

**➡ § 2020. Purpose and Definitions of Diesel Particulate Matter Control Measures.**

(a) Purpose. Diesel particulate matter was identified in 1998 as a toxic air contaminant. According to California law, an airborne toxic control measure using the best available control technology shall, therefore, be employed to reduce the public's exposure to diesel particulate matter.

(b) Definitions. For the purposes of the rules specified in article 4, the following definitions apply:

"Alternative fuel" means natural gas, propane, ethanol, methanol, gasoline (when used in hybrid electric buses 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.

"Commercially available" means available for purchase and installation at a reasonable cost.

"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.

"Level" means one of three categories of Air Resources Board-verified diesel emission control strategies: Level 1 means the strategy reduces engine diesel particulate matter emissions by between 25 and 49 percent, Level 2 means the strategy reduces engine diesel particulate matter emissions by between 50 and 84 percent, and Level 3 means the strategy reduces engine diesel particulate matter emissions by 85 percent or greater, or reduces engine emissions to less than or equal to 0.01 grams diesel particulate matter per brake horsepower- hour.

"Municipality" means a city, county, city and county, special district, or a public agency of the State of California, and any department, division, public corporation, or public agency of this State, or two or more entities acting jointly.

"Owner" means the same as in title 13, California Code of Regulations, section 2180.1(a)(25).

"Transit agency" means a public entity responsible for administering and managing transit services. Public transit agencies can directly operate transit service or contract out for all or part of the total transit service provided.

"Terminal" means any place or places where a vehicle is regularly garaged or maintained, or from which it is operated or dispatched, which may include a private business or residence.

"Verified" means that a diesel emission control strategy or system has received approval from the Executive Officer according to the "Verification Procedure for In-Use Strategies to Control Emissions from Diesel Engines" in title 13, California Code of Regulations, commencing with section 2700, and incorporated by reference.

"Warranty Period" means the same as in title 13, California Code of Regulations, section 2707.

**➡ § 2021. Solid Waste Collection Vehicles.**

(a) Scope and Applicability. Sections 2021 and 2021.1 shall apply to municipalities that have a contract with owners for residential and commercial solid waste collection service. Sections 2021 and 2021.2 shall apply to solid waste collection vehicle owners, both private and government entities. These regulations mandate the reduction of diesel particulate matter emissions from 1960 to 2006 model year engines in on-road diesel-fueled heavy-duty residential and commercial solid waste collection vehicles with a manufacturer's gross vehicle weight rating greater than 14,000 pounds.

(b) Definitions. The definitions in Section 2020 shall apply to sections 2021, 2021.1, and 2021.2. In addition, the following definitions apply only to sections 2021, 2021.1, and 2021.2.

"Active fleet" means the total, by terminal, of an owner's collection vehicles, excluding backup vehicles.

"Backup vehicle" means a collection vehicle that is driven fewer than 1000 miles annually.

"Contract" means an agreement between an owner and a municipality to perform residential or commercial solid waste collection services, in which the contractor's compensation for providing services, or a formula for determining compensation, is specified.

"Contractor" means an owner with a contract as defined in this section.

"Residential and commercial solid waste" means all putrescible and nonputrescible solid, and semisolid wastes, including garbage, trash, refuse, rubbish, ashes, yard waste, recyclable materials, industrial wastes, demolition and construction wastes, abandoned vehicles and parts thereof, discarded home and industrial appliances, manure, vegetable or animal solid and semisolid wastes, and other discarded solid and semisolid wastes originating from single-family or multiple family dwellings, stores, offices, and other commercial sources, and construction and demolition projects in residential and commercial zones, not including hazardous, radioactive, or medical waste.

"Retirement" or "Retire" means an engine or vehicle will be withdrawn from an active fleet in California. The engine may be sold outside of California, scrapped, or used in a backup vehicle.

"Roll off vehicle" means any heavy-duty vehicle used for transporting waste containers such as open boxes or compactors that may be removed from the tractor.

"Solid waste collection vehicle or collection vehicle" means an on-road heavy-duty vehicle with a manufacturer's gross vehicle weight rating of greater than 14,000 pounds used for the purpose of collecting residential and commercial solid waste for a fee, including roll off vehicles.

"Total Fleet" means the total of an owner's collection vehicles, excluding backup vehicles.

#### **§ 2021.1. Methods for Determining Compliance for a Municipality That Contracts with Owners for Solid Waste Collection.**

(a) Compliance Requirement. A municipality shall include language requiring the contractor be in compliance with all applicable air pollution control laws in any new contract that has an effective date of December 31, 2004 or later.

(b) Reporting Requirement. A municipality shall submit an annual report to the Executive Officer by January 31, 2005, and by each January 31 through 2013, as described below:

(1) A listing of its contractor(s) as of January 1 of each applicable year, and including the following information:

(A) Municipality name, address, telephone number, fax number, contact name and electronic mail address;

(B) For each contract, the contractor name, owner name, contact name, if different from owner name, business address, business telephone number, business fax number, contact electronic mail address, and the address of each terminal in the jurisdiction that houses collection vehicles, serving the municipality.

(c) Non-Compliance. Any violations of this section may carry civil penalties as specified in state law and regulations.

**➡ § 2021.2. Methods for Determining Compliance for an Owner of Solid Waste Collection Vehicles.**

(a) Compliance Requirements. Beginning with the applicable effective dates, an owner who operates an active fleet of one or more collection vehicles is required to comply with this diesel particulate matter control measure. Compliance requires all of the following:

(1) Use of a best available control technology for each collection vehicle in the active fleet as specified in subsection (b),

(2) Implementation for collection vehicles in the active fleet as specified in subsection (c), and

(3) If a compliance deadline extension is granted by the Executive Officer per subsection (d), the owner shall be deemed to be in compliance as specified by the Executive Officer's authorization; and

(4) Special circumstances that may apply when a diesel emission control strategy is used as a best available control technology as specified in subsection (e); and

(5) Records must be kept as specified in subsection (f).

(6) Continuous Compliance. An owner is required to keep his collection vehicle in compliance with this regulation, once it is in compliance, so long as the owner is operating the collection vehicle in California.

(b) Best Available Control Technology. Each owner shall use one of the following best available control technologies on each engine or collection vehicle in his fleet as required by the implementation schedule in subsection (c):

(1) An engine or power system certified to the optional 0.01 g/bhp-hr particulate emission standard as specified in title 13, California Code of Regulations, section 1956.8(a)(2), or the 0.01 g/bhp-hr particulate emission standard as specified in title 13, California Code of Regulations, section 1956.8(a), when effective; or

(2) An engine or power system certified to the 0.1 g/bhp-hr particulate emission standard, as specified in title 13, California Code of Regulations, section 1956.8, used in conjunction with the highest level diesel emission control strategy as defined in subsection (b)(4) applied by the implementation schedule in subsection (c); or

(3) An alternative fuel or heavy-duty pilot ignition engine; model year 2004- 2006 alternative fuel engines must be certified to the optional, reduced emission standards as specified in title 13, California Code of Regulations, section 1956.8(a)(2)(A); or

(4) The highest level diesel emission control strategy per title 13, California Code of Regulations, section 2702(f), Table 1, that is verified for a specific engine to reduce diesel particulate matter and which the diesel emission control strategy manufacturer or authorized dealer agrees can be used on a specific engine and collection vehicle combination, without jeopardizing the original engine warranty in effect at the time of application.

(c) Implementation Schedule. The owner shall comply with the schedule in Table 1 - Implementation Schedule for Solid Waste Collection Vehicles, Model Years 1960 to 2006, for the specified percentage of collection vehicles by each applicable compliance deadline.

Table 1 - Implementation Schedule for Solid Waste Collection Vehicles, Model Years 1960 to 2006.

Group	Engine Model Years	Percentage of Group to Use Best Available Control Technology	Compliance Deadline
1	1988-2002	10	December 31, 2004
		25	December 31, 2005
		50	December 31, 2006
		100	December 31, 2007
2a [FNa]	1960-1987 (Total fleet < 15 collection vehicles)	15	December 31, 2005
		40	December 31, 2006
		60	December 31, 2007
		80	December 31, 2008
		100	December 31, 2009
2b	1960-1987 (Total fleet < 15 collection vehicles)	25	December 31, 2007
		50	December 31, 2008
		75	December 31, 2009
		100	December 31, 2010
3	2003-2006 (Includes dual-fuel and bi-fuel engines)	50	December 31, 2009
		100	December 31, 2010

[FNa] Group 2a: An owner may not use Level 1 technology as best available control technology on Group 2a engines or collection vehicles.

Group	Engine Model Years	Percentage of Group to Use Best Available Control Technology	Compliance Deadline
1	1988-2002	10	December 31, 2004
		25	December 31, 2005
		50	December 31, 2006
		100	December 31, 2007
2a*	1960-1987 (Total fleet > 15 collection vehicles)	15	December 31, 2005
		40	December 31, 2006
		60	December 31, 2007
		80	December 31, 2008
		100	December 31, 2009
2b	1960-1987 (Total fleet < 15 collection vehicles)	25	December 31, 2007
		50	December 31, 2008
		75	December 31, 2009
		100	December 31, 2010
3	2003-2006 (Includes dual-fuel and bi-fuel engines)	50	December 31, 2009
		100	December 31, 2010

(1) Calculating Number of Collection Vehicles Required for Implementation based on Active Fleet Size. The owner shall calculate the size of his active fleet as of January 1 of each year (#SWCV) based on

the model year of each engine (#Engines) plus the number of engines removed from the model year group by retirement in prior years (TotRetire) and determine the number of collection vehicles required for implementation as follows.

$$\#SWCV = \#Engines + TotRetire$$

(A) The owner shall determine the total number of collection vehicles required to be in compliance by the compliance deadline in Table 1 (TotVeh) by multiplying "Percentage of Group to Use Best Available Control Technology" (Group%CT) for that year by the sum of the number of collection vehicles in an engine model year group (#SWCV) as in this following expression:

$$TotVeh = (Group\%CT) \times (\#SWCV)$$

(B) After the first compliance deadline for each group, the owner shall determine the additional number of collection vehicles to be brought into compliance each subsequent year (TotAddComp) by subtracting the number of engines or collection vehicles brought into compliance the previous years using the method listed in subsection (b)(4) (TotRetrofit) or by retirement (TotRetire) from the total number of collection vehicles required to be in compliance (TotVeh), as in the following expression:

$$TotAddComp = TotVeh - TotRetrofit - TotRetire$$

(C) Notwithstanding subsection (B) above, in the 100 percent compliance deadline year for each engine model year group the owner shall bring the remaining engines and collection vehicles into compliance.

(D) If the TotVeh or TotAddComp is not equal to a whole number of collection vehicles, the owner shall round up to the nearest collection vehicle when the fractional part of TotAddComp is greater than or equal to one-half of a collection vehicle, and round down to the nearest collection vehicle when the fractional part of TotAddComp is less than one-half of a collection vehicle.

(d) Compliance Extensions. An owner may be granted an extension to a compliance deadline specified in subsection (c) for one of the following reasons:

(1) Compliance Extension based on Early Implementation. An owner will be granted an extension based on compliance with one or more of the following early implementation schedules, provided the Executive Officer has received a letter by the applicable early compliance deadline stating the owner's intent to comply with one of the following conditions:

(A) If an owner has implemented best available control technology on fifty percent or more of his Group 1 total fleet of collection vehicles, at least fifty percent of which are the owner's oldest collection vehicles in Group 1, by July 1, 2005, then the owner may delay the final compliance deadline for Group 1 to December 31, 2009.

(B) If an owner has implemented best available control technology on fifty percent or more of his Group 2a total fleet of collection vehicles by December 31, 2005, then the owner may delay the intermediate and final compliance deadlines for Group 2a to December 31, 2010.

(C) If an owner has implemented best available control technology on fifty percent or more of his Group 2b total fleet of collection vehicles by December 31, 2006, then the owner may delay the intermediate and final compliance deadlines for Group 2b to December 31, 2011.

(2) Compliance Extension based on No Verified Diesel Emission Control Strategy. If the Executive Officer has not verified a diesel emission control strategy, or one is not commercially available, for a particular engine and vehicle combination, an annual extension in compliance may be granted by the Executive Officer under one of the conditions specified below:

(A) Executive Officer Compliance Extension. The Executive Officer shall grant a blanket one-year compliance extension if a diesel emission control strategy is not verified for an engine ten months prior to each compliance deadline specified in subsection (c).

(i) For a Group 1 collection vehicle engines, the Executive Officer shall grant an annual extension through 2007, after which the owner shall comply with subsection (b) by December 31, 2008.

(ii) For a Group 2a collection vehicle engine, the Executive Officer shall grant an annual extension through 2008, after which the owner shall comply with subsection (b) by December 31, 2009.

