Appendix A

Proposed Regulation Order Amendments to the Regulation for In-Use On-Road Diesel Vehicles

PROPOSED REGULATION ORDER

REGULATION TO REDUCE EMISSIONS OF DIESEL PARTICULATE MATTER, OXIDES OF NITROGEN AND OTHER CRITERIA POLLUTANTS FROM IN-USE ON-ROAD DIESEL-FUELED VEHICLES

Note: Proposed amendments are shown in <u>underline</u> to indicate additions and <u>strikeout</u> to indicate deletions, compared to the preexisting regulatory language.

Amend section 2025, title 13, California Code of Regulations to read as follows.

Section 2025. Regulation to Reduce Emissions of Diesel Particulate Matter, Oxides of Nitrogen and Other Criteria Pollutants, 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 (NOx) and other criteria pollutants, and greenhouse gases from inuse 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 on-road or 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)(68).

(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 evergreater than 14,000 pounds owned or operated by a municipality, as defined in title 13, section 2020(b), that comply with the Best Available Control Technology (BACT) requirements of title 13, CCR section 2022.1(a)(1);

- (3) Vehicles subject to the fleet rule for <u>public</u> 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)(18)(15);
- (9) Two-engine cranes as defined in title 13, CCR, section 2449(c)(56);
- (10) Historic vehicles as defined in section 2025(d)(41)(36);
- (11) Motor homes for non-commercial private use;
- (12) Except as specified in section 2025(I) vVehicles subject to the regulation for drayage trucks commencing with title 13, CCR, section 2027 until January 1, 202117; and
- (13) Trucks with a GVWR of 19,500 pounds or less with <u>a riginally equipped</u> pick-up beds used exclusively for personal-use, non-commercial, <u>or non-governmental use</u>;
- (14) Two-engine water well drilling rigs as defined in title 13, CCR, section 2449(c)(57); and
- (15) Except school buses with a GVWR greater than 14,000 lbs manufactured before April 1, 1977, school buses as defined in the California Veh. Code, section 545, with a GVWR less than 26,001 lbs.
- (d) Definitions

For purposes of this regulation, the following definitions apply:

- (1) "2004 Model Year NOx Emissions Equivalent" means emissions from:
 - (A) An engine certified to the 2003 or prior model year heavy duty diesel engine emission standard that was built to 2004 engine emission standards and was not used in any manufacturer's averaging, banking and trading program.
 - (B) A pre-2004 model year heavy duty diesel engine that is equipped with a verified diesel emissions control strategy (VDECS) that reduces NOx exhaust emissions by at least 55 percent.
- (1) "2006 Baseline Fleet" means on-road diesel-fueled heavy-duty vehicles greater then 26,000 pounds GVWR included in the scope of section 2025(b) that were owned by a fleet and registered to operate in California on October 1, 2006 with the California Department of Motor Vehicles, or were owned by a fleet, registered to operate on October 1, 2006 in a jurisdiction that is an International Registration

- Plan member, and were driven at least 1,000 miles in California in the calendar year 2006. All vehicles in the scope and applicability section 2025(b) must be included and all vehicles exempt from the regulation in the exemptions section 2025(c) must be excluded.
- (3) 2008 Baseline Fleet' means the motor vehicles that were owned by the fleet, registered with California's department of motor vehicles or registered in the home jurisdiction of one of the International Registration Plan member jurisdictions on July 1, 2008, and were driven at least 1,000 miles in the year 2008 in California.
- (2) "2007 Model Year NOx Emissions Equivalent" means emissions from:
 - (A) An engine as specified below that is equipped with the highest level VDECS that reduces PM emissions and reduces NOx exhaust emissions by at least 40 percent.
 - 1. An engine certified to the 2004 through 2006 model year heavy-duty diesel engine emissions standard; or
 - 2. An engine that was built to the 2004 engine emission standard and was not used in any manufacturer's averaging, banking, or trading program.
 - (A) 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) An engine certified to the 2004 through 2006 model year heavy-duty diesel engine emissions standard or was built to the 2004 engine emission standard and was not used in any manufacturer's averaging, banking, or trading program that is equipped with a the highest level VDECS that reduces PM emissions and reduces NOx exhaust emissions by at least 40 percent; or
 - (C) A 2004 model year NOx emissions equivalent heavy_duty diesel engine, as defined in section 2025(d)(1)(A), that is equipped with a VDECS that reduces NOx exhaust emissions by at least 40 percent.
 - (D)(C) An engine certified to the 2007-2009 model year heavy-duty engine emissions standard.
- (4)(3) "2010 Model Year NOx Emissions Equivalent" means emissions from:
 - (A) An engine as specified below that is equipped with the highest level VDECS that reduces PM emissions and reduces NOx exhaust emissions by at least 85 percent.
 - 1. An engine certified to the 2004 through 2006 model year heavy-duty diesel engine emissions standard; or
 - 2. An engine that was built to the 2004 engine emission standard and was not used in any manufacturer's averaging, banking, or trading program.
 - (A) An engine certified to the 2004 model year heavy-duty diesel engine emissions standard that is equipped with a VDECS that reduces NOx exhaust emissions by more than 85 percent; or

- (B) An engine certified to the 2007 model year heavy-duty diesel engine emissions standard that meets PM BACT and that is equipped with a VDECS that reduces NOx exhaust emissions by more than 70 percent; or
- (C) An engine certified to the 2010 model year or newer heavy-duty diesel engine emissions standard; or
- (D) A heavy-duty engine certified to 0.2 g/bhp-hr or less NOx emissions level and 0.01 g/bhp-hr or less PM emissions level; or
- (E) An off-road engine certified to the Tier 4 Final engine emissions standard.

(5)(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 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.
- (6)(5) "Agricultural Vehicle" means one of the following types of vehicles; a vehicle that can be eligible to utilize the requirements for agricultural vehicles in section 2025(m) and meet one of the definitions of (A) through (E) below. An agricultural vehicle does not include 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.
 - (B)(A) A vehicle, or truck-tractor and trailer combination, owned by farming business and used exclusively in any combination of the following ways:
 - 1. in agricultural operations;
 - 2. to transport harvested farm products to the first point of processing;
 - 3. to directly support the farming or forestry operation including supply trucks, cattle trucks, and other vehicles; or
 - <u>Vehicles meeting this definition do not need to meet the definitions in sections 2025(d)(5)(B), (C), (D), or (E).</u>
 - (B) A vehicle, or truck-tractor and trailer combination, owned by a bee keeping business and used exclusively transport their own bees.

- (A)(C) A truck, or a truck-tractor and trailer combination, that is required to display a hazardous material placard during delivery and exclusively delivers fertilizer or crop protection chemicals that require placard identification for use in agricultural operations from a distribution center to a farm and back, 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.
 - 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); or
 - d. 49 CFR, CHAPTER 1, PART 173.136 Class 8; or
 - e. 49 CFR, CHAPTER 1, PART 173.140 Class 9.
- (B) A vehicle, or truck-tractor and trailer combination, owned by a farming business and used exclusively in agricultural operations, or owned by a beekeeping business used exclusively to transport their own bees. 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.
- (C)(D) A truck, or truck-tractor and trailer combination, designed for in-field operations, that is exclusively engaged in agricultural operations on the farm. Examples include truck configurations designed to spread manure, dispense hay, and dispense freestall bedding. It also includes water trucks and trucks designed or modified to be used exclusively for the dusting, spraying, fertilizing, or seeding of crops. Except as allowed in (A) above, trucks, or truck-tractor and trailer combinations that transport any products, materials, personnel, or equipment are excluded.
- (D)(E) A truck, or truck-tractor and trailer combination, including yard trucks, that exclusively transports any unprocessed horticultural, viticultural, aquacultural, forestry, dairy, livestock, poultry, bee or farm products such as raw, unprocessed crops, livestock, fish, or fowl from between the farm and to the

- where the first point of processing occurs after harvest. Also included are trucks that are used to harvest crops for silage, and trucks that transport unprocessed agricultural materials from forest or farm to a biomass facility.
- (7)(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.
- (8)(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.
- (9)(8) "Alternative-Fueled Engine" means an engine that is exclusively fueled with a fuel meeting the definition of alternative fuel.
- (10)(9) "Authorized Emergency Vehicle" has the same meaning as California Vehicle Code section 165.
- (11) "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) and 2025(g).
- (12)(10) "California Based Broker" means a person, with operations based in California, who, for compensation, arranges or offers to arrange the transportation of property by an authorized motor carrier. A motor carrier, or person who is an employee or bona fide agent of a carrier, is not a broker when it arranges or offers to arrange the transportation of shipments which it is authorized to transport and which it has accepted and legally bound itself to transport.
- (13) "Cattle or Calf Feedlot" means a lot or facility where cattle or calves have been, are, or will be stabled or confined and fed or maintained for a total of 45 days or more in any 12-month period, and where crops, vegetation, forage growth, or post-harvest residues are not sustained in the normal growing season over any portion of the lot or facility.

- "Commercial Vehicle" means a motor vehicle or combination of motor vehicles as defined in California Veh. Code, section 260.
- (15)(12) "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.
- (16)(13) "Compliance Year" means January 1 through December 31 of a calendar year.
- (17)(14) "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.
- "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.
- (19)(16) "Diesel Fuel" has the same meaning as defined in title 13, CCR, sections 2281 and 2282.
- (20)(17) "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.
- "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.
- (22) "Diesel PM Index" for the purposes of section 2025(h)(3)(B) means an indicator of the overall PM emission rate.
- (23) "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.
- (24)(19) "Drayage Truck" is the same as defined in title 13, CCR. Section 2027.
- "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.

(26)(21) "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.
- (27)(22) "Emergency Operation" means operation of an authorized emergency vehicle or emergency support vehicle to help alleviate an immediate threat to public health or safety. Examples of emergency operation include vehicle used at an emergency event to repair or prevent damage to roads, buildings, terrain, and infrastructure as a result of an earthquake, flood, storm, fire, terrorism, or other infrequent acts of nature. Emergency operation includes authorized emergency vehicle and emergency support vehicle travel to and from an emergency event when dispatched by a local, state, or federal agency. Routine operation to prevent public health risks does not constitute emergency operation.
- (28)(23) "Emergency Support Vehicle" means a vehicle, other than an authorized emergency vehicle that has been dispatched by a local, state, or federal agency that is used to transport services or supplies in connection with an emergency operation.
- (29) "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 retrofitted 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.
- (30)(24) "Executive Officer" means the Executive Officer of the ARB or his or her authorized representative.
- "Farm" means a physical location for which the primary purpose 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.
- (32)(26) "Farming Business" means a business involved in the cultivating, operating, or managing a farm for profit, either as owner or tenant or a business contracted to harvest trees in a forest for profit. A farming business does not

include businesses that derive their principal source of income from providing agricultural services such as, landscape services, veterinary, farm labor, or management for a fee or on a contract basis, or are engaged in the business of artificial insemination, raising, and caring for dogs, cats, or other pet animals.

- (33)(27) "First Point of Processing" means the location where harvested crops, bees, fowl, fish, livestock, animals, or their products, such as wool, milk, or eggs, are first altered from their original state, or the first location where unaltered products are packaged and prepared for transportation. First point of processing is not a location of the product's final use and for some crops the location may be in the field, such as chipping wood. First point of processing also includes biomass facilities that receive agricultural waste in the form of unprocessed agricultural materials. A first point of processing may include, but is not limited to, packinghouses, slaughterhouses, cotton gins, nut hullers/shellers and processors, dehydrators, lumber mills, feed and grain mills, and biomass facilities. First point of processing does not include distribution centers, wholesale retail sales locations where the first processing of product does not occur, livestock auction houses, and subsequent locations where processing, canning, or similar activities occur after departing a first point of processing location.
- (34)(28) "Fleet" means one or more vehicles, owned by a person, business, or government agency, traveling in California and subject to this regulation. A fleet may fall into one of the following subclassifications:
 - (A) "Agricultural Fleet" means a fleet utilizing the agricultural fleet provision in section 2025(m). 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)(A) "Federal Fleets" means vehicles _- a 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 including the United States Postal Service. 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; or
 - (C)(B) "Rental or Leased Fleets" means vehicles that are <u>- a fleet</u> 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.
 - (D) "Schoolbus Fleet" means a fleet comprised only of vehicles that meet the definition of schoolbus given in section 2025(d)(67).
 - (E) "Schoolbus Sub-Fleet" means the schoolbuses in a fleet comprised of schoolbuses and vehicles other than schoolbuses.

