of the request, the ARB may assess penalties for non-compliance. The fleet owner may be required to reimburse the ARB auditor per diem and travel expenses under certain conditions as determined by the Executive Officer.

| (t)(v) *Record Retention*

The fleet owner or responsible person shall maintain the records for each vehicle subject to the reporting and record keeping requirements of sections 2025(s) and (t) for 3 years after it is retired or January 1, 2025, whichever is earlier. If fleet ownership is transferred, the seller shall transfer the fleet records to the buyer. Dealers must maintain records of the disclosure of regulation applicability required by section 2025(x) for three years after the sale.

| (u)(w) *Right of Entry*

For the purpose of inspecting vehicles and their records to determine compliance with this regulation, an agent or employee of ARB, upon presentation of proper credentials, has the right to enter any facility (with any necessary safety clearances) where vehicles are located or vehicle records are kept.

| (v)(x) *Disclosure of Regulation Applicability*

Any person residing in California selling a vehicle with an engine subject to this regulation must provide the following disclosure in writing to the buyer on the bill of sale,

“An on-road heavy-duty diesel or alternative-diesel vehicle operated in California may be subject to the California Air Resources Board Regulation to Reduce Particulate Matter and Criteria Pollutant Emissions from In-Use Heavy-Duty Diesel Vehicles. It therefore could be subject to exhaust retrofit or accelerated turnover requirements to reduce emissions of air pollutants. For more information, please visit the California Air Resources Board website at <http://www.arb.ca.gov/dieseltruck>.”

| ~~(w)~~(y) *Compliance Requirement.*

- (1) The vehicle owner shall comply with all applicable requirements and compliance schedules set forth in this regulation.
- (2) Any in-state or out-of-state motor carrier, California broker, or any California resident who operates or directs the operation of any vehicle subject to this regulation shall verify that each hired or dispatched vehicle is in compliance with the regulation.
- (3) Compliance may be accomplished by keeping on site a copy of the Certificate of Reported Compliance with the In-Use On-Road Diesel Vehicle Regulation for each fleet.
- (4) Any contract that a lessor and lessee enter into that has an effective date of January 1, 2010 or later shall clearly specify whether or not the leased vehicle is to be excluded from the lessor’s fleet for the duration of the lease, or the responsibility will be that of the lessee.

| ~~(x)~~(z) *ARB Certificate of Reported Compliance*

After the required reporting and compliance certification are received by ARB staff, ARB will provide the fleet with a Certificate of Reported Compliance with the In-Use On-road Diesel Vehicle Regulation. ARB staff will also post on the website for this regulation the motor carrier number for fleets that have reported compliance.

| ~~(v)~~(aa) *Non-Compliance.*

Any person who fails to comply with the performance requirements of this regulation, who fails to submit any information, report, or statement required by this regulation, or who knowingly submits any false statement or representation in any application, report, statement, or other document filed, maintained, or used for the purposes of compliance with this regulation may be subject to civil or criminal penalties under sections 39674, 39675, 42400, 42400.1, 42400.2, 42402.2, and 43016, of the Health and Safety Code. In assessing penalties, the Executive Officer will consider factors, including but not limited to the willfulness of the violation, the length of time of noncompliance, whether the fleet made an attempt to comply, and the magnitude of noncompliance.

| ~~(z)~~(bb) *Severability*

Any subsection, paragraph, subparagraph, sentence, clause, phrase, or portion of this regulation is, for any reason, held invalid, unconstitutional, or unenforceable by any court of competent jurisdiction, such portion shall be deemed as a separate, distinct,

and independent provision, and such holding shall not affect the validity of the remaining portions of the regulation.

Note: Authority Cited: Sections 39600, 39601, 39650, 39658, 39659, 39666, 39667, 39674, 39675, 42400, 42400.1, 42400.2, 42402.2., 42410, 43013, 43016, 43018, 43023, 43600, California Health and Safety Code. Reference: Sections 39650, 39658, 39659, 39666, 39667, 39674, 39675, 42400, 42400.1, 42400.2, 42402.2, 42410, 40717.9, 43013, 43016, 43018, 43023, 43600, and 43701(b), California Health and Safety Code.

APPENDIX A

**Table A-1
PM Emissions Factors by Engine Model Year
(g/mile)**

Engine Certification Standard Model Year	Medium Heavy-Duty Diesel Vehicle (MHD)	Heavy Heavy-Duty Diesel Vehicle (HHD)
Pre-1991	1.65	3.36
1991-1993	0.84	1.25
1994-2006	0.43	0.81
2007-2009*	0.06	0.11
2010 and newer*	0.06	0.11

* If the engine is not equipped by the manufacturer with a diesel particulate filter, use the emission factor for the 1994-2006 model years

**Table A-2
NOx Emissions Factors by Engine Model Year
(g/mile)**

Engine Certification Standard Model Year	Medium Heavy-Duty Diesel Vehicle (MHD)	Heavy Heavy-Duty Diesel Vehicle (HHD)
2003 and older	14.2	22.0
2004-2006	6.7	12.0
2007-2009	4.0	7.0
2010 and newer	0.8	1.6