(iii) For a Group 2b or 3 collection vehicle engines, the Executive Officer shall grant an annual extension through 2010, after which the owner shall comply with subsection (b) by December 31, 2011.

(B) Owner Application Compliance Extension. An owner may apply to the Executive Officer for a compliance extension for an engine six months prior to each compliance deadline specified in subsection (c). The owner must first apply best available control technology to all applicable engines as required before requesting an extension. The owner shall meet the following application conditions and documentation requirements by providing the following to the Executive Officer:

(i) Identification of each engine, by vehicle identification number; engine manufacturer, model year, family, and series; and type of collection vehicle, for which no diesel emission control strategy has been verified, or

(ii) Identification of each engine, by vehicle identification number; engine manufacturer, model year, family, and series; and type of collection vehicle, for which a specific diesel emission control strategy would jeopardize the original engine warranty and a statement from the engine manufacturer or authorized dealer stating the original engine warranty would be jeopardized, or

(iii) Identification of each engine and vehicle combination, by vehicle identification number; engine manufacturer, model year, family, and series; and type of collection vehicle, for which no diesel emission control strategy is commercially available and a list of manufacturers that have been contacted with their responses to a request to purchase, and

(iv) A description of the reason for the request for a compliance extension for each engine or engine and collection vehicle combination, and

(v) A copy of the statement of compliance as required in subsection (f)(1)(H) for all applicable collection vehicles, and

(vi) Submission of the application for compliance extension to the Executive Officer no later than July 31 annually beginning 2004. For a Group 1 collection vehicle engine, the Executive Officer will accept an annual compliance extension application until July 31, 2007, after which the owner shall comply with subsection (b) by December 31, 2008. For a Group 2a collection vehicle engine, the Executive Officer will accept an annual compliance extension application until July 31, 2008, after which the owner shall comply with subsection (b) by December 31, 2009. For a Groups 2b or 3 collection vehicle engine, the Executive Officer will accept an annual compliance extension application until July 31, 2010, after which the owner shall comply with subsection (b) by December 31, 2011. The Executive Officer will grant a compliance extension for only one year for an engine in Group 2a or 2b.

(3) Compliance Extension for an Owner with a Total Fleet of Fewer than Four Solid Waste Collection Vehicles. An owner with three or fewer collection vehicles in his total fleet may delay the intermediate compliance deadline of any engine to its applicable final compliance deadline.

(4) Compliance Extension for an Owner of a Dual-Fuel or Bi-Fuel Engine. An owner may delay implementation of a Group 1 dual-fuel or bi-fuel engine to the Group 3 compliance deadlines.

(5) Compliance Extension for an Engine near Retirement. If an owner has applied best available control technology to all applicable engines as required, and the next applicable engine is scheduled to be retired from the active fleet within one year of the applicable compliance deadline, then the owner is exempt from applying the best available control technology as defined in subsection (b) to that

engine for a maximum of one year, provided documentation of expected retirement date is kept in records as specified in subparagraph (f) and the engine is retired as of the stated expected date.

(6) Use of Experimental Diesel Particulate Matter Emission Control Strategies. An owner may use an experimental diesel particulate matter emission control strategy provided by or operated by the manufacturer in no more than 20 collection vehicles, or ten percent, of his total fleet, whichever is less, for testing and evaluation purposes. The owner shall keep documentation of this use in records as specified in subsection (f). Each collection vehicle will be considered to be in compliance for the duration of the experiment, or a maximum of two years. The owner must bring the collection vehicle into compliance within six months of the end of the testing and evaluation period. No experimental diesel particulate matter emission control strategy may be used on a collection vehicle after December 31, 2010.

(e) Diesel Emission Control Strategy Special Circumstances. An owner shall maintain the original level of best available control technology on each engine once that engine is in compliance, and is not required to upgrade to a higher level of best available control technology, except under specified special circumstances, as follows:

(1) Diesel Emission Control Strategy Failure or Damage. 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 diesel emission control strategy fails or is damaged within its warranty period and the diesel emission control strategy manufacturer or authorized dealer determines it can not be repaired, the owner shall replace the diesel emission control strategy with either the same level diesel emission control strategy or another best available control technology as defined in subsection (b).

(B) Failure or Damage Outside of Warranty Period. If a diesel emission control strategy fails or is damaged outside of its warranty period, and it cannot be repaired, the owner shall apply the best available control technology at the time of replacement, as defined in subsection (b).

(2) Discontinuation of Fuel Verified as a Diesel Emission Control Strategy. If an owner discontinues use of a fuel verified as a diesel emission control strategy, the owner shall apply best available control technology within 30 days of the date of discontinuation or submit a compliance plan to the Executive Officer no later than 30 days after discontinuation that demonstrates how the owner will bring his collection vehicles into compliance within six months of the date of discontinuation.

(3) Limited Use of Level 1 Diesel Emission Control Strategy. If a Level 1 diesel emission control strategy is identified as the best available control technology pursuant to subsection (b), an owner is subject to the following limitations:

(A) Group 1. An owner may use a Level 1 diesel emission control strategy in a Group 1 engine for up to ten years, after which the owner shall replace the Level 1 diesel emission control strategy with the best available control technology from subsection (b), except that a Level 1 diesel emission control strategy cannot be installed.

(B) Group 2a. An owner with 15 or more collection vehicles in his total fleet may not use a Level 1 diesel emission control strategy on any Group 2a engine.

(C) Group 2b. An owner with fewer than 15 collection vehicles in his total fleet may use a Level 1 diesel emission control strategy in a Group 2b engine for up to ten years, after which the owner shall replace the Level 1 diesel emission control strategy with the best available control technology from subsection (b), except that a Level 1 diesel emission control strategy cannot be installed.

(D) Group 3. An owner may use a Level 1 diesel emission control strategy in a Group 3 engine for up to five years, after which the owner shall replace the Level 1 diesel emission control strategy with the best available control technology from subsection (b), except that a Level 1 diesel emission control strategy cannot be installed.

(f) Record Keeping Requirement. Beginning December 31, 2004, an owner shall maintain the following records. The owner shall provide the following records to an agent or employee of the Air Resources Board upon request for all collection vehicles in his total fleet subject to compliance with this regulation.

(1) Records Accessible at Terminal. The owner shall keep the following records accessible either in hard copy format or computer records at the terminal where a collection vehicle normally resides:

(A) A list by vehicle identification number of collection vehicles identifying each vehicle type; engine manufacturer, model year, family, and series; and status as active fleet or back-up vehicle, and

(B) Correlated to each collection vehicle, the installed diesel emission control strategy, its serial number, manufacturer, model, level, installation date, and if using a Level 1 or Level 2 verified diesel emission control strategy, the reason for the choice, and

(C) Records of maintenance for each installed diesel emission control strategy, and

(D) For fuel or fuel additives used as a diesel emission control strategy, the most recent two years worth of records of purchase that demonstrate usage, and

(E) For each backup vehicle, its mileage as of January 1 of each year beginning January 1, 2005 correlated to the information in paragraph (1)(A) above, and

(F) For each engine for which an owner is claiming an exemption pursuant to paragraph (d)(5), the retirement date correlated to the information in paragraph (1)(A) above, and

(G) For each engine for which an owner is claiming an extension pursuant to paragraph (d)(6), the records of the test plan, including start and end dates of the experiment; diesel particulate matter emission control strategy manufacturer name and contact information (representative, address, and phone number); name and type of experimental diesel particulate matter emission control strategy; and targeted data to be generated by experiment, correlated to the information in paragraph (1)(A) above, and

(H) A statement of compliance, prepared beginning January 1, 2005, and renewed each January 1 thereafter until January 1, 2013, certifying that the owner's engines are in compliance as required, including the following:

(i) "The solid waste collection vehicles at terminal (insert terminal identification number) are in compliance with title 13, California Code of Regulations, section 2021.2;" and

(ii) The owner's name, business address, business telephone; and

(iii) The signature of the owner or owner's agent and date signed.

(2) Records Kept in the Solid Waste Collection Vehicle. For each collection vehicle, the owner shall keep the following information affixed to the driver's side door jamb, or another readily accessible location known by the driver of each collection vehicle, in the form of a legible and durable label:

(A) For a collection vehicle operated under contract to a municipality, the name of the municipality or municipalities, and

(B) For each installed diesel emission control strategy, label information as specified in title 13, California Code of Regulations, section 2706 (g), and the installation date, or

(C) Engine model year and planned compliance date, or

(D) Designation as a backup vehicle and its mileage as of January 1 of each year beginning January 1, 2005, or

(E) Engine model year and retirement date for an engine for which an owner is claiming an exemption pursuant to paragraph (d)(5), or

(F) Engine model year and beginning and ending date of the test plan for an engine for which an owner is claiming an extension pursuant to paragraph (d)(6).

(3) Each owner shall maintain these records for each collection vehicle until it is sold outside of the State of California or is no longer used as a collection vehicle for the purpose of residential or commercial solid waste collection in the State of California. If ownership is transferred, the seller shall convey the records to the buyer.

(g) Non-Compliance. Any violations of this section may carry civil penalties as specified in state law and regulations, including, but not limited to, Health and Safety Code Section 39674.

### **§ 2022. Diesel Particulate Matter Control Measure for Municipality or Utility On-Road Heavy-Duty Diesel-Fueled Vehicles.**

(a) Scope and Applicability. Sections 2022 and 2022.1 apply to any municipality or utility that owns, leases, or operates an on-road diesel-fueled heavy-duty vehicle with either a 1960 to 2006 model-year heavy-duty engine or a 2007 model-year or newer engine certified to greater than 0.01 grams per brake horsepower-hour particulate emission standard and manufacturer's gross vehicle weight rating greater than 14,000 pounds. These sections do not apply to a vehicle subject to the solid waste collection vehicle rule commencing with title 13, California Code of Regulations, section 2021 or to the fleet rule for transit agencies commencing with section 2023, or to a school bus as defined in Vehicle Code section 545, or to a military tactical support vehicle, as described in title 13, California Code of Regulations, section 1905, or to an emergency vehicle as described in California Vehicle Code, section 27156.2, or to an off-road vehicle as described in title 13, California Code of Regulations, sections 2401, 2421, 2411 and 2432.

(b) Definitions. The definitions in section 2020 shall apply to sections 2022, and 2022.1. In addition, the following definitions apply only to sections 2022, and 2022.1.

(1) "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 perform snow removal operations.

(2) "Dual Engine Street Sweeper" means an on-road heavy-duty vehicle, over 14,000 pounds gross vehicle weight rating, that is used for the express purposes 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 dual engine street sweeper has an engine to propel the vehicle and an auxiliary engine to power the broom or vacuum.

(3) "Lease" means to operate a vehicle that is owned by a rental or leasing company for a period of one year or more.

(4) "Low-Population County" means a county with a population of less than 125,000, based upon the California Department of Finance estimates as of July 1, 2005, and as listed in Table 2 of title 13, California Code of Regulations section 2022.1.

(5) "Low Usage Vehicle" means a vehicle that is operated for fewer than 1000 miles or 50 hours per year, based on a 5 year rolling mileage or engine-hour average. A vehicle that does not have a properly functioning odometer, tachograph, or other reliable device to measure usage may not qualify as a low usage vehicle.

(6) "Low-Population County Low Usage Vehicle" means a vehicle that is owned or operated by a municipality or utility located in a low-population county and is operated, based on a 5 year rolling mileage or engine hour average for fewer than 3000 miles or 150 hours, excluding mileage or engine hours used during snow removal operations. A vehicle that does not have a properly functioning odometer, tachograph, or other reliable device to measure usage may not qualify as a low-population county low usage vehicle.

(7) "Operate" means to use or manage a vehicle by a municipal or utility employee for the purposes of conducting work by or for the municipality or utility. This does not include personal vehicle use for commuting to or from the workplace.

(8) "Retirement" or "Retire" means the withdrawal of an engine or vehicle subject to this rule from a municipality or utility fleet in California; the engine may be sold outside of the State of California, scrapped, converted for use in a low usage vehicle or low-population county low usage vehicle. "Retirement" or "retire" also means the transfer of an engine or vehicle, which is subject to this rule and has been brought into compliance with title 13, California Code of Regulations, section 2022.1(b), from a municipality or utility fleet in California to another person or entity in California. In addition, "retirement" means the sale of a dual engine street sweeper with a model year engine of 2004, 2005, or 2006 in the State of California to a buyer who must comply with title 13, California Code of Regulations, section 2025.

(9) "Sold Outside of the State of California" means a sale of a vehicle for operation outside the State of California to satisfy the definition of "retirement" in section 2022(b)(8). A municipality or utility must submit a completed "VIN stop" application, as defined in title 13, California Code of Regulations, section 2022(b)(10), to the Executive Officer prior to sale of the vehicle. ARB will obtain VIN Stop from Department of Motor Vehicles. A municipality or utility must also follow the record-keeping requirements as defined in title 13, California Code of Regulations, section 2022(f)(1)(K). If a municipality or utility is selling a vehicle through a Third Party Vehicle Seller, it must include Third Party Vehicle Seller contract language as defined in title 13, California Code of Regulations, section 2022(h).