- (F) "Small Fleet" means a fleet with a fleet size of three or fewer vehicles. When determining fleet size, all of the vehicles under common ownership and control must be counted.
- (35)(29) "Fleet Owner" means, except as modified below in paragraphs (A) and (B), either 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; as evidenced on the vehicle registration document carried in the vehicle.
 - (A) For vehicles that are owned by the federal government and not registered in any state or local jurisdiction, the owner shall be the department, agency, branch, or other entity of the United States, including the United States Postal Service, to which the vehicles in the fleet are assigned or which have responsibility for maintenance of the vehicles.
 - (B) For vehicles that are rented or leased:
 - 1. The owner shall be presumed to be the rental or leasing entity for purposes of compliance with section 2025(e), if:
 - a. The rental or lease agreement for the vehicle is for a period of less than one year; or
 - b. The rental or lease agreement for the vehicle is for a period of one year or longer, unless the terms of the rental or lease agreement or other equally reliable evidence identifies the party responsible for compliance with state laws for the vehicle to be the renting operator or lessee of the vehicle.
 - 2. For purpose of enforcement, if at the time that the vehicle is inspected and cited for noncompliance with this regulation and <u>neither</u> the operator of the vehicle <u>nor the rental or leasing entity can produce does not possess</u> evidence of the party responsible for compliance with state laws, the owner shall be presumed to be both the rental or leasing entity and the renting operator or lessees of the vehicle.
- (36)(30) "Fleet Size" means the total number of diesel vehicles with a GVWR greater than 14,000 lbs in a fleet, regardless of whether the vehicles operate in California, that are under common ownership or control even if they are part of different subsidiaries, divisions, or other organizational structures of a company or agency.
- (31) "Fuel Efficient Hybrid Vehicle" means a vehicle with an onboard energy storage system that improves the average fuel economy of the vehicle by at least 20 percent compared to a conventional diesel vehicle of the same model year and configuration. The vehicle must have a combination of an engine and onboard energy storage system that provides motive power for accelerating the vehicle, recapture of energy when the vehicle decelerates, or operates auxiliary equipment that serves as the primary function for the vehicle while stationary. 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

- <u>energy storage systems of the hybrid vehicle can have the capability to supplement its energy from an external power source.</u>
- "Governmental Agency" means any federal, state, or local governmental agency, including, public schools, water districts, or any other public entity with taxing authority.
- (33) "GVWR" means gross vehicle weight rating which is the weight specified by the manufacturer as the maximum loaded weight of a single vehicle.
- (38)(34) "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.
- (39)(38) "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.
- (40)(35) "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 <code>Level 3</code> Plus is the same diesel PM level as <code>Level 3</code>.
 - (B) A Level 2 VDECS shall not be considered the highest level VDECS as long as a <u>ILevel 3 VDECS</u> can be retrofitted on a vehicle in the fleet.
 - (C) Level 1 devices are never considered highest level VDECS for the purpose of this regulation.
- (41)(36) "Historic Vehicle" means a vehicle that has met the qualifications qualifies for and has 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.
- (37) "Hubodometer" means a non-resettable device mounted on the axle of a vehicle that measures distance traveled that has a serial number and a lock-out feature that permanently prevents tampering.
- (42) "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.

- (43)(38) "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.
- (44) "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 specified below per calendar year, based on the model year of the installed engine or any vehicle that replaces a limited-mileage vehicle pursuant section 2025(m) (6)(B):
 - (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) "Log Truck" means a heavy-duty vehicle with a manufacturer's GVWR greater than 33,000 pounds that exclusively transports logs and has log bunks permanently attached.
- (45) "Low-Mileage Agricultural Vehicle" means until January 1, 2023, an agricultural vehicle with a properly functioning odometer installed at all times, that operates less than 10,000 miles per calendar year each year since January 1, 2010 or a vehicle that replaces a low-mileage vehicle per section 2025(m) (7)(B).
- (46) "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 hourmeter.
- (40) "Low-use Vehicle" means a vehicle that will be operated fewer than 1,000 miles in any compliance year and has an odometer or hubodometer that is properly functioning at all times. A vehicle with power take off (PTO) that only operates equipment while stationary must also operate its PTO less than 100 hours in any compliance year except for PTO used to load and unload cargo from the vehicle. Vehicles subject to the hour limitations must have a functioning non-resettable hour-meter installed at all times.
- (47) "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 and hour-meter installed at all times.

- (48) "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.
- (49) "Motorcoach" (MC) is an 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.
- (50)(41) "Motor Carrier" is the same as defined in California Veh. Code section 408 for fleets other than those that are comprised entirely of schoolbuses-school buses, which for the purposes of this regulation, means the registered owner, lessee, licensee, school district superintendent, or bailee of any schoolbus-school bus, who operates or directs the operation of any such bus on either a for-hire or not-for-hire basis.
- (51)(42) "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 or a vehicle that exclusively tows a trailer that was originally designed for human habitation for recreational or emergency occupancy.
- "New Fleet" means a fleet that is acquired or that enters California after January 1, 2011 January 1, 2012. Such fleets may include new businesses or outof-state businesses that bring vehicles into California for the first time after January 1, 2011 January 1, 2012.
- (53)(44) "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.
- (54) "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)(4).
- (55)(45) "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.
- (56) "NOx Exempt Vehicle" is any vehicle identified in paragraphs 0 through (E) below. These vehicles are exempt from meeting the NOx BACT requirements of sections 2025(f) or (g), or the NOx fleet average requirements of section 2025(h) for the compliance years specified in section 2025(p).

A NOx exempt vehicle is:

- (A) A schoolbus as defined in section 2025(d)(67); or
- (B) A vehicle that operates exclusively in the NOx exempt areas defined in section 2025(d)(55); or

- (C) A vehicle that is granted a compliance extension under the early action provision of section 2025(p)(8); or
- (D) A NOx mileage exempt vehicle, as defined in section 2025(d)(56); or
- (E) A motorcoach as defined in section 2025(d)(47).
- (57) "NOx Index" for the purposes of section 2025(h)(2)(B) means an indicator of a fleet's overall NOx emission rate.
- (58) "NOx Mileage Exempt Vehicle" is exempt from meeting NOx BACT in sections 2025(f) or (g), or the NOx fleet average in section 2025(h) during the compliance years specified in section 2025(p)(1), and section 2025(h) regardless of where the vehicle is operated and is limited to:
 - (A) A heavy heavy-duty diesel vehicle that has a power take off system to perform work in a stationary mode, or a diesel yard truck that is operated fewer than 7,500 miles and less than 250 hours per year;
 - (B) A 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 to 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 to perform work in a stationary mode and is operated fewer than 5,000 miles per year, with no hours limitation.
- (59) "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.
- (60) "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.
- (61)(46) "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.
- (62)(47) "PM BACT" means the technology employed on the highest level VDECS for PM or an engine originally equipped with a diesel particulate filter and certified to meet the 0.01 g/bhp-hr certification standard.
- "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.

- (64)(49) "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.
- (65)(50) "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 decisionmaking functions for the corporation;
 - (B) For a partnership or sole proprietorship: a general partner or the proprietor, respectively; or
 - (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.
- (66)(51) "San Joaquin Valley Air Basin" includes the entire counties of San Joaquin, Stanislaus, Merced, Madera, Fresno, Tulare, and Kings and western part of Kern County as described starting page 23888 of the Federal Register Vol. 69, No. 84.
- (67)(52) "Schoolbus School Bus" is a motor vehicle as defined in California Veh. Code, section 545.
- (68) "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.
- (69)(53) "Specialty Agricultural Vehicle" means, until January 1, 2023, an agricultural vehicle having one of the following body types and that have been approved for the exemption under section 2025(m)(8)(10) by the Executive Officer:
 - (A) A truck, or a truck-tractor and trailer combination, 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 truck, or a truck tractor and trailer combination, 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 truck 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 or for livestock; or
- (D) A feed truck or mixer-feed truck, specially designed for dispensing feed to livestock, and is used exclusively at a cattle or calf feedlet. It does not include a feed truck or mixer-feed truck used at dairies or other locations other than cattle and calf feedlets.
- (70)(54) "Three Day Pass" means a once-a-year temporary permit to operate a vehicle in California for three consecutive days without meeting the requirements of section 2025(e) provided that prior to entering California the vehicle owner has reported the information required in sections 2025(r) (7)(19) and (r)(8) and the date the vehicle will be entering California. No vehicle or fleet will be granted more than one three day pass per year.
- (71)(55) "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.
- (72)(56) "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
- (73) "Truck-Tractor" means a motor vehicle as defined in section 655 of the California Motor Veh. Code.
- (57) "Two-Engine Sweeper" means an on-road heavy-duty vehicle with a manufacturers GVWR greater than 14,000 pounds, used for the express purpose of removing material from road surfaces, by mechanical means through the action of one or more brooms, or by suction through a vacuum or regenerative air system or any combination of the above. A two-engine street sweeper has an engine to propel the vehicle and an auxiliary engine to power the broom or vacuum.
- (74)(58) "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 used suitable cab and chassis upon which the truck bed could be mounted 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.
- (75)(59) "Private Utility Vehicle" means a vehicle owned by a privately-owned or publicly held company or corporation that provides the same or similar services for water, natural gas, and electricity as a public utility operated by a municipality.
- (76)(60) "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 \(\frac{1}{2}\)evel 1 diesel PM reductions (25 percent), \(\frac{1}{2}\)evel 2 diesel PM reductions (50 percent), or \(\frac{1}{2}\)evel 3 diesel PM reductions (85 percent). VDECS may also be verified to achieve NOx reductions. See also definition of Highest Level VDECS.

- "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.
- (78)(62) "Yard Truck" means a vehicle, with an on-road or off-road engine, and a hydraulically elevated fifth wheel, that is used in moving and spotting trailers and containers at locations or facilities. Yard trucks are also known as yard goats, hostlers, yard dogs, trailer spotters or jockeys.

(e) General Requirements

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

- (1) Starting January 1, 2015, fleets must meet the requirements of section 2025(f) for all vehicles with a GVWR 26,000 lbs or less and may utilize the exemptions and extensions provided in of section 2025(p).
- (2) Starting January 1, 2012, fleets must meet the requirements of section 2025(g) or the phase-in options of section of 2025(i) for all vehicles with a GVWR greater than 26,000 lbs and must follow the reporting requirements of section 2025(r) if complying using the phase-in option. The fleet owner may use the exemptions and extensions provided in section 2025(p).
- (3) Fleets with one to three vehicles with a GVWR greater than 14,000 lbs may utilize phase-in option for small fleets with vehicles with a GVWR greater than 26,000 lbs provided in 2025(h).
- (4) Beginning January 1, 2012, fleets with school buses must comply with the requirement of section 2025(k) for all school buses in the fleet.
- (5) Beginning January 1, 2021, all private utility vehicle owners must comply with the requirements of section 2025(I).
- (6) Beginning January 1, 2017, fleets with drayage trucks must comply with the requirements of section 2025(I).
- (7) Fleets with log trucks may utilize the log truck provision of section 2025(m)(11).
- (8) Fleets may utilize the credits of 2025(j) or the extensions and exemptions of section 2025(p).
- (1) Except for small fleets electing to comply with section 2025(i), 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(p)(8).
- (2) Schoolbus fleets, as defined in section 2025(d)(34)(D), must comply with the requirements of section 2025(j).
- (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)(34)(E) must meet the requirements of section 2025(j).
 - (B) The remaining non-schoolbus vehicles, excluding the schoolbus sub-fleet, must comply with the requirements of section 2025(e)(1) above; or the owner may include the schoolbus sub-fleet in the determination of compliance for the entire fleet with the requirements of section 2025(e)(1). Schoolbuses used in this determination remain exempt from meeting NOx BACT in sections 2025(f) or (g), or the NOx fleet average in section 2025(h). However, the owner may not use non-schoolbus vehicles to satisfy the schoolbus sub-fleet requirements of section 2025(j).
- (4) Requirements for Drayage Trucks and Utility Vehicles

Starting in January 1, 2021, all drayage truck and utility vehicle owners must comply with the BACT requirements of section 2025(f).

- (5) (9) 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 of a "common ownership of control fleet" may elect to have the vehicles under the control of different responsible officials report compliance independently of other vehicles in the general fleet if choosing to comply with the fleet averaging requirements of phase-in option of section 2025(h)(i) or the BACT percentage limits requirements of section 2025(g) for the segment of the fleet under the control of the different responsible officials.
- (6) A fleet may meet the requirements of section 2025(e)(1), 2025(e)(2), or 2025(i)(2) 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), one of 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(m), the retired vehicle provisions of section 2025(k), or the exemptions or credits of sections 2025(p)(1), (2), (9), and (10):
- (10) Except personal, non-commercial, unregistered motor vehicles, or vehicles otherwise not required to obtain operating authority, the following is required for all fleet owners who elect to utilize the phase-in options of sections 2025(h) and 2025(i), credits for early PM retrofits, hybrids vehicles and alternative fueled

vehicles of section 2025(j), the agricultural provisions of section 2025(m), or the exemptions and extensions provisions of sections 2025(p):

(A)

- (A)1. a valid California motor carrier of property number;
- (B)2. a valid identification number assigned by the United States Secretary of the Department of Transportation;
- (C)3. a valid operating authority number issued by the Public Utilities Commission; or
- (D)4. other applicable valid operating authority number approved by the Executive Officer.
 - (B) this requirement does not apply to personal, non-commercial, unregistered motor vehicles, or vehicles otherwise not required to obtain operating authority numbers as described in section (e)(7)(A) above.
- (8) A vehicle that is exempt from meeting the NOx BACT sections 2025(f) or the percent limits in section 2025(g), or the NOx fleet average in section 2025(h) must comply with the requirements of section 2025(p)(o)(1).
- (9)(11) All information specified in section 2025(r) must be reported to the Executive Officer.
- (10)(12) Records must be kept as specified in section 2025(s).
- (11)(13) 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) Requirements for Vehicles with a GVWR 26,000 lbs or less
- (1) Except as provided in (3) below, all vehicles with a GVWR 26,000 lbs or less must be 2010 model year emission equivalent pursuant to the following schedule in Table 1:

<u>Table 1: Best Available Control Technology Compliance Schedule</u> <u>for Vehicles with a GVWR 26,000 lbs or less</u>

Compliance Date as of January 1	Existing Engine Model Year	BACT Requirements
<u>2015</u>	<u>1995 & older</u>	
<u>2016</u>	<u>1996</u>	
<u>2017</u>	<u>1997</u>	
<u>2018</u>	<u>1998</u>	2010 model year emission
<u>2019</u>	<u>1999</u>	equivalent
<u>2020</u>	2003 & older	<u>equivalent</u>
<u>2021</u>	<u>2004-2006</u>	
<u>2022</u>		
<u>2023</u>	2007-2009	

- (2) Each year the fleet must meet the requirements of all prior years shown in the schedule. A 2007 model year emissions equivalent engine complies with the BACT requirements until January 1, 2023.
- (3) There are no reporting requirements for vehicles with a GVWR 26,000 lbs or less except as identified in 2025(f)(4) below.
- (4) Any vehicle that meets PM BACT prior to January 1, 2014, is exempt from upgrading to a 2010 model year emission equivalent engine until January 1, 2020 and must meet the reporting and record keeping requirements of sections 2025(r) and (s).
- (g) Requirements for Vehicles with a GVWR greater than 26,000 lbs

Except as required in sections 2025(3) and (4) below, if all vehicles in the fleet meet the requirements of this section the fleet is exempt from the reporting requirements of section 2025(e)(11). A fleet may meet PM BACT by installing the highest level VDECS or with a vehicle originally equipped with a diesel particulate filter. A fleet may meet the 2010 model year emissions equivalent by replacing the engine or vehicle with one with a 2010 model year engine or later, retrofitting the engine with a VDECS that achieves 2010 model year equivalent emissions, or by replacing a vehicle with one that has a future compliance deadline.

(1) Starting January 1, 2012, vehicles with a GVWR greater than 26,000 lbs must meet PM BACT and upgrade to a 2010 model year engine or equivalent emissions pursuant to the schedule set forth in Table 2 below.

<u>Table 2: Best Available Control Technology Compliance Schedule</u> <u>for Vehicles with GVWR greater than 26,000 lbs</u>

Engine Model Year	Compliance Date Install PM Filter by	Compliance Date 2010 Engine by
<u>1993 & older</u>	<u>N/A</u>	<u>January 1, 2015</u>
<u>1994-1995</u>	<u>N/A</u>	<u>January 1, 2016</u>
<u>1996-1997</u>	<u>N/A</u>	January 1, 2017
<u>1998-2000</u>	<u>January 1, 2012</u>	<u>January 1, 2020</u>
2001-2004	January 1, 2013	<u>January 1, 2021</u>
<u>2005-2006</u>	January 1, 2014	January 1, 2022
2007-2009	January 1, 2014 if not originally equipped	<u>January 1, 2023</u>

- (2) Each year the fleet must meet the requirements of all prior years shown in the schedule. A 2007 model year emissions equivalent engine complies with the BACT requirements until January 1, 2023.
- (3) Until January 1, 2015, any fleet may optionally choose to meet PM BACT according to the following schedule:
 - 1. 2003-2004 model year engines and 1993 model year and older engines must meet PM BACT by January 1, 2012.
 - 2. 2005-2006 model year engines and 1994-1999 model year engines must meet PM BACT by January 1, 2013.
 - 3. All engines meet PM BACT by January 1, 2014.

Beginning January 1, 2015, this option expires and the fleet must comply with general requirement 2025(e). Fleet owners choosing this option must comply with the reporting and record keeping requirements of sections 2025(r) and (s).

(4) Any vehicle that meets PM BACT prior to January 1, 2014, is exempt from meeting 2010 model year emission equivalent requirement until January 1, 2020 at which time it must comply with the requirements of Table 2 below. Fleet owners choosing this option must comply with the reporting and record keeping requirements of sections 2025(r) and (s).

(h) Phase-in Option for Small Fleets

This is an option for fleets with a fleet size of one to three vehicles with a GVWR greater than 14,000 lbs that allows the fleet to delay meeting the PM BACT requirements until January 1, 2014 and the 2010 engine or equivalent emissions requirement until January 1, 2020. This option applies only to vehicles in the fleet with a GVWR greater than 26,000 lbs.

(1) The fleet shall have one vehicle comply with PM BACT, by January 1, 2014, two vehicles by January 1, 2015, and three vehicles by January 1, 2016.

- (2) Vehicles with a GVWR greater than 26,000 lbs are exempt from meeting the 2010 model year emissions equivalent until January 1, 2020. Beginning January 1, 2020, all vehicles in the fleet must comply with the 2010 engine or equivalent emissions requirements of the BACT compliance schedule in Table 2.
- (3) This option is not available to divisions within a company or subsidiaries under common ownership and control that has a fleet size greater than three.
- (4) Fleets with vehicles with 1998-2000 model year engines that do not meet PM BACT by January 1, 2012, must comply with the reporting requirements of section 2025(r) starting January 31, 2012.
- (5) Fleets with vehicles with 2001-2004 model year engines that do not meet PM BACT by January 1, 2013, must comply with the reporting requirements of section 2025(r) starting January 31, 2013.
- (6) Fleet owners using this provision must comply with the reporting and record keeping requirements of sections 2025(r)(5) through (10) and (s) by January 1, 2014
- (i) Phase-in Option for Large Fleets

The phase-in option for fleets with vehicles with a GVWR greater than 26,000 lbs provides fleets with an alternative compliance option to phase in the requirements from January 1, 2012 to January 1, 2016.

(1) Beginning January 1, 2012, fleets must meet the PM BACT and upgrade to a 2010 model year emission equivalent engine pursuant to the schedule set forth in Table 2 below.

<u>Table 3: Phase-in Compliance Schedule</u> <u>for Vehicles with GVWR greater than 26,000 lbs</u>

Compliance Date as of January 1	Percent of Total Fleet Complying with BACT	BACT Requirements
<u>2012</u>	<u>30%</u>	
<u>2013</u>	<u>60%</u>	DMDACT
<u>2014</u>	<u>90%</u>	PM BACT
<u>2015</u>	<u>90%</u>	
<u>2016</u>	All vehicles must comply with section 2025(g)	

(2) If the calculated number of engines in each model year group required to be brought into compliance with the 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.

- (3) Vehicles in which public funds contributed to the purchase or retrofit of a vehicle must be excluded in determining the fleet size and the number of vehicles in accordance with the funding program guidelines.
- (4) To utilize this option, fleet owners must comply with the reporting and record keeping requirements of sections 2025(r) and (s) by January 31, 2012.
- (5) Relief for Fleets that have Downsized
 - This credit is only available to fleets utilizing the phase-in option. Until January 1, 2016, a fleet that has fewer vehicles with a GVWR greater than 26,000 lbs. operating in the compliance year than in the 2006 baseline fleet may claim a reduced requirement for the compliance year.
 - (A) Until January 1, 2014, the fleet may reduce the percent requirement in Table 3 by the same percent that the fleet was downsized. For example, a fleet that is 20 percent smaller than it was in 2006 would subtract 20 percent from the annual compliance requirement. If the compliance requirement for the year is 30 percent, the fleet would need to demonstrate that it had PM filters on the 10 percent of the existing fleet (30%-20%=10%).
 - (B) The number of vehicles that are not operated in the compliance year may be excluded from the existing fleet in determining the credit if:
 - 1. The vehicle is not driven for the entire compliance year and
 - a. Either a planned non-operation certificate that has been filed with the DMV or a certificate of non-operation or,
 - b. An equivalent certificate filed with another state prior to the beginning of the compliance year; or
 - 2. The vehicle is not operated for any other purpose during the compliance year except to demonstrate functionality of the vehicle to potential buyers, to move the vehicle short distances for maintenance, or to a storage facility while awaiting sale.
 - (C) Any fleet utilizing this provision must comply with the reporting requirements of section 2025(r)(13) and report information for all vehicles in the 2006 baseline fleet.
 - (E) The credits are not transferrable except with appropriate documentation of a change of business form such as sole proprietorship to partnership or partnership to corporation, or for mergers or acquisitions of the entire company and fleet.
 - (F) For purposes of determining the number of vehicle in the fleet on January 1 of the compliance year, all vehicles in the scope and applicability section 2025(b) must be included and all vehicles exempt from the regulation in the exemptions section 2025(c) must be excluded.
- (j) Credits for Early PM Retrofits, Hybrid Vehicles, Alternative Fueled Vehicles, and Vehicles with Heavy-Duty Pilot Ignition Engines

- (1) A fleet shall receive a credit to treat another vehicle with a GVWR greater than 26,000 lbs as compliant until January 1, 2017. The fleet can earn a credit for taking the following compliance action on a vehicle with a GVWR greater than 26,000 lbs. The fleet can also earn a credit to treat another vehicle with a GVWR greater than 26,000 lbs as compliant for taking the following action on a vehicle with a GVWR from 14,001 to 26,000 lbs if the action was taken between January 1, 2007 and July 1, 2011.
 - (A) For each vehicle the fleet has equipped with the highest level VDECS for PM by July 1, 2011. A fleet may also receive the same credit if the highest level VDECS is ordered and paid for by May 1, 2011 and installed by September 1, 2011.
 - (B) For each fuel efficient hybrid vehicle added to the fleet between January 1, 2007 and January 1, 2017.
 - (C) For each alternative fueled engine or heavy-duty pilot ignition engine added to the fleet between before January 1, 2011. A dual-fuel engine is not eligible.
- (2) Credits under this section will not be given for vehicles that were purchased or retrofitted to comply with any other California in-use regulation. Credits will also not be given for partially state funded vehicle replacements or retrofits according to the funding program guidelines. Credits under this section are only valid for as long as the vehicle for which the compliance action has been taken remains operational in the fleet.
- (3) A fleet using the credits under this section must report the information required in section 2025(r) about the vehicle for which the compliance action has been taken and the vehicle to be treated as compliant.
- (f) Best Available Control Technology (BACT) Requirements

Starting and every January 1, 2011 thereafter, vehicles within a fleet in which the fleet owner has elected to utilize the provisions of section 2025(f) must comply with the definitions for PM BACT, and NOx BACT as set forth in the compliance schedule shown in Table 1. Each year the fleet must meet the requirements of all prior years shown in the schedule. If all vehicles in the fleet meet the requirements of this section the fleet is exempt from the reporting requirements of section 2025(e)(9).