(10) "Third Party Vehicle Seller" means a person that a municipality or utility uses to sell a vehicle outside of the State of California.

(11) "Total Fleet" means the total of a municipality's or utility's on-road heavy-duty vehicles with a 1960 to 2006 model-year medium heavy-duty or heavy heavy-duty engine and a manufacturer's gross vehicle weight rating greater than 14,000 pounds, excluding (A) low usage vehicles, (B) low-population county, low usage vehicles, (C) dedicated snow-removal vehicles, and (D) gasoline fueled vehicles. <sup>1</sup> As of January 1, 2009, "Total Fleet" means the total of a municipality's or utility's on-road heavy-duty vehicles with a manufacturer's gross vehicle weight rating greater than 14,000 pounds with a 1960 to 2006 model-year heavy-duty engine or with a 2007 model-year or newer heavy-duty engine certified to greater than 0.01 grams per brake horsepower-hour particulate emission standard, excluding low usage vehicles; low-population county, low usage vehicles; dedicated snow-removal vehicles; and gasoline fueled vehicles.

(12) "Utility" means a privately-owned company that provides the same or similar services for water, natural gas, and electricity as a public utility operated by a municipality.

(13) "Vehicle Type" means one of the following categories: "Compliant" for those vehicles that meet the requirements of section 2022.1(b); "Future Compliant" for those vehicles for which the municipality or utility has a planned compliance date; "Retired" for those vehicles that will meet the definition of "retirement" at a planned retirement date; "Low Usage or Low-Population County Low Usage" for those vehicles that meet the applicable definitions in this section; and "Experimental" for those vehicles that are part of an experimental program and comply with the provisions of section 2022.1(d)(5).

(14) "VIN stop" means a Department of Motor Vehicle's registration hold based on a vehicle identification number to prevent a vehicle from being re-registered in California after a vehicle is "retired."

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<sup>1</sup> Gasoline vehicles that do not meet the best available control technology (BACT) requirements specified in title 13, California Code of Regulations, section 2022.1(b)(3) are excluded from the total fleet calculation.

#### ➡ § 2022.1. Determining Compliance for a Municipality or Utility.

(a) Compliance Requirements. Beginning with the applicable effective dates, a municipality or utility is required to comply with this diesel particulate matter control measure for each vehicle in its total fleet. Compliance requires all of the following:

(1) Use of a best available control technology (BACT) for each vehicle in the total fleet as specified in subsection (b);

(2) Implementation for each vehicle in the total fleet as specified in subsection (c);

(3) If a compliance deadline extension is granted by the Executive Officer per subsection (d), the municipality or utility shall be deemed to be in compliance as specified by the Executive Officer's authorization;

(4) Special circumstances must be followed as specified in subsection (e);

(5) Records must be kept as specified in subsection (f); and

(6) Continuous compliance: municipality or utility is required to keep each vehicle in compliance with this regulation, once it is in compliance, so long as the municipality or utility is operating the vehicle in California.

(b) Best Available Control Technology. Each municipality or utility shall use one of the following best available control technologies on each applicable vehicle in its total fleet as required by the implementation schedule in subsection (c):

(1) An engine or power system certified to the optional 0.01 grams per brake horsepower-hour (g/bhp-hr) particulate emission standard as specified in title 13, California Code of Regulations, section 1956.8(a)(2), or the 0.01 g/bhp-hr particulate emission standard as specified in title 13, California Code of Regulations, section 1956.8(a), as appropriate for the engine's model-year; or

(2) An engine or power system certified to the 0.10 g/bhp-hr particulate emission standard, as specified in title 13, California Code of Regulations, section 1956.8, used in conjunction with the highest level diesel emission control strategy as defined in subsection (b)(4) applied by the implementation schedule in subsection (c); or

(3) An alternative fuel engine, heavy-duty pilot ignition engine, or gasoline engine. Model-year 2004-2006 alternative fuel engines must be certified to the optional, reduced emission standards as specified in title 13, California Code of Regulations, section 1956.8(a)(2)(A). Gasoline engines must be certified to the emission standards as specified in title 13, California Code of Regulations, for heavy-duty Otto-cycle engines used in heavy-duty vehicles over 14,000 pounds gross vehicle weight, sections 1956.8(c)(1)(B) and 1976(b)(1)(F); or

(4) The highest level diesel emission control strategy per title 13, California Code of Regulations, section 2702(f), Table 1, that is verified for a specific engine to reduce diesel particulate matter and

which the diesel-emission-control strategy manufacturer or authorized dealer agrees can be used on a specific engine and fleet-vehicle combination, without jeopardizing the original engine warranty in effect at the time of application.

(c) Implementation Schedule.

(1) A municipality or utility shall comply with the schedule in Table 1 - Implementation Schedule for a Municipal and Utility Total Fleet Vehicle, 1960 and newer Model-Year Engines for the specified percentage of vehicles by each applicable compliance deadline.

Table 1 - Implementation Schedule for a Municipal and Utility Total Fleet Vehicle, 1960 and newer Model-Year Engines.

Group	Engine Model-Years	Percentage of Group to Use Best Available Control Technology	Compliance Deadline, As of December 31
1 <sup>a</sup>	1960-1987	20	2007
		60	2009
		100	2011
2	1988-2002	20	2007
		60	2009
		100	2011
3	2003-2006 (Includes dual-fuel and bi-fuel engines)	50	2009
		100	2010
4	2007 and newer certified above the 0.01g/bhp-hr std.	100	2012

<sup>a</sup> An owner may not use Level 1 technology, as classified pursuant to title 13, California Code of Regulations section 2020, as best available control technology on a Group 1 engine or vehicle.

(2) Municipality or Utility Located in a Low-Population County. A municipality or utility that is headquartered in a county in Table 2 may elect to follow the option in Table 3 below in lieu of the implementation schedule in Table 1.

Table 2 - Low-Population Counties

COUNTY	Population as of July 1, 2005
ALPINE	1,300
AMADOR	37,600
CALAVERAS	47,800
COLUSA	24,200
DEL NORTE	31,500
GLENN	31,800
INYO	18,800
LAKE	69,200
LASSEN	39,800
MARIPOSA	19,600
MENDOCINO	95,500
MODOC	10,100
MONO	14,200
NEVADA	106,300
PLUMAS	21,900
SAN BENITO	63,600
SIERRA	3,700
SISKIYOU	47,200
SUTTER	90,400
TEHAMA	63,400
TRINITY	13,800

TUOLUMNE 62,200  
 YUBA 66,000

Table 3 - Implementation Schedule for a Municipality or Utility Located in a Low-Population County or Granted Low-Population County Status

Group	Engine Model-Years	Percentage of Group to Use Best Available Control Technology	Compliance Deadline, As of December 31
1	1960-1987	20	2009
		40	2011
		60	2013
		80	2015
		100	2017
2	1988-2002	20	2008
		40	2010
		60	2012
		80	2014
		100	2016
3	2003-2006 (Includes dual-fuel and bi-fuel engines)	20	2011
		40	2012
		60	2013
		80	2014
		100	2015
4	2007 and newer certified above the 0.01g/bhp-hr std.	20	2012
		40	2013
		60	2014
		80	2015
		100	2016

(3) Accelerated Turnover Option for Municipality or Utility Located in a Low-Population County or Granted Low-Population County Status. A municipality or utility headquartered in a county listed in Table 2 or granted low-population county status may elect to follow the option in Table 4 below in lieu of the implementation schedules in Table 1 or 3.

Table 4 - Accelerated Turnover Option for a Municipality or Utility Located in a Low-Population County or Granted Low-Population County Status

Engine Model-Year	Fleet Percent to Repower with a 1994 or newer engine	Compliance Date as of Dec 31	Percent of Fleet to use BACT	Compliance Date as of Dec 31
1960-1993	100%	2020	100%	2025
1994 and newer	N/A	N/A	100%	2025

(4) A municipality or utility not specifically listed in Table 2 may apply to the Executive Officer for consideration as a fleet located in a designated "low-population county." The Executive Officer shall issue that designation provided that all of the following criteria are met:

(A) The total fleet is located in a "nonurbanized area," a "rural and small urban area," or any area outside of an urbanized area, as designated by the U.S. Bureau of the Census. An urbanized area consists of a core area and the surrounding densely populated area with a total population of 50,000 or more, with boundaries fixed by the Bureau of the Census or extended by state and local officials; or

(B) The fleet is located in a county that, as of July 1, 2005, has a population of less than 325,000 and meets the definition of a low-population county when the population of one or more cities that have their own municipal vehicle fleet are subtracted from the county population, and the fleet does not operate within those cities' boundaries; and

(C) The fleet revenue is not based on special district assessments or fees.

(5) Calculating Number of Total Fleet Vehicles Required for Implementation.

(A) As of January 1 of each year where a compliance deadline is applicable, a municipality or utility shall calculate, for each engine model-year group, the number of vehicles in its total fleet for which compliance will be required. This fleet size by engine model-year group ( $\#MUV_{by\ group}$ )<sup>2</sup> must be calculated using the following equation:

$$\#MUV_{by\ group} = \#Vehicles_{by\ group} + TotRetire_{by\ group}$$

Where:

$\#Vehicles_{by\ group}$  = the number of vehicles in an engine model-year group subject to the rule, and

$TotRetire_{by\ group}$  = the number of vehicles removed from the model-year group by retirement in prior years, beginning with January 1 of the initial applicable compliance deadline year for each group.

If a vehicle has left the total fleet for reasons other than retirement, it must not be included in the calculation of  $\#MUV_{by\ group}$ .

(B) The municipality or utility shall use the following equation to determine the total number of vehicles in an engine model-year group that are required to be in compliance by the deadline in Table 1 ( $TotVeh_{by\ group}$ ):

$$TotVeh_{by\ group} = Group\%CT_{by\ group} \times \#MUV_{by\ group}$$

Where:

$Group\%CT_{by\ group}$  = the percentage of vehicles in an engine model-year group that must meet BACT requirements for a given year as specified in subsection (c), and

$\#MUV_{by\ group}$  = the total fleet size by engine model-year group as defined in paragraph (5)(A) above

(C) After the first compliance deadline for each group, the municipality or utility shall determine the number of additional vehicles in each model-year group to be brought into compliance each year that a compliance deadline is applicable ( $TotAddComp_{by\ group}$ ). The following equation must be used to calculate  $TotAddComp_{by\ group}$ :

$$TotAddComp_{by\ group} = TotVeh_{by\ group} - TotBACT_{by\ group} - TotRetire_{by\ group}$$

Where:

$TotVeh_{by\ group}$  = the total number of vehicles in an engine model-year group required to be in compliance, as defined in paragraph (5)(B) above,

$TotBact_{by\ group}$  = the number of vehicles in an engine model-year group that have been brought into compliance since the earliest compliance deadline using the method listed in subsection (b), and

$TotRetire_{by\ group}$  = the number of vehicles retired in prior years as defined in paragraph (5)(A) above

If a vehicle has left the total fleet for reasons other than retirement, it must not be included in the calculation of  $TotAddComp_{by\ group}$ .

(D) Notwithstanding subsection (C) above, in the 100 percent compliance deadline year for each engine model-year group, the municipality or utility shall bring the remaining vehicles into compliance.

(E) If the  $TotVeh_{by\ group}$  or  $TotAddComp_{by\ group}$  is not equal to a whole number, the municipality or utility shall round up a whole number when the fractional part of  $TotAddComp_{by\ group}$  is equal to or greater than 0.5, and round down if less than 0.5.

(d) Compliance Extensions. A municipality or utility may be granted an extension to a compliance deadline specified in subsection (c) for one of the following reasons:

(1) Compliance Extension Based on Early Implementation. A municipality or utility may be granted an extension based on compliance with one or more of the following early implementation schedules, provided the Executive Officer has received a letter by the applicable early compliance deadline stating the municipality's or utility's intent to comply with one of the following conditions and the municipality or utility meets the requirements set forth in paragraphs (A), (B), (C) or (D).

(A) If a municipality or utility has implemented best available control technology on fifty percent or more of its Group 1 vehicles in its total fleet by December 31, 2007, then the municipality or utility may delay the intermediate and final compliance deadlines for the remaining Group 1 vehicles to July 1, 2012.

(B) If a municipality or utility has implemented best available control technology on fifty percent or more of its Group 2 vehicles in its total fleet by December 31, 2007, then the municipality or utility may delay the intermediate and final compliance deadlines for the remaining Group 2 vehicles to July 1, 2012.

(C) If a municipality or utility has implemented BACT on 100 percent of its Group 1 and Group 2 engines by December 31, 2008, then the municipality or utility may follow the alternate implementation schedule for its Group 3 engines of 20 percent BACT by December 31, 2009, 60 percent BACT by December 31, 2011 and 100 percent BACT by December 31, 2012.

(D) If a municipality or utility employs significant quantities of advanced technology vehicles (for example, hybrid electric vehicles) to meet BACT requirements, then the municipality or utility may apply to the Executive Officer for approval of a longer implementation schedule for its Group 2 and Group 3 vehicles, or approval of credits to be used towards BACT compliance. The longer implementation schedule must be proportionate to the additional emissions benefits from the use of the advanced technology vehicles, and BACT credits cannot exceed the additional emissions benefits. The advanced technology vehicles must meet or exceed model-year 2007 and later emissions standards and significantly reduce greenhouse gas emissions and petroleum use.

(2) Compliance Extension Based on No Verified Diesel Emission Control Strategy. If the Executive Officer has not verified a diesel emission control strategy, or one is not commercially available, for a particular engine and vehicle combination, an annual extension in compliance may be granted by the Executive Officer under one of the conditions specified below:

(A) Executive Officer Compliance Extension. The Executive Officer shall grant a blanket one-year compliance extension if a diesel emission control strategy is not verified for an engine ten months prior to each compliance deadline specified in subsection (c).

1. For a Group 1 engine for which there is no verified diesel emission control strategy, the Executive Officer shall grant a one-year extension, after which the municipality or utility shall comply with subsection (b). If no diesel emission control strategy for the engine is verified during the extension period, the Executive Officer shall grant an additional one year extension. The Executive Officer may grant one-year extensions until December 31, 2012, (or December 31, 2018 for a municipality or utility located in a low-population county, or granted low-population county status), after which the municipality or utility shall comply with subsection (b).

2. For a Group 2 engine for which there is no verified diesel emission control strategy, the Executive Officer shall grant a one-year extension, after which the municipality or utility shall comply with

subsection (b). If no diesel emission control strategy for the engine is verified during the extension period, the Executive Officer shall grant an additional one-year extension. The Executive Officer may grant one-year extensions until December 31, 2012, (or December 31, 2017 for a municipality or utility located in a low-population county or granted low-population county status), after which the municipality or utility shall comply with subsection (b)

(B) Municipality or Utility Application for Compliance Extension. A municipality or utility may apply to the Executive Officer for a compliance extension pursuant to subsection (d)(2) for an engine no later than July 31 prior to each compliance deadline specified in subsection (c). Before requesting this extension, the municipality or utility shall demonstrate compliance or intent to comply with applicable deadlines for the remaining vehicles in the fleet. The municipality or utility shall meet the following application conditions and documentation requirements by providing the following to the Executive Officer:

1. Identification of each engine, by vehicle identification number; engine manufacturer, model-year, family, and series; and type of vehicle for which no diesel emission control strategy has been verified; or

2. Identification of each engine, by vehicle identification number; engine manufacturer, model-year, family, and series; and type of vehicle for which a specific diesel emission control strategy would void the original engine warranty and a statement from the engine manufacturer or authorized dealer stating the original engine warranty would be voided; or

3. Identification of each engine and vehicle combination, by vehicle identification number; engine manufacturer, model-year, family, and series; and type of vehicle for which no diesel emission control strategy is commercially available and a list of manufacturers that have been contacted, with the manufacturers' responses to a request to purchase; and

4. A description of the reason for the request for a compliance extension for each engine or engine and fleet-vehicle combination; and

5. A copy of the statement of compliance as required in subsection (f)(1)(K); and

6. The application for compliance extension to be submitted to the Executive Officer no later than July 31 annually beginning 2007.

a. A municipality or utility. For a Group 1 engine, the Executive Officer will accept an annual compliance-extension application until July 31, 2011, after which the municipality or utility shall comply with subsection (b) by December 31, 2012. The Executive Officer will only grant one compliance extension for an engine in Group 1. For a Group 2 engine, the Executive Officer will accept an annual compliance extension application until July 31, 2011, after which the municipality or utility shall comply with subsection (b) by December 31, 2012.

b. A municipality or utility either located in a low-population county, or granted low-population county status. For a Group 1 engine, the Executive Officer will accept an annual compliance extension application until July 31, 2017, after which the municipality or utility shall comply with subsection (b) by December 31, 2018. The Executive Officer will only grant one compliance extension for an engine in Group 1. For a Group 2 engine, the Executive Officer will accept an annual compliance extension application until July 31, 2016, after which the municipality or utility shall comply with subsection (b) by December 31, 2017.

(3) Compliance Extension for a Municipality or Utility that Operates a Dual-Fuel or Bi-Fuel Engine. A municipality or utility may delay implementation of a Group 1 or 2 dual-fuel or bi-fuel engine to the Group 3 compliance deadlines.

(4) Compliance Extension for an Engine Near Retirement. If a municipality or utility has applied best available control technology to all engines as required, and the next engine subject to implementation under subsection (c) is scheduled to be retired from the total fleet within one year of the applicable compliance deadline, then the municipality or utility shall be exempted from applying the best

available control technology as defined in subsection (b) to that engine for a maximum of one year, provided documentation of the expected retirement date is kept in records as specified in subsection (f) and the engine is retired by the stated anticipated date.

(5) Use of Experimental Diesel Emission Control Strategy. A municipality or utility may use an experimental diesel emission control strategy provided by, or operated by, the manufacturer in no more than 20 vehicles, or ten percent of its total fleet, whichever is less, for testing and evaluation purposes. The municipality or utility shall keep documentation of this use in records as specified in subsection (f). Each vehicle will be considered to be in compliance for the duration of the experiment to a maximum of two years. The municipality or utility must bring the vehicle into compliance within six months of the end of the testing and evaluation period. No experimental diesel emission control strategy may be used on a vehicle after December 31, 2012.

(6) Accelerated Turnover Option. A municipality or utility either located in a low-population county or granted low-population county status may follow the accelerated turnover option provided in subsection (c)(3), provided the Executive Officer has received a letter by July 31, 2008, stating the municipality's or utility's intent to comply with this option.

(7) Light Heavy-Duty Engine Extension. A municipality or utility may apply for a one year extension from the 2009 compliance deadline for light heavy-duty engines if after counting light heavy-duty engines as a part of the total fleet prevents the fleet from complying with the 2009 intermediate BACT compliance requirements in section 2022.1(c)(1). A municipality or utility must:

(A) Submit a letter to the Executive Officer by December 31, 2009 requesting the light heavy-duty engine extension;

(B) Submit documentation to demonstrate it cannot comply with the 2009 intermediate BACT compliance requirements in section 2022(c)(1) after adding light heavy-duty engines as a part of the total fleet size. Documentation shall include, but is not limited to, proof of financial hardship, budgeting schedules, etc. Documentation of financial hardship shall include an analysis of cost of compliance, sources of available funds and shortfall between funds available and cost of compliance; and

(C) Meet the record-keeping requirements under section 2022.1(f).

(8) Privately-Owned Utility Extension. A utility may be granted an extension for Group 2 and Group 3 intermediate and final compliance deadlines as required in section 2022.1(c)(1) by two years, provided that thirty (30) percent of its fleet vehicles meet the 2010 model year NOx emissions equivalent as defined a section 2025(d), and twenty (20) percent of its fleet vehicles meet the 2007 model year NOx emissions equivalent as defined in section 2025(d) by December 31, 2013. A privately-owned utility must:

(A) submit a letter to the Executive Officer by December 31, 2009 stating the utility's intent to comply with this section,

(B) submit records by December 31, 2009 required by section 2022.1(f)(1),

(C) label each vehicle in its fleet according section 2022.1(f)(3)(G),

(D) submit by December 31, 2011 records required by section 2022.1(f)(1), and

(E) submit by December 31, 2013 records required by section 2022.1(f)(1) and documentation, such as but not limited to percent of fleet calculations and purchase records, demonstrating the utility's compliance with the above conditions.

(e) Diesel Emission Control Strategy Special Circumstances. A municipality or utility shall maintain the original level of best available control technology on each engine once that engine is in compliance, and will not be required to upgrade to a higher level of best available control technology, except under specified special circumstances, as follows:

(1) Fuel Strategy Diesel Emission Control Strategy.

(A) If a municipality or utility determines that the highest level diesel emission control strategy for a small percentage of its fleet would be a Level 2 fuel-based strategy, and implementation of this diesel emission control strategy would require installation of a dedicated storage tank, then the municipality or utility shall request prior approval from the Executive Officer to allow use of a lower level diesel emission control strategy; or

(B) If a municipality or utility elects to use a fuel-based diesel emission control strategy across its fleet, and some vehicles can use a Level 3 hardware diesel emission control strategy, then the municipality or utility shall request prior approval from the Executive Officer to allow use of a lower level diesel emission control strategy. This provision is only available if a minimum Level 2 diesel emission control strategy is used.

(2) *Diesel Emission Control Strategy Failure or Damage.* 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 diesel emission control strategy fails or is damaged within its warranty period and the diesel emission control strategy manufacturer or authorized dealer determines it cannot be repaired, the municipality or utility shall replace the diesel emission control strategy with either the same level diesel emission control strategy or another best available control technology as defined in subsection (b).

(B) *Failure or Damage Outside of Warranty Period.* If a diesel emission control strategy fails or is damaged outside of its warranty period, and it cannot be repaired, the municipality or utility shall apply the best available control technology at the time of replacement, as defined in subsection (b).

(3) Discontinuation of Fuel Verified as a Diesel Emission Control Strategy. If a municipality or utility discontinues use of a fuel verified as a diesel emission control strategy, the municipality or utility shall apply best available control technology within 30 days of the date of discontinuation or submit a compliance plan to the Executive Officer no later than 30 days after discontinuation that demonstrates how the municipality or utility will bring the vehicles into compliance within six months of the date of discontinuation.

(4) Limited Use of Level 1 Diesel Emission Control Strategy. If a Level 1 diesel emission control strategy is identified as the best available control technology pursuant to subsection (b), a municipality or utility is subject to the following limitations:

(A) Group 1

1. A municipality or utility may not use a Level 1 diesel emission control strategy on any Group 1 engine.

2. *Exception for low-population counties.* The limitation in (A)1. does not apply to a vehicle owned or operated by a municipality or utility located in a low-population county (Table 2), or to a vehicle owned or operated by a municipality or utility that has been granted low-population county status.

(B) Group 2

1. Ten year limit. A municipality or utility may use a Level 1 diesel emission control strategy in a Group 2 engine for up to ten years. The municipality or utility shall then replace the Level 1 diesel emission control strategy with the best available control technology from subsection (b). The replacement cannot be a Level 1 diesel emission control strategy.

2. *Exception for low-population counties.* The limitation in (B)1. does not apply to a vehicle owned or operated by a municipality or utility located in a low-population county (Table 2) or to a vehicle owned or operated by a municipality or utility that has been granted low-population county status.

(C) Group 3 and 4

1. Five year limit. A municipality or utility may use a Level 1 diesel emission control strategy in a Group 3 and 4 engine for up to five years. The municipality or utility shall then replace the Level 1 diesel emission control strategy with the best available control technology from subsection (b). The replacement cannot be a Level 1 diesel emission control strategy.

2. Exception for low-population counties. The limitation in (C)1. does not apply to a vehicle owned or operated by a municipality or utility located in a low-population county (Table 2) or to a vehicle owned or operated by a municipality or utility that has been granted low-population county status.

(f) Record-Keeping Requirement. A municipality or utility shall maintain the following records. The municipality or utility shall provide the following records upon request to an agent or employee of the Air Resources Board for all vehicles in its total fleet subject to compliance with this regulation.