Table 2: Best Available Control Technology Compliance Schedule

Compliance Deadline, as of January 1	Engine Model Years	BACT Requirements
2011	Pre-1994	PM BACT
2012	2003 – 2004	PM BACT
2013	2005 – 2006	PM BACT
2013	1994 – 1999	NOx and PM BACT
2014	2000 – 2002	NOx and PM BACT
	2007 and later	PM BACT
	that do not meet 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.

A fleet owner who elects to utilize the provisions of this section must comply with the applicable requirements below and the reporting requirements of section 2025(r).

- (1) By January 1 of each compliance year, the fleet must meet PM BACT for the percentage of propulsion engines in the fleet, including engines installed in motorcoaches, as set forth in Table 2.
- (2) By January 1 of each compliance year, the fleet, excluding motorcoaches, must meet NOx BACT for the percentage of non-motorcoach propulsion engines in the fleet as set forth in Table 2. By January 1 of each compliance year, motorcoaches in the fleet must meet MC NOx BACT for the percentage of motorcoach engines in the fleet as set forth in Table 2.
- (3) 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 To- Complying wit		Percent of Total Motorcoach Fleet Complying with BACT MC NOx BACT
2011	25%	NA	NA
2012	50%	NA	NA
2013	75%	25%	NA
2014	100%	50%	NA
2015	100%	50%	NA
2016	100%	60%	NA
2017	100%	80%	50%
2018	100%	80%	50%
2019	100%	80%	50%
2020	100%	90%	50%
2021	100%	90%	90%
2022	100%	90%	90%
2023	100%	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 2025(h)(2) and (3) below and the reporting requirements of section 2025(r).

(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)(56)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.

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

Where:

- EF_(HHD) = The NOx emission factor as specified in Appendix A for each heavy heavy-duty (HHD) vehicle subject to the NOx requirements, including motorcoaches, 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. Except for 2010 model year NOx emissions equivalent engines, for propulsion engines that have been retrofitted with VDECS, the NOx emission factor is reduced by the percentage NOx emission reductions that are verified. 2010 model year NOx emissions equivalent engines 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 until January 1, 2017.

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

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)

Compliance Deadline, as of January1	Fleet NOx Targets for each compliance deadline		
as of daridary f	MHD	HHD	MC
2013	8.5	14.4	N/A
2014	5.8	9.8	N/A
2015	5.8	9.8	N/A
2016	4.6	7.8	N/A
2017	4.0	6.0	9.8
2018	4.0	6.0	9.8
2019	4.0	6.0	9.8
2020	3.2	4.4	9.8
2021	3.2	4.4	4.4
2022	1.6	3.0	3.0
2023	0.8	1.6	1.6

(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:

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

Where:

- PMEF_(HHD) = The PM emission factor (g/mile) as specified in Appendix A for each heavy heavy-duty (HHD) vehicle, including motorcoaches, 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 a propulsion engine that has been retrofitted 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

$$PM\ T \operatorname{arg} et\ Rate = \frac{Sum\ of\ PM\ T \operatorname{arg} et_{(HHD)}}{Total\ number\ of\ vehicles\ subject\ to\ the\ PM\ fleet\ averaging\ requirement}$$

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	
as or carriagry	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

- (1) For any compliance deadline, small fleet owners may comply with the requirements of section 2025(e)(1), which includes the requirement to comply with BACT in section 2025(f), the BACT percentage limits of 2025(g), or the fleet averaging option of 2025(h), or by complying with following optional compliance requirements.
- (2) Small fleets must comply with the general requirements of section 2025(e) except that in lieu of the requirements of sections 2025(e)(1), the owner of a small fleet may comply by having the following:
 - (A) Fleets with One Vehicle

Beginning January 1, 2014, a fleet consisting of one vehicle must have that vehicle equipped with a 2004-2006 model year NOx emissions

equivalent or newer engine that has the highest level VDECS for reducing PM emissions installed. By January 1, 2019, the vehicle must meet the requirements of BACT in section 2025(f).

(B) Fleets with Two Vehicles

Fleets with two vehicles may meet the requirements of 1. or 2. below.

- 1. a. Beginning January 1, 2014, the fleet must have one vehicle equipped with a 2004-2006 model year NOx emissions equivalent or newer engine that has the highest level VDECS for reducing PM emissions installed and the second vehicle in the fleet must meet the requirements of BACT in section 2025(f); and
 - b. By January 1, 2019, the 2004-2006 model year vehicle identified in a. above must meet the requirements of BACT in section 2025(f).
- 2. a. Beginning January 1, 2014 the fleet must have one vehicle equipped with a 2010 NOx emissions equivalent or newer engine and the second vehicle equipped with the highest level VDECS for reducing PM emissions; and
 - b. By January 1, 2017, the second vehicle must meet the requirements of BACT in section 2025(f).

(C) Fleets with Three Vehicles

Fleets with three vehicles may meet the requirements of 1., 2., or 3. 2. below.

- 1. a. Beginning January 1, 2014, the fleet must have one vehicle equipped with a 2004-2006 model year NOx emissions equivalent or newer engine that has the highest level VDECS for reducing PM emissions installed and the other two vehicles in the fleet must meet the requirements of BACT in section 2025(f);
 - b. Beginning January 1, 2019, all three vehicles in the fleet must be in compliance with the requirements of section 2025(e).
- 2. a. Beginning January 1, 2014, the fleet must have one vehicle equipped with a 2010 model year emissions equivalent or newer engine, and a second vehicle equipped with a 2004-2006 model year NOx emissions equivalent or newer engine that has the highest level VDECS for reducing PM emissions; the third vehicle is exempt the requirements of sections 2025(f), (g), or (h) until January 1, 2016 when it must meet the requirements of BACT in section 2025(f).from the PM and NOx requirements.
 - b. Beginning January 1, 2019, all three vehicles in the fleet must be in compliance with the requirements of section 2025(e).

(k)(j) Requirements for Schoolbuses School Buses

This section applies to school buses as defined in section 2025(d)(52) with a GVWR greater than 26,000 lbs. Except school buses with a GVWR greater than 14,000 lbs manufactured before April 1, 1977, school buses less than 26,001 lbs are exempt from the requirements of section 2025(k).

(1) Phase-in Requirements for School Buses with a GVWR greater than 26,000 lbs

Fleets with school buses manufactured on or after April 1, 1977, with a GVWR greater than 26,000 lbs, must comply with PM BACT as defined in section 2025(d)(47), pursuant to the schedule set forth in Table 4 below.

<u>Table 4: Compliance Schedule for School Buses</u> with a GVWR greater than 26,000 lbs

Compliance Deadline, as of January 1	Percent of Fleet Complying with PM BACT
<u>2012</u>	<u>33%</u>
<u>2013</u>	<u>66%</u>
<u>2014</u>	<u>100%</u>

(2) Relief for School Bus Fleets that have Downsized

(A) Until January 1, 2014, a fleet having fewer school buses, with a GVWR greater than 14,000 lbs, on January 1 of the compliance year than it had in the 2006 baseline year may reduce the percent requirement in Table 4 by the same percentage that the fleet has downsized.

For example, a fleet that is 20 percent smaller than it was in 2006 would subtract 20 percent from the annual compliance requirement. If the compliance requirement for the year is 33 percent, the fleet would need to demonstrate that it had PM filters on the 13 percent of the existing fleet (33%-20%=13%).

- (B) The credits are not transferrable except with appropriate documentation of a change of business form such as sole proprietorship to partnership or partnership to corporation, or for mergers or acquisitions of the entire company and fleet.
- (3) Credits for Hybrid School Buses, Alternative Fueled School Buses, and School Buses with Pilot Ignition Engines

Fleets with fuel efficient hybrid school buses, alternative fueled school buses, or school buses with pilot ignition engines with a GVWR greater than 14,000 lbs shall receive a credit to treat another school bus as compliant until January 1, 2014. A school bus with a dual-fuel engine is not eligible. This credit is not available for school buses that were purchased or retrofitted to comply with any other California in-use regulation. This credit is not available if state funds where used to partially

- <u>or totally replace or retrofit any school bus unless allowed by the guidelines of the</u> program that funded the bus replacement or retrofit.
- (4) Credits for PM VDECS or Replacement School Buses between 14,001 and 26,000 lbs GVWR

For each school bus in the fleet, with a GVWR greater than 14,000 and less than or equal to 26,000 lbs, equipped with a PM VDECS or an OEM diesel particulate filter that replaced an older bus, the fleet may treat another school bus with a GVWR greater than 26,000 lb as compliant until January 1, 2014.

(5) Extension of Deadline for Unavailability of VDECS

If a school bus engine cannot be equipped with the highest level VDECS for PM the school bus owner must:

- (A) Record and submit to the Executive Officer the information listed in section 2025(k)(5)(B) through (E) by January 31 of each compliance year through January 31, 2017. By January 1, 2018, this extension expires and all school buses must be replaced with a vehicle that is 2010 model year emissions equivalent or one that complies with the BACT compliance schedule (i.e., a 1998 model year engine or newer school bus equipped with the highest level VDECS for PM).
- (B) Describe the reasons that a compliance extension is needed for each engine or engine-vehicle combination annually.
- (C) If during the warranty period, the VDECS would void the engine warranty, provide a statement from the engine manufacturer, or authorized engine dealer, or vehicle dealer that explains why the warranty would be voided.
- (D) If no verified VDECS is commercially available, provide a list of VDECS manufacturers that have been contacted and the manufacturers' responses to your requests to purchase a VDECS from them.
- (E) If a verified VDECS is commercially available, but the VDECS manufacturer or an authorized VDECS installer does not deem the VDECS to be technologically feasible for the school bus, provide a statement from the VDECS manufacturer or authorized VDECS installer.

(6) Low-use School Buses

- (A) School buses operating fewer than 1,000 miles during any compliance year are exempt from the Requirements for School buses in section 2025(k), but fleet owners must comply with the record keeping requirements of section 2025(s)(3). Such vehicles must have a properly functioning odometer installed at all times.
- (B) A fleet owner of a school bus that exceeds 1,000 miles in any compliance year must immediately count the school bus as part of the fleet, bring the fleet into compliance with the requirements of 2025(k) in the current compliance year and notify the Executive Officer of the change in status within 30 days of exceeding the mileage limit.