(1) Records to be Kept For Inspection. Beginning December 31, 2007, the municipality or utility shall keep the following records either in hard-copy format or as computer records:

(A) A list by vehicle identification number of vehicles, identifying each vehicle type; engine manufacturer, model-year, family, and series; and status as a total fleet or low usage vehicle; and

(B) Correlated to each vehicle, the installed diesel emission control strategy family name, its serial number, manufacturer, installation date, and if using a Level 1 or Level 2 verified diesel emission control strategy, the reason for the choice; and

(C) Records of maintenance for each installed diesel emission control strategy; and

(D) For fuel or fuel additives used as a diesel emission control strategy, the most recent two years' worth of records of purchase that demonstrate usage; and

(E) For each low usage vehicle, or low-population county low usage vehicle, its mileage or engine hours as of December 31 of each year beginning 2007, and records to document its five-year mileage or engine hours, as of December 31 of each year beginning 2007, correlated to the vehicle identification information in paragraph (1)(A) above; and

(F) If a municipality or utility is located in a low-population county or has been granted low-population county status, documentation affirming that the vehicle is not operated at any time in a metropolitan statistical area as defined by the U.S. Census Bureau; and

(G) For each engine for which a municipality or utility is claiming an extension pursuant to paragraph (d)(4), the retirement date correlated to the vehicle identification information in paragraph (1)(A) above; and

(H) For each engine for which a municipality or utility is claiming an extension pursuant to paragraph (d)(5), the records of the test plan, including start and end dates of the experiment; diesel emission control strategy manufacturer name and contact information (representative, address, and phone number); name and type of experimental diesel particulate matter emission control strategy; and targeted data to be generated by experiment and correlated to the vehicle identification information in paragraph (1)(A) above; and

(I) For each engine for which a municipality or utility located in a lowpopulation county is following the accelerated turnover path in Table 3, the date of each engine repower correlated to the vehicle identification information in paragraph (1)(A) above; and

(J) Records to document the retirement of a vehicle. For each vehicle or engine to be retired, list the vehicle identification number, engine manufacturer, model-year, family, and series. For each vehicle that will be transferred to another fleet in California, include also the information required by sections 2022.1(f)(1)(B) and a statement of compliance that the vehicle meets the provisions of section 2022.1(b). For each vehicle or engine to be retired, provide the date of retirement, and written

confirmation from the recipient of the retired vehicle or engine that the destination of the vehicle or its engine meets the requirements of the definition of "retirement" or "retire" in section 2022(b).

(K) Vehicles sold outside of the State of California. For a vehicle to qualify for retirement, a municipality or utility must:

1. Submit to the Executive Officer a completed VIN Stop application, which includes: vehicle license plate number, vehicle identification number, vehicle model-year, vehicle make, vehicle model, engine manufacturer, engine serial number, and engine model year;
2. Receive and maintain VIN Stop submittal to Department of Motor Vehicles in municipality's or utility's records; and
3. Obtain and maintain out-of-state buyer's contact information, such as name, address and phone number for the vehicle sold outside of the State of California and acknowledgement of the vehicle's operational status.

(L) A statement of compliance, prepared beginning December 31, 2007, and renewed each December 31, thereafter until December 31, 2012, with low-population counties continuing until December 31, 2018, certifying that the municipality's or utility's engines are in compliance as required, including the following:

1. "The [insert name of municipality or utility] vehicles at terminal [insert terminal identification number or address] are in compliance with title 13, California Code of Regulations, section 2022.1"; and

2. The municipality's or utility's name, address, and business telephone; and the signature of the municipality's or utility's agent and the date signed.

(2) Inspection of Records at the Terminal. Beginning December 31, 2007, the municipality or utility shall provide to any ARB representative any records required to be maintained by the municipality or utility pursuant to subsection (f)(1), by appointment, at the terminal where a vehicle normally resides.

(3) Records Kept in the Vehicle. For each vehicle, beginning December 31, 2007, the municipality or utility shall keep the following information in the form of a legible and durable label affixed to the driver's side door jamb, or another readily accessible location known to the driver of each vehicle:

(A) For each installed diesel emission control strategy, the diesel emission control strategy family name as specified in title 13, California Code of Regulations, section 2706(g)(2), and the installation date; or

(B) Engine model-year and planned compliance date, and a statement that the vehicle is following the accelerated turnover option, if applicable; or

(C) Designation as a low usage vehicle or low-population county low usage vehicle (as applicable) and the vehicle's mileage or hours as of December 31 of each year beginning December 31, 2007; or

(D) Engine model-year and terminal where the vehicle is permanently housed if the municipality or utility is located in a low-population county or has been granted low-population county status; or

(E) Engine model-year and retirement date for an engine for which a municipality or utility is claiming an extension pursuant to paragraph (d)(4); or

(F) Engine model-year and the beginning and the ending dates for the test plan of an engine for which a municipality or utility is claiming an extension pursuant to paragraph (d)(5); or

(G) Engine model-year and planned compliance date, and a statement that the vehicle is following the private utility extension, if applicable.

(4) Each municipality or utility shall maintain these records for each vehicle until it is sold outside of the State of California or is no longer owned or operated by the municipality or utility. If ownership is transferred, the seller shall convey these records to the buyer, or a third-party sales representative.

(g) Contractor Compliance Requirement. In any contract for services that a municipality or utility enters that has an effective date of December 31, 2007, or later, the municipality or utility shall include language requiring the contractor to be in compliance with all federal, state, and local air pollution control laws and regulations applicable to the contractor.

(h) Third Party Vehicle Seller Contract Requirement. In any contract with a third party vehicle seller for the sale of a vehicle outside of the State of California to satisfy retirement, a municipality or utility must:

(1) Include in the contract that it is the third party vehicle seller's responsibility to:

(A) Ensure that the vehicle is sold outside of the State of California, or if sold to an intermediate buyer in state, inform the intermediate buyer in writing that the vehicle cannot be sold or operated within California unless the vehicle is in compliance with section 2022.1(b);

(B) Inform the buyer in writing that the vehicle cannot be registered in California unless the vehicle is in compliance with section 2022.1(b); and

(C) Notify the buyer in writing to inform future buyers that the vehicle cannot be registered/operated in California unless the vehicle is in compliance with section 2022.1(b).

(2) Obtain a written statement from the third party vehicle seller with the buyer's contact information, such as name, address, and phone number; obtain acknowledgement of the requirements in subparagraph 2022.1(h)(1); and provide original copy to public agency or utility.

(i) Non-Compliance. Any violations of this section may carry civil penalties as specified in state law and regulations, including, but not limited to, Health and Safety Code Section 39674.

(1) A municipality or utility that fails to maintain the required records in paragraph (f)(1) may be subject to civil penalties of not less than \$100 per day for every day past the required record-keeping date.

(2) A municipality or utility that fails to maintain the required records in the vehicle as specified in paragraph (f)(3) may be subject to civil penalties of not less than \$100 per day per vehicle for every day past the required record-keeping date.

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<sup>2</sup> "By group" means all vehicles in an engine model-year group as described in Table 1 under (c)(1).

### ➡ § 2023. Fleet Rule for Transit Agencies.

(a) The definitions in section 2020 shall apply to sections 2023, 2023.1, 2023.2, 2023.3 and 2023.4. In addition, the following definitions apply only to sections 2023, 2023.1, 2023.2, 2023.3 and 2023.4.

(1) "Active fleet" means the total number of urban buses operated by a transit agency or under contract to a transit agency, including spare buses, but not emergency contingency vehicles or non-revenue producing vehicles.

(2) "Commuter Service Bus" means a passenger-carrying vehicle powered by a heavy heavy-duty diesel engine or of a type normally powered by a heavy heavy-duty diesel engine that is not otherwise an urban bus and which operates on a fixed route primarily during peak commute hours and

that has no more than ten scheduled stops per day, excluding park-and-ride lots. A commuter service bus is a transit fleet vehicle.

(3) "Diesel PM emission total," for the purposes of sections 2023.1 and 2023.2, means the sum of the particulate matter (PM) value, based on the engine certification standard, of each diesel fuel, dual-fuel, bi-fuel (except for heavy-duty pilot ignition engines), and diesel hybrid-electric engine in a transit agency's active fleet or transit fleet vehicle fleet in g/bhp-hr. For 1987 and earlier engines, the PM exhaust emission value shall be presumed to be 1.0 g/bhp-hr.

(4) "Emergency contingency vehicle" means an urban bus placed in an inactive contingency fleet for energy or other local emergencies, after the urban bus has reached the end of its normal minimum useful life.

(5) "Hybrid-electric bus" (HEB) means an urban bus equipped with at least two sources of energy on board; this energy is converted to motive power using electric drive motors and an auxiliary power unit, which converts consumable fuel energy into mechanical or electrical energy. The electric drive motors must be used partially or fully to drive the vehicle's wheels.

(6) "Low Usage Vehicle" means a non-revenue-generating transit fleet vehicle that operates for no more than 1000 miles per year.

(7) "New Transit Agency" means

(A) for the purposes of section 2023.1, a transit agency formed after January 1, 2002;

(B) for the purposes of section 2023.2, a transit agency formed after January 1, 2005.

(8) "NOx Fleet Average" for the purposes of sections 2023.1 and 2023.2 means the average of the oxides of nitrogen (NOx) emissions for all transit fleet vehicles or urban buses, owned, operated, or leased by a transit agency, based on the engine certification standard of each engine. The NOx fleet average is calculated by summing the NOx engine certification standards in g/bhp-hr, of each engine in an active fleet or transit fleet vehicle fleet, and dividing by the total number of vehicles in that fleet.

(9) "Retirement" or "Retire" means an engine will be withdrawn from a transit vehicle fleet in California. The engine may be sold outside of California, scrapped or used in an emergency contingency vehicle or low usage vehicle.

(10) "Spare bus" means an urban bus that is used to accommodate routine maintenance and repair operations, and to replace a bus in scheduled service that breaks down or is involved in an accident.

(11) "Transit Fleet" means a transit agency's urban buses and transit fleet vehicles, excluding emergency contingency vehicles and low usage vehicles.

(12) "Transit Fleet Vehicle" means an on-road vehicle greater than 8,500 pounds gross vehicle weight rating (GVWR) powered by a heavy-duty engine fueled by diesel or alternative fuel, owned or operated by a transit agency, and which is not an urban bus.

(13) "Urban bus" means a passenger-carrying vehicle powered by a heavy heavy-duty diesel engine, or of a type normally powered by a heavy heavy-duty diesel engine, with a load capacity of fifteen (15) or more passengers and intended primarily for intra-city operation, i.e., within the confines of a city or greater metropolitan area. Urban bus operation is characterized by short rides and frequent stops. To facilitate this type of operation, more than one set of quick-operating entrance and exit doors would normally be installed. Since fares are usually paid in cash or token, rather than purchased in advance in the form of tickets, urban buses would normally have equipment installed for the collection of fares. Urban buses are also typically characterized by the absence of equipment and facilities for long distance travel, e.g., restrooms, large luggage compartments, and facilities for stowing carry-on luggage.

(b) A new transit agency shall:

(1) notify the Executive Officer in writing of its existence and submit reports to the Executive Officer as required in section 2023.4(j);

(2) choose a compliance path for its active fleet and notify the Executive Officer within 120 days of formation of its intent to follow either the diesel path or alternative path, as described in section 2023.1(a), except that a new transit agency that is a successor to an existing transit agency shall follow the compliance path of the transit agency out of which it has been formed;

(3) meet the NO<sub>x</sub> fleet average and the diesel PM total of the urban buses or transit fleet vehicles

(A) used in the transit operations of the existing transit agency out of which the new transit agency is formed or,

(B) if not formed from an existing transit agency, meet the requirements set forth in 2023.1(d)(4), 2023.1(e)(5) for urban buses and 2023.2(a)(1)(B), 2023.2(a)(2)(B) 2023.2(b)(3) for transit fleet vehicles; and,

(4) comply with all applicable requirements of section 2023, section 2023.1, 2023.2 and 2023.4.

(c) A transit agency that installs a diesel emission control strategy to reduce diesel PM shall use a diesel emission control strategy that is verified by the Executive Officer in accordance with section 2700 et seq., title 13, CCR, or an urban bus retrofit device that has been exempted under Vehicle Code section 27156 as an engine rebuild kit and that reduces PM to 0.10 g/bhp-hr when used on an engine model 6V92TA DDEC for the model years specified for that engine.

(d) A transit agency that installs a diesel emission control strategy on an engine shall use the following percentage reductions from the engine certification standard value when calculating its total diesel PM emissions: 25 percent for a Level 1, 50 percent for a Level 2, and 85 percent for a Level 3 diesel emission control strategy.

(e) A transit agency with fewer than 30 buses in its transit fleet may apply for an extension to comply with the provisions of section 2023.1 and section 2023.2 by submitting documentation of financial hardship to the Executive Officer, in writing, at least thirty (30) days before the requirement becomes applicable for approval by the Executive Officer. Documentation of financial hardship shall include, but is not limited to, an analysis of the cost of compliance, the sources of available funds, and the shortfall between funds available and the cost of compliance. The transit agency must also specify the date and means by which compliance will be achieved in the request for a delay.

(f) A transit agency that is unable to comply with an implementation deadline specified in section 2023.1 paragraph (e)(1), (2), (3), or (4) or section 2023.2(b)(1) or (2) because of the unavailability of technology may apply in writing to the Executive Officer for an extension of the compliance deadline. The application to the Executive Officer must be made in writing and at least ninety (90) days before the applicable implementation deadline. The Executive Officer may grant an extension of up to one year, provided that the applicant:

(1) demonstrates that the technology is unavailable;

(2) explains why the transit agency cannot comply by retiring older buses; and

(3) provides a schedule for compliance.

(g) A transit agency that owns, operates, or leases fewer than 20 diesel-fueled, dual-fuel, bi-fuel, or diesel hybrid-electric buses in its transit fleet and that operates in a federal one-hour ozone attainment area may delay implementation of the intermediate total diesel PM emission reduction requirements provided the transit agency complies with the implementation deadlines set forth in Section 2023.1 paragraphs (e)(3)(A) or (e)(4) and section 2023.2 paragraph (b)(2).

(h) Non-Compliance. Any violations of sections 2023, 2023.1, 2023.2, 2023.3, or 2023.4 may be subject to civil penalties as specified in state law and regulations.

■ **§ 2023.1. Fleet Rule for Transit Agencies - Urban Bus Requirements.**

(a) To encourage transit agencies that operate urban bus fleets to purchase or lease lower emission alternative-fuel buses, while also providing flexibility to such fleet operators to determine their optimal fleet mix in consideration of such factors as air quality benefits, service availability, cost, efficiency, safety, and convenience, two paths to compliance with this fleet rule are available: the alternative-fuel path and the diesel path.

(1) Transit agencies must choose their compliance path, and shall notify ARB of their intent to follow either the diesel or the alternative-fuel path, by January 31, 2001. Reporting requirements for that notification are set forth in subdivisions (a) and (b) of section 2023.4, title 13, CCR.

(2) A transit agency within the jurisdiction of the South Coast Air Quality Management District may elect to change its compliance path from the diesel path to the alternative-fuel path, provided that the transit agency notifies the Executive Officer of the change by January 31, 2004, and provided that the transit agency is in compliance with all requirements of section 2023.1, including specific requirements of the diesel path, on or before January 1, 2004. Reporting requirements for this notification are set forth in paragraph (b)(3) of section 2023.4, title 13, CCR.

(3) A new transit agency that is a successor to an existing transit agency or that has been created from a merger of two or more transit agencies or parts of two or more transit agencies must have the same compliance path as the transit agency or agencies out of which it is formed.

(4) A transit agency within the jurisdiction of the South Coast Air Quality Management District shall follow the alternative-fuel path. If the transit agency had previously stated its intent to follow the diesel path, the change to the alternative-fuel path shall be effective on October 7, 2006.

(5) Transit agencies on the diesel path with more than 30 buses in their fleets purchasing model year 2007 through 2009 urban buses that are not certified at or below 0.2 g/bhp-hr NO<sub>x</sub> emission level shall:

(A) Mitigate the increased NO<sub>x</sub> emissions for each urban bus purchased by retrofitting an existing urban bus or transit fleet vehicle within the fleet with a level 3 particulate matter (PM) verified diesel emission control strategy with an oxides of nitrogen (NO<sub>x</sub>) reduction efficiency of at least 40 percent, if available, otherwise, with a NO<sub>x</sub> reduction efficiency of at least 25 percent. This retrofit requirement applies on a one-to-one basis until all diesel urban buses and transit fleet vehicles within the transit agency's fleet are either retrofitted or are determined to be unable to be retrofitted as specified in (B) below.

(B) Obtain Executive Officer approval for purchasing a 2007 through 2009 model year urban bus not subject to (A) above by submitting to the Executive Officer a report 90 days prior to the delivery of the urban bus. The report shall provide information that demonstrates that all vehicles in the transit agency's fleet have been retrofitted or are determined to be unable to be retrofitted including when the inability to retrofit occurs for reasons other than a device not verified for the specific urban bus or transit fleet vehicle engine family.

(C) Submit annual reports that meet the requirements in section 2023.4(b)(4).

(b) Transit agencies on the alternative-fuel path shall meet the following requirements:

(1) Upon approval of the regulation, and through Model Year 2015, at least 85 percent of all urban buses purchased or leased each year must be alternative-fuel buses or buses with engines purchased under paragraph (b)(9).

(2) NOx fleet average requirements as set forth in subdivision (d), below.

(3) Beginning October 1, 2002, only engines certified to an optional PM standard of 0.03 g/bhp-hr or lower shall be purchased when making new bus purchases.

(4) Total diesel PM emission reduction requirements and use of low-sulfur or other allowed fuel as set forth in subdivision (e), below.

(5) Transit agencies on the alternative-fuel path shall not purchase any diesel-fueled, dual-fuel, or bi-fuel buses with 2004-2006 model year engines certified to emissions levels in excess of those specified in paragraph (a)(11) of section 1956.1, title 13, CCR, except as provided in paragraph (b)(8) or (b)(9) of this section.

(6) Zero-emission bus purchase requirements beginning in model year 2012, in accordance with the requirements set forth in subdivision (c) of section 2023.3, title 13, CCR.

(7) Reporting requirements as set forth in section 2023.4, title 13, CCR.

(8) The Executive Officer may exempt transit agencies on the alternative-fuel path from the requirements of paragraph (b)(5) of section 2023.1, title 13, CCR, provided that:

(A) A transit agency applies to the Executive Officer for such exemption by June 30, 2001;

(B) A transit agency demonstrates to the Executive Officer that it will achieve NOx emissions benefits through 2015 greater than what would have been achieved through compliance with paragraph (b)(5); and

(C) The Executive Officer finds that transit agencies, after consulting with the Engine Manufacturers Association, have demonstrated, or are contractually committed to demonstrate, advanced NOx aftertreatment technology.

(9) A transit agency on the alternative-fuel path may purchase a bus operated with a heavy-duty pilot ignition engine provided the engine meets the standards set forth in subdivision (b) of section 1956.1, title 13, CCR.

(c) Transit agencies on the diesel path shall meet the following requirements:

(1) NOx fleet average requirements as set forth in subdivision (d), below.

(2) Total diesel PM emission reduction requirements and use of low-sulfur or other allowed fuel as set forth in subdivision (e), below.

(3) Zero-emission bus demonstration as required in subdivision (b) of section 2023.3, title 13, CCR.

(4) Transit agencies on the diesel path shall not purchase any diesel-fueled, dual-fuel, or bi-fuel buses with 2004-2006 model year engines certified to emissions levels in excess of those specified in paragraph (a)(11) of section 1956.1, title 13, CCR, except as provided in paragraph (c)(7) or (c)(8) of this section. Beginning July 1, 2003, a transit agency may not purchase alternative fuel buses certified to a PM emission level in excess of the optional standard of 0.03 g/bhp-hr when making new bus purchases.

(5) Zero-emission bus purchase requirements beginning in model year 2011, in accordance with the requirements set forth in subdivision (c) of section 2023.3, title 13, CCR.

(6) Reporting requirements as set forth in section 2023.4, title 13, CCR.

(7) The Executive Officer may exempt transit agencies on the diesel path from the requirements of paragraph (c)(4) of section 2023.1, title 13, CCR, provided that:

- (A) A transit agency applies to the Executive Officer for such exemption by June 30, 2001;
- (B) A transit agency demonstrates to the Executive Officer that it will achieve NOx emissions benefits through 2015 greater than what would have been achieved through compliance with paragraph (c)(4); and
- (C) The Executive Officer finds that transit agencies, after consulting with the Engine Manufacturers Association, have demonstrated, or are contractually committed to demonstrate, advanced NOx aftertreatment technology.
- (8) A transit agency on the diesel-fuel path may purchase a bus operated with a heavy-duty pilot ignition engine provided the engine meets the standards set forth in subdivision (b) of section 1956.1.
- (9) The Executive Officer shall authorize, in writing, a transit agency on the diesel path to purchase one or more diesel-fueled hybrid-electric bus certified under title 13, CCR, section 1956.1(a)(11)(B) provided that:
- (A) The transit agency shall submit a mitigation plan and letter requesting approval by January 31, 2005, to the Executive Officer that demonstrates that the transit agency will provide surplus emission reductions from urban buses in its fleet that will offset the NOx emission difference between the certified NOx emission standard of the hybrid-electric bus and 0.5 g/bhp-hr. The transit agency may not use NOx emission reductions that are otherwise required by any statute, regulation, or order or the emission reductions that will accrue from the retirement of an urban bus to be replaced by a hybrid-electric bus for the offset;
- (B) The transit agency shall complete implementation of all mitigation measures set forth in the approved plan to offset NOx emissions prior to the receipt of the last diesel-fueled hybrid-electric bus; and
- (C) The transit agency shall submit the reports required by section 2023.4(g).
- (d) Beginning October 1, 2002, no transit agency shall own, operate, or lease an active fleet of urban buses with average NOx emissions in excess of 4.8 g/bhp-hr, based on the engine certification standards of the engines in the active fleet.
- (1) This active fleet average requirement shall be based on urban buses owned, operated, or leased by the transit agency, including diesel buses, alternative-fuel buses, all heavy-duty zero-emission buses, electric trolley buses, and articulated buses, in each transit agency's active fleet. The Executive Officer may allow zero-emission buses that do not meet the definition of an urban bus to be included in the calculation of the fleet average standard upon written request to the ARB by January 31, 2002, and upon approval by the Executive Officer. The request shall include a description of the zero-emission buses, the zero-emission technology utilized, and the number of zero-emission buses to be used in calculating the NOx fleet average standard. Zero-emission buses not meeting the definition of an urban bus may not be used to satisfy the requirements of the Zero-emission Bus Demonstration Project set forth in subdivision (b) of section 2023.3, title 13, CCR.
- (2) Transit agencies may use ARB-certified NOx retrofit systems to comply with the fleet average requirement (in addition to bus purchases, repowerings, and retirements).
- (3) Transit agencies have the option of retiring all 1987 and earlier model year diesel urban buses by October 1, 2002, to comply with the fleet average standard requirement.
- (4) A transit agency established after January 1, 2005, shall not operate an active fleet of urban buses with an average NOx emission in excess of:
- (A) 4.0 g/bhp-hr, or

(B) the NO<sub>x</sub> average of the active fleet of the transit agency from which it was formed, whichever is lower, or

(C) in the case of a merger of two or more transit agencies or parts of two or more transit agencies, the average of the NO<sub>x</sub> fleet averages, whichever is lower.

(e) To reduce public exposure to diesel particulate matter, each transit agency shall reduce the diesel PM emissions total of the diesel buses in its active fleet relative to its diesel PM emission total as of January 1, 2002, according to the schedule below, and shall operate its diesel buses on diesel fuel with a maximum sulfur content of 15 parts per million by weight. Documentation of compliance with these requirements must be provided in accordance with the provisions of subdivision (d) of section 2023.4, title 13, CCR.

(1) No later than January 1, 2004:

(A) The diesel PM emission total for a transit agency on the diesel path shall be no more than 60 percent of its diesel PM emission total on January 1, 2002.

(B) The diesel PM emission total for a transit agency on the alternative fuel path shall be no more than 80 percent of its diesel PM emission total on January 1, 2002.

(2) No later than January 1, 2005:

(A) The diesel PM emission total for a transit agency on the diesel path shall be no more than 40 percent of its diesel PM emission total on January 1, 2002.

(B) The diesel PM emission total for a transit agency on the alternative fuel path shall be no more than 60 percent of its diesel PM emission total on January 1, 2002.

(3) No later than January 1, 2007:

(A) The diesel PM emission total for a transit agency on the diesel path shall be no more than 15 percent of its diesel PM emission total on January 1, 2002 or equal to 0.01 g/bhp-hr times the total number of current diesel-fueled active fleet buses, whichever is greater.

(B) The diesel PM emission total for a transit agency on the alternative fuel path shall be no more than 40 percent of its diesel PM fleet average on January 1, 2002.

(4) No later than January 1, 2009, the diesel PM emission total for a transit agency on the alternative fuel path shall be no more than 15 percent of its diesel PM emission total on January 1, 2002 or equal to 0.01 g/bhp-hr times the total number of current diesel-fueled active fleet buses, whichever is greater.

(5) Beginning on January 1, 2005, a new transit agency may not have a diesel PM emission total exceeding the following values:

(A) As of January 1, 2005 through December 31, 2009, 0.05 g/bhp-hr (exhaust emission value) times the total number of diesel-fueled buses in the active fleet;

(B) As of January 1, 2010, 0.01 g/bhp-hr (exhaust emission value) times the total number of diesel-fueled buses in the active fleet.

(6) Beginning July 1, 2002, a transit agency shall not operate its diesel urban buses on diesel fuel with a sulfur content in excess of 15 parts per million by weight, except that a transit agency may operate its diesel buses on a fuel that is verified by the Executive Officer as a diesel emission control strategy that reduces PM in accordance with section 2700 et seq., title 13, CCR. A transit agency with fewer than 20 buses in its active fleet, and that operates in a federal one-hour ozone attainment area, is not subject to this low-sulfur fuel requirement until July 1, 2006. In areas redesignated as one-hour ozone non-attainment areas prior to July 1, 2006, a transit agency initially exempt from the low-sulfur fuel

requirement shall submit a plan to the Executive Officer within 30 days of redesignation for achieving compliance with this requirement.