- (7) Any school bus, with a GVWR greater than 14,000 lbs, manufactured before April 1, 1977, must be retired from service no later than January 1, 2012.
- (8) Title 13, CCR section 1272(c) requires that a schoolbus that has been retrofit with a VDECS must receive a safety inspection from an authorized employee of the department of the California Highway Patrol, prior to its return to service.
- (9) School buses that were equipped 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 PM BACT.
- (10) Section 2025(c)(10) exempts school buses meeting the definition in section 2025(d)(36) of a historic vehicle.
- (11) Owners of school buses are subject to the recordkeeping requirements in section 2025(s)(3).
- (12) Owners of school buses are subject to the applicable requirements of sections 2025(t) through (z).

Beginning with the applicable effective dates set forth below, a schoolbus fleet, as defined in section 2025(d)(34)(D), and a schoolbus sub-fleet as defined in section 2025(d)(34)(E) must comply with the following requirements of this regulation:. Schoolbuses within a schoolbus fleet or a schoolbus sub-fleet are exempt from meeting NOx BACT in section 2025(f), (g) and NOx fleet averaging in section 2025(h).

- (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 retrofitted with the highest level VDECS available. 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)(62) according to the compliance schedule shown in Table 5.
- (5) If a schoolbus engine cannot be retrofitted with highest level VDECS for PM then the engine shall be replaced with an engine that can be retrofitted with the highest level VDECS by January 1, 2018, subject to meeting the annual extension requirements of section 2025(p)(11). 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 retrofitted 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

Compliance Deadline, As of January 1	Engine Model Years
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(p)(8) and (9), respectively.

(B) Low-use Schoolbuses

- 1. Schoolbuses that meet the definition of a low-use schoolbus are exempt from the 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 2025(s)(4).
- 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 requirements of Table 5 above or section 2025(g) or (h) as required for the immediately preceding compliance deadline.
- (C) Schoolbuses that were retrofitted 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 PM BACT.
- (8) Schoolbuses registered as historic vehicles, as defined in section 2025(d)(41) are not subject to the regulation.
- (9) Reporting Requirements for Schoolbus Fleets and Schoolbus Sub-Fleets

 The owner of a schoolbus fleet or a schoolbus sub-fleet is subject to the reporting requirements in section 2025(r)(14) 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(p).
- (10) Schoolbus fleets and schoolbus sub-fleets are subject to the applicable requirements of sections 2025(t) through (z).

(I) Requirements for Drayage Trucks and Utility Vehicles

- (A) Drayage trucks that are subject to the Drayage Truck regulation may be included in the fleet for purposes of complying with the requirements of section 2025(e) only if all drayage trucks are included. Fleets must include all drayage trucks when complying with the Phase-in Option for Large Fleets of section 2025(i).
- (B) Starting January 1, 2017, all drayage truck owners must comply with the requirements of section 2025(e).
- (C) Drayage trucks may not utilize any of the credits in section 2025(j) or exemptions and extensions in section 2025(p).
- (D) Starting January 1, 2021, all private utility vehicle owners must comply with the requirements of section 2025(e).

(k) Retired Vehicle Credit

- (1) Until January 1, 2014, a fleet may obtain credit equivalent to one 2010 engine for purposes of determining BACT in section 2025(g) or for calculating the PM and NOx indices and target rates in 2025(h). Any fleet utilizing the retirement credit provision must comply with the reporting requirements of section 2025(r) beginning March 31, 2010, by January 31, 2012, and report information for all vehicles in the 2008 baseline fleet.
- (2) For purposes of calculating the BACT percentage limits in section 2025(g) credit will be given equal to a 2010 model year engine for each vehicle retired, that reduces the number of vehicles in the fleet compared to the baseline fleet as defined in section 2025(d)(3).
- (3) For purposes of calculating the PM and NOx indices and target rates in fleet averaging 2025(h) the fleet shall use the following approach:
 - (A) If the number of MHD vehicles in the fleet has declined then the emissions factor used shall be the same as a 2010 model year engine emissions factor for each MHD vehicle retired up to the total number of vehicles reduced from the 2008 baseline fleet.
 - (B) If the number of HHD vehicles in the fleet has declined then the emissions factor used shall be the same as a 2010 model year engine emissions factor for each HHD vehicle retired up to the total number of vehicles reduced from the 2008 baseline fleet.
- (4) Retirement credits will be retained upon appropriate documentation of a change of business form such as sole proprietorship to partnership or partnership to corporation, but not for mergers, acquisitions, sales or purchases.

(I) Requirements for Motorcoaches

Motorcoaches are exempt from meeting NOx BACT in sections 2025(f) or (g), or the NOx fleet averaging in section 2025(h) until January 1, 2017. Beginning January 1, 2017, fleets with motorcoaches complying with the BACT percentage limits of section 2025(g) or the fleet averaging requirements of section 2025(h), would include the MC NOx BACT emissions factor from Table 2 and the MC NOx target value from Table 3 when calculating the NOx target rate and fleet average NOx emissions for the fleet.

(m) Requirements for Agricultural Fleets

Beginning January 1, 2011, agricultural vehicles shall be exempt from the requirements of sections 2025(f) and (g) if they meet the definition of an agricultural vehicle and remain below the applicable mileage limits for the period specified. Vehicles meeting the specialty vehicle definition would have no mileage restrictions. Fleets must comply with the reporting and record keeping requirements of sections 2025(r) and (s).

(1) Beginning January 1, 2011 through January 1, 2017, any vehicle meeting the definition of an agricultural vehicle, as defined in section 2025(d)(5), that remains below the annual mileage limits in Table 5 below are exempt from the requirements of section 2025(f) and (g).

Table 5: Agricultural Vehicle Mileage Limits

Engine Model Year	Mileage Limits		
1995 and earlier	15,000 miles		
<u>1996-2005</u>	20,000 miles		
2006 or newer	25,000 miles		

- (2) Agricultural vehicles that have not exceeded 10,000 miles per year between January 1, 2011 and January 1, 2017, shall continue to be exempt from the requirements of 2025(f) and (g) until January 1, 2023, so long as the 10,000 mile limit is not exceeded.
- (3) Beginning January 1, 2017, all agricultural vehicles that have exceeded 10,000 miles in any calendar year since January 1, 2011, must comply wit the best available control technology (BACT) requirements of section 2025(f) and (g).
- (4) Specialty agricultural vehicles, as defined in section 2025(d)(53), are exempt from the requirements of sections 2025(f) and (g) until January 1, 2023 regardless of annual miles traveled.
- (5) A qualifying agricultural vehicle must be operational, functional, able to start without assistance, and be able to move under its own power. Vehicles that are being used for parts do not qualify as an agricultural vehicle subject to section 2025(m).
- (6) Agricultural fleet owners utilizing the agricultural provisions of section 2025(m) must report and comply with the requirements of section 2025(r) and 2025(s).
- (7) Within 30 days of replacing a qualifying agricultural or specialty agricultural vehicle, the agricultural fleet owner must report the required information in section 2025(r)(14)(l).
- (8) The maximum number of qualifying agricultural vehicles in a fleet shall be established by the number of agricultural vehicles in the fleet as of January 1, 2009, as reported in section 2025(r)(14). This number shall not increase from one year to the next.
- (9) An 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, sold out of the agricultural fleet, or will no longer meet the definition of an agricultural or specialty agricultural vehicle. This

- requirement does not apply if just the engine is being replaced and not the entore vehilce.
- (7) When a qualifying 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 based on the model year of the engine in the replacement vehicle.
- (8) A merger of two or more agricultural fleets may not result in more agricultural vehicles after the merger occurs than the sum of the agricultural vehicles in the individual agricultural fleets included in the merger.
- (9) Beginning January 1, 2017, all agricultural vehicles that have exceed 10,000 miles in any calendar since January 1, 2011, must comply with the best available control technology (BACT) requirements of section 2025(f) and (g).
- (1) Beginning January 1, 2011, vehicles meeting the definitions of limited-mileage agricultural vehicles, or low-mileage agricultural vehicles, shall be exempt from the 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)(69)(74), 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 utilizing the agricultural provisions of section 2025(m) must report and comply with the requirements of section 2025(r) and 2025(s) for all vehicles subject to this regulation for each compliance year, 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(r)(15)(J).
- (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(r)(15). 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, replaces a low-mileage agricultural vehicle according to section 2025(m)(7)(C), or is 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)(44) based on the model year of the engine in the replacement vehicle.
- (D) Beginning January 1, 2017, all limited-mileage agricultural vehicles that do not meet the definition of a low-mileage agricultural vehicle as defined in section 2025(d)(45) 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)(44) based on the model year of the engine, must immediately meet the 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(m)(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(r)(15). 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)(45).
- (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(m)(7)(A) a vehicle that formerly met the low-mileage agricultural vehicle definition, but whose use increases above the mileage thresholds established in section 2025(d)(45), must immediately meet the 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(m)(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(m)(7)(A) above, shall be reduced by one

(8)(10) Requirements for specialty agricultural vehicles

- (A) Specialty agricultural vehicles, as defined in section 2025(d)(69)(53), are exempt from the requirements of sections 2025(f) and 2025(g), (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 operating 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) If more vehicles are reported than allowed by the limits, the Executive Officer will randomly approve one vehicle per eligible fleet until all fleets have one approved vehicle, then randomly approve another vehicle for the remaining eligible fleets until they all have one more vehicle approved. Vehicles will continue to be approved in this manner until the limits have been met.

 Vehicles reported by March 31, 2010 will be given priority should the limits identified in section 2025(m)(B) above be exceeded.

- (D) All vehicles with the body types described in section 2025(d)(69)(53) that have not been approved must meet the requirements of section 2025(e) or the agricultural provisions of section 2025(m).
 - 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.
- (E) A fleet that replaces an agricultural specialty vehicle will not affect the number of approved specialty vehicles in the fleet so long as the replacement vehicle meets the specialty vehicle body type and use requirements.

(11) Optional Phase in for Log Trucks

Beginning January 1, 2012, fleets with log trucks as defined in section 2025(d)(39) may opt to have the log trucks in the fleet comply by meeting all of the requirements as set forth below in lieu of meeting the requirements in sections 2025(g) or 2025(i).

- (A) Fleet owners may phase in 2010 model year emission equivalent engines according to the compliance schedule shown in Table 6.
- (B) If the calculated number of engines in each model year group required to be brought into compliance with the 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.
- (C) The number of log trucks and qualifying agricultural vehicles cannot exceed the number of vehicles in the fleet as of January 1, 2009.
- (D) The total number of qualifying log trucks cannot increase from one year to the next.
- (E) Fleets utilizing the log truck provision must comply with the reporting requirements of section 2025(r) for all log trucks.
- (F) Qualifying log trucks may not utilize any of the credits of section 2025(j) or any of the extensions or exemptions of section 2025(p).
- (G) The remaining vehicles in the fleet other than log trucks, must comply with the requirements of section 2025(e).

<u>Table 6: Reported Percent of Log Trucks that Must have</u> 2010 Model Year Emissions Equivalent

Compliance Deadline as of January 1	Percent of Total Fleet Complying with BACT
<u>2011</u>	<u>0%</u>
<u>2012</u>	<u>0%</u>
<u>2013</u>	<u>0%</u>
<u>2014</u>	<u>10%</u>
<u>2015</u>	<u>20%</u>
<u>2016</u>	<u>30%</u>
<u>2017</u>	<u>40%</u>
<u>2018</u>	<u>50%</u>
<u>2019</u>	<u>60%</u>
<u>2020</u>	<u>70%</u>
<u>2021</u>	<u>80%</u>
<u>2022</u>	<u>90%</u>
<u>2023</u>	<u>100%</u>

(9)(12) Labeling Requirements for Agricultural Vehicles and Log Trucks

- (A) Within 30 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 vehicle, and log truck reported in the fleet according to the following specification:
 - 1. The letters AG shall be white block lettering on a black 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 and be in clear view at all times.
- (n) Requirements for Two-Engine Sweepers
- (1) Two-engine sweepers with auxiliary engines 50 hp or greater must comply with section 2025(e). The propulsion engine is required to meet PM BACT and to upgrade to a 2010 model year emission equivalent engine. The auxiliary engine is required to meet PM BACT when the propulsion engine is required to meet PM BACT or be 2010 model year emissions equivalent.
- (1) Two-engine sweepers must comply with section 2025(e) and must meet PM BACT on the auxiliary engine, 50 hp or greater, when the propulsion engine is required to meet PM BACT according to the compliance option chosen under section 2025(f), section 2025(g) or 2025(h).

- (2) Regardless of fleet size, two-engine sweepers may not operate any Tier 0 auxiliary engine, 50 hp or greater, more than 450 hours per year starting January 1, 2010 until January 1, 2014 and no more than 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 according to the following specification:
 - The letters SW shall be white block lettering on a black background. Both letters shall be at least three inches high on a five by eight inch background-; and
 - 2. The label shall be located on the left and right door of the vehicle and be in clear view at all times.
- (o) Requirements for a New Fleet and Adding Vehicles to a Fleet Change in Status of an Existing Fleet
- (1) New Fleet Requirements. Owners of new fleets must meet the requirements of section 2025(e) 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 January 1, 2012. New fleets meeting the requirements of sections 2025(h) or 2025(i) 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(r).
- (2) Change in Status of an Existing Fleet
 - (A) Adding Vehicles to an Existing Fleet. If a fleet does not meet the BACT requirements of section 2025(f), before Before a the fleet may operate a newly added vehicle in service, or operate a vehicle that was previously reported as non-operational, 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 the Executive Officer shall approve the vehicle for service operation upon the fleet demonstrating demonstrate that the fleet, as newly constituted, complies with the requirements of sections 2025(o)(2)(A), (B), and (C) below. The fleet shall file the report to the Executive Officer within 30 days of adding the vehicle. If the vehicle added can comply by meeting PM BACT, the vehicle may be operated prior to receiving Executive Officer approval for the purpose of having the vehicle's exhaust temperature data logged.
 - (B) Removing Vehicles from an Existing Fleet. If an existing fleet does not meet the requirements of section 2025(f) or 2025(g) when a vehicle is removed from the fleet, it must file a report with the Executive Officer that it has removed a vehicle and demonstrate that the fleet, as newly constituted, will comply with the requirements of sections 2025(o)(2)(C)1 and 2 within 30 days of removal of the vehicle.

- (C) Compliance Requirements for an Existing Fleet that has Changed Status
 - (A)1. A fleet owner who elects to utilize the phase-in option BACT percentage limits option of section 2025(g)(i) may not add or remove 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.
 - (C)2. Until January 1, 2017, the The addition of vehicles with 2007 or newer through 2009 model year engines need not be reported until the next compliance date unless;
 - 1. a. the addition will cause a fleet to increase its size to greater than three vehicles or,a fleet with three or fewer vehicles changes to a fleet with four or more or.
 - 2.b. a fleet is utilizing the relief for fleets that have downsized retired vehicle credit of section 2025(k)(i)(5).
 - (D) The addition of vehicles with 2010 model year or newer engines that meet PM BACT need not be reported until the next compliance date;
- (p) <u>Exemptions and Extensions</u> <u>Exemptions, Compliance Extensions, and Credits</u>
 A fleet owner may be granted an extension to a compliance deadline if:
- (1) Exemption from Meeting NOx BACT. Upon providing documentation demonstrating compliance with the conditions listed below in paragraphs (A) through (D), the Executive Officer will exempt the vehicles identified in those paragraphs from meeting NOx BACT in sections 2025(f) or (g), or the NOx fleet average in section 2025(h). If an exemption is granted, all such vehicles affected will continue to be subject to meeting PM BACT in sections 2025(f) or (g), or the PM fleet average in section 2025(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 2025(d)(58), prior to January 1, 2021.
 If an emergency support vehicle is used both for emergency operation
 - If an emergency support vehicle is used both for emergency operation as defined in section 2025(d)(27), 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)(55) 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)(67).
- (D) Motorcoaches as defined in section 2025(d)(49) prior to January 1, 2017.
- (E) Early compliance action. If a fleet owner installs the highest level VDECS for PM on one or more vehicles before January 1, 2010, the owner is exempt from the NOx BACT requirements of sections 2025(f), the NOx BACT percent limits of section 2025(g) and the NOx fleet averaging requirements of section 2025(h) until January 1, 2014 for each vehicle that has been retrofitted early.
- (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 BACT prior to January 1, 2018, but the fleet owner will still be required to include the vehicle in the fleet if complying using the BACT percentage limits of section 2025(g) or the fleet averaging option of section 2025(h):
 - (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.
- (1) Exemption for 1997 and Older Model Year Engines in Vehicles with a GVWR Greater than 26,000 lbs Operating Exclusively in NOx Exempt Areas
 - Fleets having vehicles with a GVWR greater than 26,000 lbs with model year engines 1997 or older that operate exclusively in the NOx exempt areas as defined in section(d)(45) may optionally have the vehicles meet PM BACT and upgrade to being 2010 model year emissions equivalent pursuant to the schedule set forth in Table 7 below.
 - (A) If the option is selected, the vehicles will be subject to the electronic tracking reporting requirements of section 2025(r)(16)(A)2, unless the fleet chooses to label the vehicles as described in section 2025(p)(1)(B) below. Fleet owners utilizing this exemption must comply with the reporting and record keeping requirements of section 2025(r) and (s). No reporting is required for fleets that choose the labeling option unless suitable VDECS is not available.

- (B) Fleets using this exemption are allowed to have the vehilces travel outside of the NOx exempt area only for repairs or other services to the vehicle. The vehicle owner must obtain a work order from the facility that describes the service and it must show the date of the service and the location of the facility.
 - Optional Labeling Requirements for Vehicles Operating Exclusively in the NOx Exempt Areas – Fleet owners electing this option must affix or paint an NE identification label on each vehicle that operates exclusively in the NOx exempt areas according to the following specification:
 - a. The letters NE shall be white block lettering on a black
 background. Both letters shall be at least three inches high on a five by eight inch background.
 - b. The label shall be located in clear view on the left and right door of the vehicle and be in clear view at all times.

Table 7: NOx Exempt Area Compliance Schedule

Compliance Deadline, as of January 1	Existing Engine Model Year	BACT Requirements	
<u>2012</u>	<u>1998-2000</u>		
<u>2013</u>	<u>2001-2004</u>		
<u>2014</u>	2005 and newer	PM BACT	
<u>2015</u>	<u>1993 and older</u>		
<u>2016</u>	<u>1994-1995</u>		
<u>2017</u>	<u>1996-1997</u>		
<u>2021</u>	2004 and older	Replace with 2010	
<u>2022</u>	<u>2005-2006</u>	engine or equivalent	
<u>2023</u>	All vehicles	<u>emissions</u>	

- (2) Unique Vehicle Extension The fleet owner may apply for and the Executive Officer will grant a one year extension from requirement to upgrade to a 2010 model year emissions equivalent engine if by January 1, 2014, a used vehicle or suitable cab and chassis that performs a similar function with a 2010 emissions engine equivalent is not available and the highest level VDECS for PM has been installed.
- (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)(74), the Executive Officer will not require the vehicle to be replaced in order to meet NOx BACT prior to January 1, 2021, but the fleet owner will still be required to include the vehicle in the fleet if complying using the BACT percentage limits of section 2025(g) or the fleet averaging option of section 2025(h).

(4)(3) Exemption for Low-Use Vehicles

- (A) Low-use vehicles are exempt from the requirements of section 2025(e)(1) but the owner must keep records and meet the reporting requirements in accordance with sections 2025(r)(12) and (s). To be considered a low-use vehicle, the fleet owner must submit engine operation data from a properly functioning odometer or hubodometer and non-resettable hour-meter unless they have a three day pass. Low-use vehicles need not be included when determining compliance with the phase-in options of section 2025(h) and 2025(i). 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 as an emergency support vehicle as defined in section 2025(d)(27)(23), 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 a low-use vehicle in section 2025(d)(47)(40), it is exempt from the requirements of section 2025(e)(1), but it is subject to the requirements of section 2025(p)(4)(3) for low-use vehicles.
- (C) Vehicles that formerly met the low-use vehicle definition, but whose use increases to 100 PTO hours per year or greater or whose mileage increases to 1,000 miles or greater, must immediately meet the requirements of section 2025(f) or (g), (g) or (h) for the immediately preceding compliance deadline unless it takes advantage of one of the exemptions listed in section 2025(p).

(5)(4) Exemption for Vehicles Operating with a Three Day Pass

- (A) Until January 1, 2021, a fleet that obtains a three-day pass <u>for a vehicle</u> will be allowed to operate one vehicle <u>per calendar year</u> in California without complying with section 2025(e) for the specified three day period per calendar year.
- (B) A three-day pass must be obtained from the Executive Officer either online, email, or by fax. Prior to operating within California, the fleet must obtain written approval from the Executive Officer, which must be carried within the vehicle. The request for a three-day pass shall be filed with the Executive Officer at least seven days prior to the vehicle's planned entry into California. The request must identify the initial date that an out-of-state vehicle that does not meet the compliance requirements of this regulation will be traveling within the state, the name of the fleet owner, the state or country issuing the license plate of the vehicle, the license plate number, and the vehicle identification number. The Executive Officer will make every effort to respond to the request within three business days from the receipt of the request. The Executive Officer shall grant the request so long as it is the first request made by the fleet in the calendar year. If the Executive Officer fails to respond to the request by the date of the vehicle's planned entry into the

- state, the vehicle may enter and operate in California for the requested threeday period, but if the vehicle's operator fails to present documentation to ARB enforcement personnel, upon request, that it has filed a request for a three-day pass and qualifies for operating in the state, the fleet may be cited and subject to penalties.
- (C) Fleets using a three day pass must comply with the reporting requirements of section 2025(r).
- (B) To obtain a three-day pass, a request to the Executive Officer, identifying the date that an out-of-state vehicle will be making a one-time annual visit to the state, the vehicle owner, company name, and vehicle identification number. and must obtain written approval, which must be carried within the vehicle., prior to operating in the state.
- (C) A three-day pass must be obtained from the Executive Officer either online, email, or by fax. The Executive Officer will have three business days to respond from receipt of the request.
- (6)(5) Exemption for Vehicles Awaiting Sale Vehicles in the possession of dealers, financing companies, or other entities that do not intend to operate the vehicle in California or offer the vehicle for hire for operation in California, and that are operated only to demonstrate functionality to potential buyers or to move short distances while awaiting sale for purposes such as maintenance or storage, are exempt from all requirements in section 2025.
- (7)(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.
- (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)(42) 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 2018, 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). The emissions factor from Appendix A will be based on the engine model year or standard to which the engine was certified.
- (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 is 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)(7) 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 fleet owner who has purchased the VEDCS or vehicle or has entered into contractual agreement with the seller for the purchase, at least 4 months prior to the required compliance date; in the case of VDECS replace a failed or damaged VDECS, the fleet owner has purchased, or has entered into contractual agreement with the seller 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 retrofitted vehicles are immediately placed into operation upon receipt and any replaced vehicles are removed from service within 30 days.
 - (E) Proof of the date that the new or retrofitted vehicles were placed into service and proof of the date that any replaced vehicles were removed from service.
- (11)(8) Extension of the PM BACT Compliance Deadline Based on Unavailability of Highest Level VDECS. If an engine that is required to meet PM BACT cannot be equipped with the highest level VDECS for PM, the Executive Officer may grant a one-year extension of the compliance deadline, which may be extended annually through January 1, 2017, based on an evaluation of information submitted pursuant to section 2025(r)(11) that the engine cannot be equipped with the highest level VDECS for PM provided that all other engines in the fleet are in compliance with the PM BACT requirements for the compliance year. By January 1, 2018, any vehicle that is not equipped with the highest level VDECS for PM must be replaced with a vehicle that is 2010 model year emissions equivalent or have one that complies with the BACT compliance schedule which would be a 1998 model year engine or newer equipped with the highest level VDECS for PM. its engine replaced with one that is equipped with the highest level VDECS for PM. This includes auxiliary engines in two engine sweepers.
- (12)(9) 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(n) or 2025(p) but whose status has changed so that it no longer meets the applicable definition, must immediately bring the fleet into compliance with requirements of section 2025(f) or 2025(g), (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.