➡ **§ 2023.2. Fleet Rule for Transit Agencies - Transit Fleet Vehicle Requirements.**

(a) A transit agency shall not operate transit fleet vehicles with a NO<sub>x</sub> fleet average exceeding the following values as of the specified dates. A transit agency shall provide documentation of compliance with the requirements in accordance with the provisions of subdivision (e)(2) of section 2023.4, title 13, CCR.

(1) Beginning December 31, 2007 through December 30, 2010, 3.2 g/bhp-hr;

(A) A transit agency may retire all 1997 and earlier model year engines in transit fleet vehicles by December 31, 2007, to comply with the NO<sub>x</sub> fleet average requirement.

(B) For a new transit agency established after December 31, 2007 and through December 31, 2009, either 3.2 g/bhp-hr or no higher than the NO<sub>x</sub> average of the transit fleet vehicles of the transit agency from which the new transit agency has been formed, whichever is lower.

(2) Beginning December 31, 2010, 2.4 g/bhp-hr;

(A) A transit agency may retire all 2001 and earlier model year engines in transit fleet vehicles by December 31, 2010, to comply with the NO<sub>x</sub> fleet average requirement.

(B) For a new transit agency established after December 31, 2010, either 2.4 g/bhp-hr or no higher than the NO<sub>x</sub> average of the transit fleet vehicles of the transit agency from which the new transit agency has been formed, whichever is lower.

(3) Zero-emission buses used to satisfy the requirements set forth in subdivision (d) of section 2023.1 may not be used to meet the requirements of this subdivision.

(4) A transit agency may claim NO<sub>x</sub> reductions by application of a system that has been verified by the Executive Officer in accordance with section 2700 et seq., title 13, CCR to comply with the fleet average requirement, in addition to transit fleet vehicle purchases, retirements, or engine Repowering.

(b) A transit agency shall reduce the total diesel particulate matter (PM) emissions of its diesel transit fleet vehicles relative to its total diesel PM emissions from diesel transit fleet vehicles as of January 1, 2005, according to the schedule below. "Diesel PM emission total" and how it is calculated are defined in 2023(a)(3). A transit agency shall provide documentation of compliance with these requirements in accordance with the provisions of subdivision (e)(3) of section 2023.4, title 13, CCR.

(1) (No later than December 31, 2007, the diesel PM emission total for a transit agency's transit fleet vehicle fleet shall be no more than 60 percent of its diesel PM emission total on January 1, 2005.

(2) No later than December 31, 2010, the diesel PM emission total for a transit agency's transit fleet vehicle fleet shall be no more than 20 percent of its diesel PM emission total on January 1, 2005, or equal to 0.01 g/bhp-hr times the total number of transit fleet vehicles in the current fleet, whichever is greater.

(3) A new transit agency established after January 1, 2005, may not have a diesel PM emission total exceeding the following values:

(A) For a new transit agency established January 1, 2005 through December 31, 2006, 0.1 g/bhp/hr (exhaust emission value) times the number of diesel-fueled transit fleet vehicles in its fleet. This value will serve as the transit agency's PM baseline. The transit agency must meet the requirements set forth in section 2023.2(b)(1) and (2).

(B) For a new transit agency established January 1, 2007 through December 31, 2009, 0.1 g/bhp/hr (exhaust emission value) times the number of diesel-fueled transit fleet vehicles in its fleet. This value will serve as the transit agency's PM baseline and shall be reduced by 50 percent of its PM baseline value by December 31, 2010, and 80 percent by December 31, 2012.

(C) For a new transit agency established January 1, 2010 or later, 0.01 g/bhp-hr (exhaust emission value) times the total number of diesel transit fleet vehicles in its fleet.

(c) A transit agency may apply to the Executive Officer for a delay in meeting the provisions of section 2023.2(a) and 2023.2(b) for up to one year to allow for the termination of a vehicle lease, maintenance/lease, turnkey or vehicle/service contract as defined by the Federal Transit Administration (FTA). The transit agency shall apply to the Executive Officer no later than 90 days prior to the applicable deadlines and shall include a description of the reason the delay is required, the reason the contractor cannot provide a newer vehicle to replace an existing vehicle within the terms of the contract, and provide a schedule for compliance by the end of the compliance extension.

### ➡ § 2023.3. Zero-Emission Bus Requirements.

(a) "Zero-emission bus" means an Executive Officer certified urban bus that produces zero exhaust emissions of any criteria pollutant (or precursor pollutant) under any and all possible operational modes and conditions.

(1) A hydrogen-fuel cell bus shall qualify as a zero-emission bus.

(2) An electric trolley bus with overhead twin-wire power supply shall qualify as a zero-emission bus.

(3) A battery electric bus shall qualify as a zero-emission bus.

(4) Incorporation of a fuel-fired heater shall not preclude an urban bus from being certified as a zero-emission bus, provided the fuel-fired heater cannot be operated at ambient temperatures above 40°F and the heater is demonstrated to have zero evaporative emissions under any and all possible operational modes and conditions.

(b) Zero-Emission Bus Demonstration Projects.

(1) Initial Demonstration Project.

(A) Except as provided in (D) below, the owner or operator of an urban bus fleet on the diesel path in accordance with the provisions of section 2023.1, with more than 200 urban transit buses in its active fleet on January 31, 2001, shall implement an Initial Demonstration Project in accordance with this subsection (b)(1). The owner or operator shall evaluate the operation of zero-emission buses in revenue service, and prepare and submit a report on the demonstration project to the Executive Officer for inclusion in a future review of zero-emission technology.

(B) This Initial Demonstration Project shall meet all of the following specifications and requirements:

1. utilize a minimum of three zero-emission buses,
2. include any necessary site improvements,
3. locate fueling infrastructure onsite,
4. provide appropriate maintenance and storage facilities,

5. train bus operators and maintenance personnel,
6. place the buses in revenue service for a minimum duration of 12 calendar months,
7. retain operation and maintenance records, and
8. report on the demonstration program as set forth in subdivision (f) of section 2023.4, title 13, CCR.

(C) When planning and implementing the Initial Demonstration Project, the operator or owner shall meet the following milestones:

1. no later than January 1, 2002, prepare and solicit bid proposals for materials and services necessary to implement the demonstration project, including but not limited to the zero-emission buses and the associated infrastructure;
2. no later than February 28, 2006, place at least three zero-emission buses in operation;
3. no later than July 31, 2005, submit a preliminary report on the demonstration project to the Executive Officer, in accordance with paragraph (f)(3) of section 2023.4, title 13, CCR;
4. no later than July 31, 2007, submit a report on the demonstration project to the Executive Officer, in accordance with paragraph (f)(4) of section 2023.4, title 13, CCR;
5. no later than January 31, 2003, initial documentation shall be submitted in accordance with paragraph (f)(1) of section 2023.4, title 13, CCR; and
6. no later than January 31, 2003, a financial plan shall be submitted in accordance with paragraph (f)(2) of section 2023.4, title 13, CCR.

(D) Multiple transit agencies within the same air basin may, on a case-by-case basis, petition the Executive Officer to implement a joint zero-emission bus demonstration project. Electric trolley buses shall not qualify as zero-emission buses for purposes of this joint demonstration project. No more than three transit agencies can participate in any one joint project. Transit agencies that are participating in a joint demonstration project shall:

1. designate the agency hosting the onsite demonstration,
2. jointly fund the demonstration project, and
3. place a minimum of three zero-emission buses per demonstration project in revenue service.

(2)Advanced Demonstration Project.

(A) Except as provided in (E) below, the owner or operator of an urban bus fleet on the diesel path in accordance with the provisions of section 2023.1, with more than 200 urban transit buses in its active fleet on January 1, 2007, for transit agencies on the diesel path shall implement an Advanced Demonstration Project. The owner or operator shall evaluate the operation of zero-emission buses in revenue service and prepare and submit a report on the demonstration project to the Executive Officer.

(B) Diesel fuel path transit agencies may choose to follow the single or joint path demonstration as described in 2023.3(b)(2)(D) or 2023.3(b)(2)(E).

(C) When planning and implementing the Advanced Demonstration Project for transit agencies on the diesel path, the operator or owner shall meet the following milestones:

1. No later than January 1, 2009, place all required zero-emission buses in operation,

2. No later than May 1, 2009, submit a preliminary report on the demonstration project to the Executive Officer, in accordance with paragraph (f)(3) of section 2023.4, title 13, CCR, and

3. No later than May 1, 2010, submit a final report on the demonstration project to the Executive Officer, in accordance with paragraph (f)(4) of section 2023.4, title 13, CCR.

(D) Transit agencies choosing to participate in a single transit agency Advanced Demonstration Project shall meet all of the following specifications and requirements:

1. Utilize a minimum of six zero-emission buses,
2. Provide appropriate maintenance and storage facilities,
3. Train bus operators and maintenance personnel,
4. Place the buses in revenue service for a minimum duration of 12 calendar months after delivery of all demonstration buses,
5. Retain operation and maintenance records, and
6. Report on the demonstration program as set forth in subdivision (f) of section 2023.4, title 13, CCR.

(E) Multiple transit agencies may, on a case-by-case basis, petition the Executive Officer to implement a joint zero-emission bus demonstration project. Transit agencies that are participating in a joint demonstration project shall:

1. Jointly fund the demonstration project.
2. Utilize a minimum of 12 zero-emission buses in revenue service.
3. Operate the demonstration at a transit agency affected by the zero-emission bus regulation.
4. Purchase and put in revenue service a minimum of three zero-emission buses per transit agency.
5. Place the buses in revenue service for a minimum duration of 12 calendar months after delivery of all demonstration buses.
6. Provide appropriate maintenance and storage facilities.
7. Train bus operators and maintenance personnel from each participating transit agency.

(F) Zero-emission buses placed in service to meet the zero-emission bus initial demonstration projects as specified in subdivision (b)(1) are not permitted to count towards the advanced demonstration requirements, unless upgraded with technology advancements to make the bus comparable to vehicles available for the advanced demonstration. One credit shall be earned for each bus.

(c)Purchase Requirement for Zero-Emission Buses. The number of urban buses in each transit agency's active urban bus fleet shall be reviewed annually, as described in sections 2023.4(a)(3) and (b)(2). The owner or operator of a transit agency with more than 200 urban buses in active service on January 1, 2007, for transit agencies on the diesel path, and January 1, 2009, for transit agencies on the alternative-fuel path, shall purchase and/or lease zero-emission buses, in accordance with the following paragraphs. In addition, the owner or operator of diesel path transit agencies whose active urban bus fleet initially exceeds 200 urban buses after January 1, 2007 shall have three years to comply with the Zero-Emission Bus Purchase Requirement starting January 1, of the year they exceed 200 urban buses through 2026. The owner or operator of alternative fuel path transit agencies whose active urban bus fleet initially exceeds 200 urban buses after January 1, 2009, shall have three years to comply with the Zero-Emission Bus Purchase Requirement starting January 1, of the year they exceed 200 urban buses through 2026.

(1) For transit agencies on the diesel path, in accordance with the requirements in section 2023.1, a minimum 15 percent of purchase and lease agreements, when aggregated annually, for model year 2011, or from the start model year of Zero-Emission Bus purchases, through model year 2026 urban buses shall be zero-emission buses.

(2) For transit agencies on the alternative-fuel path, in accordance with the requirements in section 2023.1, a minimum 15 percent of purchase and lease agreements, when aggregated annually, for model year 2012, or from the start model year of Zero-Emission Bus purchases, through model year 2026 urban buses shall be zero-emission buses.

(3) The provisions of paragraphs (1) and (2) shall not apply if the operator's urban bus fleet is composed of 15 percent or more zero-emission buses on January 1, 2008, for transit agencies on the diesel path, and on January 1, 2010, for transit agencies on the alternative-fuel path, or at any time thereafter.

(4) Earning Credits.

(A) Transit agencies on either the diesel path or alternative-fuel path may earn credits for use in meeting the purchase requirements for zero-emission buses specified in paragraphs (c)(1) and (c)(2) by placing zero-emission buses in service prior to the dates specified in paragraphs (c)(1) and (c)(2). For each zero-emission bus placed into early service and above what is required by section 2023.3 in paragraphs (b)(2), (c)(1) and (c)(2), credits shall be accrued according to the following table. Each earned credit is equivalent to one zero-emission bus.

Credits per Year Placed

Path	2007	2008	2009	2010	2011
Diesel	2.5	2	1.5	1.5	-
Alternative-fuel	2.5	2	2	1.5	1.5

(B) Zero-emission buses placed in service to meet the zero-emission bus initial demonstration projects as specified in subdivision (b)(1) are not permitted to accrue credits towards the zero-emission bus purchase requirements, unless upgraded with technology advancements to make them comparable to vehicles available for the advanced demonstration. One credit shall be earned for each bus.