- (q) 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 withon 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 retrofitted <u>must be in its original certified configuration</u>, <u>free of excess oil consumption</u>, <u>must not have malfunctioning fuel</u> <u>delivery systems</u>, or any other mechanical condition that may impair the <u>proper function of the VDECS</u>. <u>meets engine manufacturer's</u> <u>specifications for installation of the VDECS</u>.
 - 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)(2). The owner of a vehicle retrofitted 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 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 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.
 - The application must include the following: emissions data and a
 detailed description of the control technology that demonstrates that the
 experimental control strategy achieves at least a <u>Level 2</u> diesel PM
 emission reduction, vehicle and engine data, and odometer <u>or</u>
 <u>hubodometer</u> readings as described in sections 2025(r)(8), 2025(r)(9),
 and 2025(r)(12)(B).
 - 2. The Executive Officer will treat the strategy as a:
 - a. Level 2 VDECS if the application demonstrates that the strategy achieves at least 50 percent reduction in diesel PM.
 - b. 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 retrofitted 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) or 2025(g), (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) or 2025(g), (g), or (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.
 - (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, federal highway safety regulations, 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 health and safety laws where the vehicle operates, or federal highway safety laws, 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)(C) and (B)(D) below. During the appeal process described in (A)(C) and (B)(D) 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)(C) 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.d. 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;

- 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)(D) Appeals – Hearing Conducted by Written Submission.

In lieu of the hearing procedure set forth in A(C) 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:

- 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(q)(5)(A)(C)(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(q)(5)(A)(C) (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:
 - 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.

(r) Reporting Requirements

(1) The owner of a fleet is subject to reporting requirements for the vehicles in the fleet as defined in section 2025(d)(28) if the owner has elected to utilize the phase-in option of section 2025(g)(3) and (4), 2025(f)(3), 2025(h) or 2025(i), the credit for early PM retrofits, hybrid vehicles, and alternative fueled vehicles of section 2025(j), the agricultural provisions of section 2025(m), two-engine sweeper provision of section 2025(n), and the exemptions and extensions provisions of section 2025(p). Fleets utilizing the relief for fleets that have downsized provided in section 2025(i)(5) must report information for all vehicles with a GVWR greater

- than 26,000 lbs in the 2006 baseline fleet and in the fleet for each compliance year. Except as required in section 2025(k)(5), school buses are not required to comply with the reporting requirements.
- (1) The owner of a fleet is subject to the reporting requirements of section 2025(r) for the vehicles in the fleet as defined in section 2025(d)(34) if the owner has elected 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 retired vehicle credit provision of section 2025(k), the special provisions and compliance extensions of section 2025(p), or the agricultural provisions of section 2025(m).
- (2) All fleet owners utilizing any of the <u>credits in section 2025(j)</u> or any of the <u>exemptions or extensions in section 2025(p)</u> exemptions, compliance extensions, or credit in section 2025(p) must report <u>according to and comply with</u> the requirements of section 2025(r) and <u>maintain records according to section 2025(s)</u> for all of their vehicles in the fleet as defined in section 2025(d)(34)(28)., regardless of whether the vehicle is utilizing of the special provisions or not.
- (3) The owner of a fleet that has elected to comply complies by using the BACT compliance schedule set forth in sections 2025(f) and 2025(g) and also utilizes the low-use vehicle provision of section 2025(p)(3) is not subject to the only required to reporting follow the reporting requirements of section 2025(r) for the low-use vehicles meeting the definition in section 2025(d)(40).
- (4) Fleet owners may submit reporting information using forms (paper or electronic) approved by the Executive Officer.
- (5) The fleet owner must notify the Executive Officer in writing by the first applicable reporting date and by January 31 of every subsequent compliance year, if applicable, with the name of the responsible official and the location where the records will be kept, and whether any information has changed since its last reporting. If the records will be kept outside California, the owner must also comply with section 2025(t). If a fleet owner opts to comply with fleet averaging requirements of section 2025(h) 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.
- (6) Each year, fleet owners subject to the reporting requirement must report on their fleet as it was on January 1 the compliance date of the current compliance year. They must submit the applicable information set forth in sections 2025(r)(5) through (14)(10) by January 31 following of each compliance date year. Owners must report annually until the reporting requirement expires or fleets may stop reporting the year after the BACT requirements of section 2025(f) and 2025(g) have been completely met. Fleets may submit information by mail or electronically.
- (7) Owner Contact Information: Compliance reports must include the <u>following</u> information: in (A) through (M) 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),; and
- (M) License number issued by the Public Utilities Commission (if applicable).
- (8) 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 (P)(R) below for each vehicle:

- (A) Vehicle type,:
- (B) Whether the vehicle is a schoolbus, <u>agricultural vehicle</u>, <u>log truck</u>, <u>as defined in section 2025(d)(67) that transports pupils</u>, a motorcoach, truck-tractor, <u>shuttle vehicle</u>, two-engine sweeper, or yard truck;
- (C) If the vehicle was added after January 1, 2012, the Date the vehicle was added or first reported, or retired,
- (D) Date that a vehicle was retired, sold, or scrapped after January 1, 2012;
- (D)(E) Vehicle identification number;
- (E)(F) Vehicle manufacturer;
- (F)(G) Vehicle model;
- (G)(H) Gross vehicle weight rating:
- (H)(I) Vehicle model year;
- (I)(J) License plate number;
- (J)(K) Where t The state, providence, or country where the vehicle is or was registered and type of registration plate;
- (K)(L) Whether the vehicle will be designated as a low-use vehicle and if so:
 - 1. For vehicles designated as low-use, fleet owners must report the The information listed in section 2025(r)(12).;

- 2. Report wWhether the low-use status is based on mileage or hours of operation.
- 3. Whether the vehicle has PTO for performing work in stationary mode-;
- (L)4. Whether the vehicle is used as an emergency support vehicle as defined in section 2025(d)(23); and, if so,
 - 1<u>a</u>. For low-use or mileage exempt vehicles used in emergency operations, fleet owners must report tThe information listed required in section 2025(r)(16)-;
- (M) Whether the vehicle is a sweeper, specialty agricultural vehicle, cab-overengine truck tractor, or unique vehicle as defined in sections 2025(n) and 2025(p);
- (N)(M) Whether the vehicle is a <u>fuel efficient</u> hybrid vehicle as defined in section 2025(d)(42)(31)-;
- (O)(N) Whether the vehicle is propelled by an alternative-fueled engine as defined in section 2025(d)(9)(8)-;

(P)(O) Fuel type-;

- (P) Does the fleet contain more that three vehicles subject to the regulation with a GVWR greater than 14,000 lbs; and
- (Q) Whether the vehicle is a log truck utilizing the Optional Phase in for Log Trucks provision in section 2025(m)(11).
- (9) Engine Information Reporting

Except as provided in section 2025(r)(13)(A) below, The following information for each engine that propels a vehicle reported per section 2025(r)(8) and for each sweeper engine that operates auxiliary equipment must be reported to the Executive Officer:

- (A) Engine manufacturer;
- (B) Engine model;
- (C) Engine family except if reporting information about vehicles in the 2006 baseline fleet that are no longer in the fleet;
- (D) Engine serial number; and
- (E) Engine model year,
- (F) Whether the engine meets an on-road or off-road emissions standard,:
- (G) Whether the engine is used to propel the vehicle or to operate auxiliary equipment; and
- (H) The emissions standard to which the engine was certified if lower than required for the engine model year.

(10) Verified Diesel Emission Control Strategies Reporting-

Except as provided in section 2025(13)(A) below, Ffor each VDECS that is installed on an engine listed per section 2025(r)(9), the fleet owner must report the following information to the Executive Officer:

- (A) Type <u>Description</u> of VDECS installed;
- (B) VDECS manufacturer;
- (C) VDECS family name,
- (D) Serial number, or experimental part number, or aftermarket part number, and
- (E) Date installed.

(11) Availability of Reporting for Extension for Unavailability 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 (r)(7), (8), and (9) $\frac{1}{12}$
- (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 engine or vehicle 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-; and
- (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.

(12) Low-Use Vehicles Reporting

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 (r)(5) through (9);
- (B) Mileage from odometer readings from a properly functioning odometer or hubodometer taken on January 1 and December 31 of the compliance year-;
- (C) If the vehicle has power take off, Hhour-meter readings from a properly functioning non-resettable hour-meter taken on January 1 and December 31 of the compliance year-;
- (D) The dates of the odometer <u>or hubodometer</u> and <u>non-resettable</u> hour-meter readings. In the event that the odometer <u>or hubodometer meter</u> is replaced,

the original odometer <u>or hubodometer</u> reading and the new odometer <u>or hubodometer</u> reading and the date of replacement must be reported <u>within 30 days of replacing the odometer or hubodometer. In the event that the hubodometer is removed, the hubodometer reading and the odometer reading on the day of removal;</u>

- (E) The owner of a vehicle operating both inside and outside of California must provide records from a electronic tracking system as defined in section 2025(d)(26)(21) that can acquire date, time, engine-on, and location data. The owner may use other documentation of operation and location, such as IRP records.
- (13) Fleets Claiming Vehicle Retirement Credit Relief for Fleets that have Downsized Reporting

Fleets requesting credits under section 2025(i)(5) for fleets that have downsized must report the following:

- (A) The information required in sections 2025(r)(5) through (9) for all vehicles in the 2006 baseline fleet. Information about vehicles registered on October 1, 2006 that are no longer in the fleet do not have to report engine and VDECS information required in sections 2025(r)(9) and (10).
- (B) The information required in sections 2025(r)(5) through (10) for all vehicles in the fleet in the applicable compliance year that were registered or have been certified as non-operational with the California Department of Motor Vehicles equivalent agency in another state.
- (A) By March 31, 2010, fleets requesting vehicle retirement credits must report the information required in sections 2025(r)(5) through (9) for all vehicles in the fleet_that were registered on July 1, 2008. Beginning 2011 and every year thereafter until 2014, the reporting date shall be January 31.
- (14) Schoolbus Fleets or Sub-Fleets
 - (A) For schoolbus fleet or sub-fleets that comply using the PM BACT percentage limits of section 2025(g) or the PM fleet averaging of section 2025(h)(3) or any of the special provisions in section 2025(p), the schoolbus fleet owner must report the information required in section 2025(r), except for the information required under subsections 2025(r)(12)(C), (r)(12)(E) or (r)(16)(C).
- (15)(14) Agricultural Fleet Reporting Vehicles in Agricultural Fleets

 Until January 1, 2023, fleet owners of all agricultural vehicles that will utilize the provisions of section 2025(m) that are owned as of January 1, 2009, must report the following information to the Executive Officer by March 31, 2011 and every January 31 thereafter:

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 March 31, 2010. For subsequent years, the reporting date shall be January 31. 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)(r) (5) through(9)-:
- (B) Whether the vehicle is a specialty agricultural vehicle or a log truck;
- (B) Whether the vehicle is a low-mileage, limited-mileage, or specialty agricultural vehicle, or is none of these.
- (C) Whether the vehicle will operate as a low-mileage or limited-mileage vehicle should it not qualify as a specialty agricultural vehicle.
- (D)(C) Whether the vehicle is being added or deleted to the fleet and the date of that the addition or deletion occurred.;
- (E)(D) The vehicle body type if one of the four body types described in the definition of specialty agricultural vehicle in section 2025(d)(69)(53)-;
- (F)(E) If eligible to be considered for the specialty vehicle exemption, the priority status of the vehicle in case not all specialty vehicles in the fleet can be approved.
- (G)(F) Whether the specialty vehicle will operate exclusively outside the San Joaquin Valley Air Basin-;
- (H)(G) Whether the vehicle is operated for compensation outside a farming business owner's farm-;
- (I)(H) Mileage from a properly functioning odometer or hubodometer taken on January 1, 20112010 and every January 1 thereafter. In the event that the odometer or hubodometer is replaced, the fleet owner shall report the original odometer or hubodometer reading, the new odometer or hubodometer reading, and the date the original odometer or hubodometer was replaced; and
- (J)(I) For a low, limited, or specialty an agricultural vehicle being replaced the owner, vehicle, and engine information set forth in sections 2025(r)(5) through (10), the mileage of both the vehicle being replaced and added, and the date the mileage readings were taken.
- (16)(15) Vehicles used as emergency support vehicles in emergency operations.

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(r)(5) through (10);
- (B) Odometer <u>or hubodometer</u> readings from a properly functioning odometer <u>or hubodometer</u> to document use at an emergency event and to document travel to and from the emergency event. In the event that the odometer <u>or hubodometer</u> meter is replaced, <u>the fleet owner shall report</u> the original odometer <u>or hubodometer</u> reading and the new odometer <u>or hubodometer</u> reading and the date <u>of replacement</u> <u>that the original odometer or</u>

hubodometer was replaced must be reported. Vehicles used exclusively for emergency use that are not authorized emergency vehicles do not need to have an hour meter and do not need to report hours. Authorized emergency vehicles are exempt per section 2025(c); and

- (C) Records to document dispatch by the local, state, or federal agency or other responsible emergency management entity as approved by the Executive Officer.
- (17)(16) Vehicles Exempt from NOx BACT. Reporting of Vehicles Utilizing the Exemption and Extensions Provision
 - (A) Exemption Based on Early Action. Fleet owners utilizing the exemption and extensions provision of section 2025(p) must provide the following information to the Executive Officer by January 31, 2012:

The owner must provide the following information to the Executive Officer by March 31, 2010.

- 1. Owner, vehicle, and engine information listed in sections 2025(r)(5) through (9)-; and
- 2. Information listed in section 2025(r)(10) for the VDECS.
- (B) NOx Mileage Exempt Vehicles.

The owner must provide the following information to the Executive Officer by January 31 of the compliance year to demonstrate compliance with the requirements of section 2025(p)(1).

- 1. Owner, vehicle, and engine information listed in sections 2025(r)(5) through (11).
- 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)(58)(A) or (B) and mileage only readings for vehicles meeting the definitions of 2025(d)(58)(C) or (D). The owner must keep on record the mileage and usage records to meet the record keeping requirements of section 2025)(s).
- (C)(A) Vehicles Operating Exclusively in NOx-exempt areas.

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

- 1. Owner, vehicle, engine information, and VDECS listed in sections 2025(r)(5) through (11)(10);.
- 2. Records from an electronic tracking system that tracks usage and location in a monthly report format approved by ARB. The system must at a minimum meet the requirements as defined in section 2025(d)(26)(21) and provide the information listed therein.

fleet may use an alternative method to demonstrate compliance if approved by the Executive Officer.

3. Whether the vehicle is labeled.

(D)(B) Unique Vehicle Extension Unique Vehicles.

The owner must provide the following information to the Executive Officer by January 31 of each compliance year to demonstrate compliance with the requirements of section $2025(p)\frac{(3)(2)}{(2)}$.

- 1. Owner, vehicle, and engine information listed in sections 2025(r)(5) through (11)(10).
- 2. Photos and a complete description of the vehicle and its function.
- 3. A complete explanation of why the vehicle qualifies as a unique vehicle.
- 4. Names and phone numbers of sources contacted during the search for a replacement vehicle.
- 5. Letters from contacted VDECS vendors stating that retrofit technology is unavailable for the unique vehicle.

(E)(17) Two Engine Sweepers

The owner must provide the following information for both the propulsion and auxiliary engine to the Executive Officer by March 31, 2010 to demonstrate compliance with the requirements of section 2025(n):

- 4.(A) Owner, vehicle, and engine information listed in sections 2025(r)(5) through (11)₁;
- 2.(B) Engine tier level of the auxiliary engine, model year, and engine family number.; and
- 3.(C) For Tier 0 auxiliary engines, the hours of use readings taken January 1 and December 31 of each year staringstarting 2010.

(18) Vehicles Purchased or Retrofitted Using Public Funds.

For owners of vehicles that were purchased or retrofitted using public funds and where funding program guidelines are used to determine compliance with the requirements of this regulation, the fleet owner must provide the following information to the Executive Officer for all vehicles that were purchased or retrofitted using public funds:

- (A) Owner, vehicle, and engine information listed in sections 2025(q)(5) through (11);
- (B) Date the public funding contract began;
- (C) Program providing the funding; and
- (D). Information about the contract terms to determine eligibility.

- (19) Vehicles Requesting a Three Day Pass

 Information listed in sections 2025(r)(7) and (8) must be provided for all vehicles requesting a three day pass.
- (18)(20) 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.
- (19)(21) 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 retrofitted. If there are no changes, the fleet owner shall indicate there have been no changes.
- (20)(22) 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(r)(5) through (9) 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(r).
- (21)(23) Claiming Compliance Extension for Manufacturer Delays

The fleet owner must provide the following information to the Executive Officer by January 31, each year to demonstrate compliance with the requirements of section 2025(p)(10)(7):

- (A) The date of purchase or the date the contractual agreement for purchase of VDECS, replacement engine, or vehicle was entered;
- (B) The date the VDECS or vehicle was placed into service;
- (C) The date the existing vehicle was removed from service-; and
- (D) Identification of the vehicle that was replaced.
- (s) Record Keeping.
- (1) The owner of a fleet shall maintain the following records specified in sections 2025(s)(4) through (14) as applicable. The owner shall provide these records to an agent or employee of the ARB within five business days upon request. If the records will be kept outside California, the owner must also comply with section 2025(t).

(2) The owner of a fleet subject to the reporting requirements of section 2025(r) shall maintain copies of the information reported under section 2025(r), as well as the records described in sections 2025(s)(5)(4) through (14) 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)(3) School BusesSchoolbus Fleets and Sub-Fleets

- (A) The owner of a schoolbus fleet or a schoolbus sub-fleet shall maintain copies of the information reported under section 2025(r)(14) and the records specified in section 2025(s) as applicable.
- (A) Fleet owners of school buses shall maintain records of all the information specified in sections 2025(r)(7) through 2025(r)(10).
- (B) Fleet owners using the downsize credits of section 2025(k)(2) must maintain records of all the information specified in sections 2025(r)(7) through 2025(r)(10) for all vehicles in the 2006 baseline fleet and for all buses in the fleet on January 1 of the compliance year that were registered. Information about vehicles registered on October 1, 2006 that are no longer in the fleet do not have to report engine and VDECS information required in sections 2025(r)(9) and (10).
- (C) Fleet owners using the PM credits for replacement buses of section 2025(k)(4) must maintain records of all the information specified in sections 2025(r)(7) through 2025(r)(10) for all the buses that were replaced with buses receiving the credit and the buses to be treated as compliant.
- (E) Fleet owners with low-use buses must maintain records of all the information specified in section 2025(r)(12) for each low-use bus.
- (F) Fleet owners must comply with record keeping requirements for VDECS failures and maintenance as required in sections 2025(s)(10) and (14).

(4) 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.

(5) 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 qualifying 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.
- (6) Proof of Operation Owners of fleets must keep records showing that any vehicle used to demonstrate compliance using the phase-in options of section 2025(h) and section 2025(i) wasunder section 2025(g) or section 2025(h) operated in California for that applicable compliance year. Records could include IRP records, GPS tracking records, or DMV or law enforcement permits.
- (7) Fleets that have Downsized Claiming Retirement Credit Fleets utilizing the relief for fleets that have downsized provision of section 2025(i)(5) claiming retirement credit as defined in 2025(k) must keep the following records at the business office or terminal location identified in the reports filed with the Executive Officer:

For all vehicles in the fleet on October 1, 2006 a,

- (A) Copy of the retired vehicle's registration; or
- (B) Copy of the vehicle's ownership documentation.
- (C) Copy of the bill of sale showing the date the transaction occurred of the retired vehicle or any form of vehicle transference approved by the Executive Officer.
- (D) All documentation related to any change in business form such as a change from a sole proprietorship to partnership, partnership to corporation, etc.

For all vehicles in the fleet on January 1 of the compliance year:

- (C) A copy of the certificate of non-operation filed with the Department of Motor Vehicles or equivalent documentation from the state, providence, or country where the vehicle is registered.
- (D) If scrapped, a copy of a nonrepairable vehicle certificate issued from the California Department of Motor Vehicles or equivalent documentation from the state, providence, or country where the vehicle is registered; or
- (E) If not registered with the California Department of Motor Vehicles, proof that all retired vehicles in the fleet drove at least 1,000 miles in California in the year 2006.
- (8) 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.

- For each vehicle removed from the fleet, a copy of the bill of sale, or other documentation showing transference of ownership from the former owner and the current owner and the date of the transaction or any other form of vehicle transference approved by the Executive Officer.
- (9) Electronic Tracking For fleets using electronic tracking systems as defined in section 2025(d)(26)(21) 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.
- (10) VDECS Failure Maintain records of any VDECS failure and replacement including:-
 - (A) Date of failure;
 - (B) Description of failure;
 - (C) Description of resolution of failure; and
 - (B) Date of resolution of failure.
- (11) 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.
- (12) 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.
- (13) Manufacturer Delay For any vehicle or VDECS for which the fleet owner is utilizing the equipment manufacturer delay provision in section 2025(p)(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.
- (14) 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 <u>installation was performed by an VDECS was installed by an authorized installer authorized by the VDECS manufacturer; and, providing the following information for each engine:</u>

- a. The name of the person installing the device;
- 3. b. The date the device was installed;
- 4. c. Type Description of VDECS installed;
- d. <u>VDECS</u> Manufacturer;
- 6. e. VDECS family name;
- 7. f.—Serial number of installed VDECS; and
- 8. g. Its verification Verification level and year of verification of the installed VDECS.
- (15) Emergency Support Vehicles Fleet owners of emergency support vehicles utilizing the provisions of section 2025(p)(1) or 2025(p)(3) shall keep records to document dispatch by a local, state, or federal agency or other responsible emergency management entity as approved by the Executive Officer.

(t) 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.

(u) 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(r) and (s) for 3 years after it is retired, and for the overall fleet, for as long as the owner has a fleet, 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(w) for three years after the sale.

(v) Right of Entry

For the purpose of inspecting vehicles subject to this regulation 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.

(w) 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, sales contract addendum, or invoice, "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."

- (x) 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 and comply with the record keeping requirements of section 2025(s)(4).
- (3) Compliance may be accomplished by keeping on site at the business location, a copy of the Certificate of Reported Compliance with the In-Use On-Road Diesel Vehicle Regulation for each fleet, or in the vehicle.
- (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.

(y) 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 name and motor carrier number for fleets that have reported compliance.

(z) Non-Compliance.

Any person who fails to comply with the general 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.

(aa) Severability

If 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	8.0	1.6