(C) Zero-emission buses placed in service to meet the advanced demonstration projects as specified in subdivision (b)(2) can accrue purchase credit towards the zero-emission purchase requirements. For each zero-emission bus required by the advanced demonstration, credit shall be accrued according to the following table. Each earned credit is equivalent to one zero-emission bus.

Path	Credits per Year Placed for Advanced Demonstration Zero-Emission Buses		
	2007	2008	2009
Diesel	2	1.5	1

(d) The Air Resources Board shall review zero-emission bus technology and the feasibility of implementing the requirements of subdivision (c) above no later than July 2009. Based on that assessment, the Board shall decide whether to proceed with the implementation of subdivision (c) or adjust the requirements.

➡ **§ 2023.4. Reporting Requirements for Transit Agencies.**

(a) The following reports on new urban bus purchases and/or leases by transit agencies on the alternative-fuel path shall be submitted as described below:

(1) The initial report shall be submitted by January 31, 2001, and shall state the transit agency's intent to follow the alternative-fuel path.

(2) Any requests for deviation from the requirement that 85 percent of buses purchased per year must be alternative-fuel buses must be submitted in writing and approved by the Executive Officer of the Air Resources Board 90 days prior to purchase. The written request must include the reason for requesting the deviation from the 85 percent annual purchase requirement and the transit agency's future planned alternative-fuel bus purchases.

(3) Each transit agency shall submit an annual report containing: the number, manufacturer, make, and model year of engines, and fuel used for each urban bus it currently owns or operates, urban bus purchases and/or leases beginning January 1, 2000, and annual average percentage of total urban bus purchases and/or leases that were alternative-fuel buses. The first report shall be submitted by January 31, 2001. Subsequent reports shall be submitted annually by January 31 through the year 2016. For transit agencies operating 150 or more urban buses, reports shall be submitted annually by January 31 through the year 2027.

(b) The following reports on new urban bus purchases and/or leases by transit agencies on the diesel path shall be submitted as described below:

(1) The initial report shall be submitted by January 31, 2001, and shall state the transit agency's intent to follow the diesel path.

(2) Each transit agency shall submit an annual report containing the number, manufacturer, make, and model year of engines, and fuel used for each urban bus it currently owns or operates, and urban bus purchases and/or leases beginning January 1, 2000. The first report shall be submitted by January 31, 2001. Subsequent reports shall be submitted annually by January 31 through the year 2016. For transit agencies operating 150 or more urban buses, reports shall be submitted annually by January 31 through the year 2027.

(3) A transit agency within the jurisdiction of the South Coast Air Quality Management District that chooses to change from the diesel path to the alternative fuel path in accordance with paragraph (a)(2) of section 2023.1, title 13, CCR, must submit to the Executive Officer a letter of intent to follow the alternative fuel path no later than January 31, 2004. The letter of intent shall contain a statement certifying that the transit agency is in compliance with all provisions of the fleet rule for transit agencies on or before January 1, 2004.

(4) As set forth in section 2023.1(a)(5), transit agencies with more than 30 buses in their fleet that purchase model-years 2007 through 2009 urban buses not certified at or below 0.2 g/bhp-hr NO<sub>x</sub> emissions shall submit the following information for each urban bus purchased: the manufacturer, make, model year of the engine of the urban bus or transit fleet vehicle retrofitted and for each diesel emission control strategy applied, the date of installation, the device's product serial number, and its Diesel Emission Control Strategy Family Name in accordance with the requirements of section 2706(g)(2), title 13, CCR. The first report shall be submitted by January 31, 2007. Subsequent reports shall be submitted annually by January 31 through the year 2016.

(c) Each transit agency shall submit the following reports on the urban bus NO<sub>x</sub> fleet average requirement:

(1) Initial documentation shall be submitted by January 31, 2001, and contain, at a minimum, the active urban bus fleet NO<sub>x</sub> emission average, and if that number exceeds the average required in subdivision (d), section 2023.1, title 13, CCR, a schedule of actions planned to achieve that average by October 1, 2002, including numbers and model years of bus purchases, retirements, retrofits,

and/or repowerings, or shall indicate the intent of the transit agency to retire all model year 1987 and earlier buses in its active fleet by October 1, 2002.

(2) A final report shall be submitted by January 31, 2003, detailing the active urban bus fleet NO<sub>x</sub> emission average as of October 1, 2002, and actions, if any were needed, taken to achieve that standard, including numbers and model years of bus purchases, retirements, retrofits, and/or repowerings, or documenting the retirement of all model year 1987 and earlier buses.

(d) Each transit agency shall submit the following reports on the total diesel PM emission reduction requirements for urban buses:

(1) An initial annual report shall be submitted by January 31, 2003, and shall contain, at a minimum, the following information:

(A) number, manufacturer, make, and model year of diesel-fueled, dual-fuel, bi-fuel (except for heavy-duty pilot ignition engines), and diesel hybrid-electric engines in urban buses in the active fleet; the PM engine certification value of each of those bus engines; the diesel PM emission total for the diesel buses in the active fleet; and the diesel PM emission total for the baseline date of January 1, 2002.

(B) For each urban bus for which a diesel emission control strategy has been applied, the device's product serial number; its Diesel Emission Control Strategy Family Name in accordance with the requirements of section 2706(g)(2), title 13, CCR; and the date of installation.

(2) Annual reports shall be submitted each year beginning January 31, 2004 and each January 31 thereafter, through 2009, and shall contain the information required in paragraphs (d)(1)(A) and (B) above plus the total percentage reduction of PM achieved from the baseline diesel PM emission total as of January 1 of each applicable year.

(e) Each transit agency shall submit the following reports for its transit fleet vehicles:

(1) An annual report of the number, manufacturer, make, and model year of engines and fuel used for each transit fleet vehicle it currently owns, leases, or operates as of January 1st of each year, beginning in 2006. The first report shall be submitted by January 31, 2006, and subsequent reports shall be submitted annually by January 31st through the year 2016.

(2) For the NO<sub>x</sub> fleet average reduction requirements set forth in section 2023.2(a):

(A) A report submitted by January 31, 2006, must contain at a minimum, the transit vehicle fleet NO<sub>x</sub> emission average. If that number exceeds the average required in section 2023.2(a)(1), the report must include a schedule of actions planned to achieve compliance by December 31, 2007.

1. If a change to the compliance schedule occurs that results in noncompliance, the transit agency must notify the Executive Officer within 30 days.

2. Notification to the Executive Officer must include a revised schedule showing how the agency will be in compliance within 90 days of the schedule change that caused noncompliance.

(B) A report submitted by January 31, 2008, must contain, details of the transit fleet vehicle fleet NO<sub>x</sub> emission average as of December 31, 2007, or must document the retirement of all model year 1997 and earlier transit fleet vehicle engines by December 31, 2007.

(C) A report submitted by January 31, 2009, must contain at a minimum, the transit vehicle fleet NO<sub>x</sub> emission average. If that number exceeds the average required in section 2023.2(a)(1), the report must include a schedule of actions planned to achieve compliance by December 31, 2010.

1. If a change to the compliance schedule occurs that results in noncompliance, the transit agency must notify the Executive Officer within 30 days.

2. Notification to the Executive Officer must include a revised schedule showing how the agency will be in compliance within 90 days of the schedule change that caused noncompliance.

(D) A final report submitted by January 31, 2011 must contain details the transit fleet vehicle fleet NOx emission average as of December 31, 2010, or must document the retirement of all model year 2001 and earlier transit fleet vehicle engines by December 31, 2010.

(3) For the total diesel PM reduction requirements set forth in section 2023.2(b):

(A) An initial report submitted by January 31, 2006, must contain the PM engine certification value of each transit fleet vehicle engine and the transit fleet vehicle diesel PM total as of January 1, 2005.

(B) A report submitted by January 31, 2008, must contain the transit fleet vehicle diesel PM total as of December 31, 2007, and the percentage diesel PM reduced, documenting compliance with the requirement in section 2023.2(b)(1).

(C) A final report submitted by January 31, 2011, of the transit fleet vehicle diesel PM total as of December 31, 2010, and the percentage diesel PM reduced, documenting compliance with the requirement in section 2023.2(b)(2).

(D) For each transit fleet vehicle for which a diesel emission control strategy has been applied, each report specified above must include the strategy's product serial number; its Diesel Emission Control Strategy Family Name in accordance with the requirements of section 2705(g)(2), title 13, CCR; and the date of installation correlated to a specific transit fleet vehicle engine.

(f) The following reports on the zero-emission bus demonstration program shall be submitted by those transit agencies required to conduct such demonstrations, as described below:

(1) Initial documentation shall contain, at a minimum, the bus order and delivery schedule, fuel type, type of refueling station, any planned facility modifications, and a revenue service demonstration plan;

(2) A financial plan shall contain, at a minimum, projected expenditures for capital costs for purchasing and/or leasing buses, refueling stations, any facility modifications, and projected annual operating costs;

(3) A preliminary report shall contain, at a minimum, the following information:

(A) a brief description of the zero-emission technology utilized, identification of the bus manufacturer, and the product specifications;

(B) a comparison with conventional buses on the following parameters: miles driven per bus in revenue and non-revenue service, miles between propulsion related road calls, miles between road calls, availability of bus for pull out, fuel economy, fueling costs, infrastructure costs, initial cost of bus, maintenance costs of propulsion related components, warranty of fuel cell and propulsion related components, safety incidents, and maintenance (both scheduled and unscheduled);

(C) qualitative transit personnel and passenger experience; and

(D) a financial summary of the capital costs of bus purchases and/or leases and fueling infrastructure.

(4) A final report shall contain, at a minimum, the following information:

(A) a brief description of the zero-emission technology utilized, identification of bus manufacturer and product specifications,

(B) a comparison with conventional buses on the following parameters: miles driven per bus in revenue service, miles between propulsion related road calls, miles between road calls, availability of bus for pull out, fuel economy, fueling costs, infrastructure costs, initial cost of bus, maintenance costs of propulsion related components, warranty of fuel cell and propulsion related components, bus down

time (scheduled and unscheduled), safety incidents, driver and mechanic training conducted, and maintenance (both scheduled and unscheduled),

(C) qualitative transit personnel and passenger experience, and

(D) a financial summary of capital costs of demonstration program, including bus purchases and/or leases, fueling infrastructure, any new facilities or modifications, and annual operating costs.

(5) Beginning 1 month after the start of a demonstration and monthly thereafter, an update on the demonstration shall be provided to Air Resources Board staff. These updates shall provide staff with zero-emission bus qualitative data on the following parameters: brief description of each bus's operation, number of days in operation (in-service and testing), bus down time (scheduled and unscheduled), reason for bus down time, outreach events, and requests for future participation in outreach events.

(6) Beginning 2 months after the delivery of the first bus and quarterly thereafter, an update on the demonstration shall be provided to Air Resources Board staff. These updates shall provide staff with zero-emission and conventional bus quantitative data on the following parameters: reliability (defined as miles between propulsion related road calls), operating and maintenance costs, maintenance conducted, warranty issues, availability of bus for pull out, fuel economy, technology performance, bus downtime (scheduled and unscheduled), safety incidents, issues with fueling equipment, outreach efforts, and driver and mechanic training conducted.

(g) The following reports on new zero-emission bus purchases and/or leases shall be submitted by transit agencies required to purchase zero-emission buses as described below:

(1) The initial report shall contain, at a minimum, the following information:

(A) a brief description of the zero-emission technology to be utilized and a plan for the implementation of the requirement,

(B) for an exemption from the purchase requirement, documentation that 15 percent or more of the transit agency's active urban bus fleet is composed of zero-emission buses.

(2) Any requests for deviation from the requirement that 15 percent of buses purchased per year must be zero-emission buses must be submitted in writing and approved by the Executive Officer of the Air Resources Board 90 days prior to a transit agency submitting a purchase order(s) reflecting the purchase deviation. The written request shall include the reason for requesting the deviation and the transit agency's future planned zero-emission bus purchases.

(3) Transit agencies on the diesel path shall include in the annual reports required in paragraph (b)(2): zero-emission bus purchases and/or leases beginning with model year 2008 and through model year 2026, and the annual average percentage of total bus purchases and/or leases that were zero-emission buses.

(4) Transit agencies on the alternative-fuel path shall include in the annual reports required in paragraph (a)(3): zero-emission bus purchases and/or leases beginning with model year 2008 and through model year 2026, and the annual average percentage of total bus purchases and/or leases that were zero-emission buses.

(h) Transit agencies exempted from the requirements of paragraphs (b)(5) and (c)(4), section 2023.1, title 13, CCR, shall submit annual reports demonstrating that they are achieving NOx emission benefits required in paragraphs (b)(8)(B) and (c)(7)(B), section 2023.1, title 13, CCR. The first report shall be submitted by January 31, 2005. Subsequent reports shall be submitted annually by January 31 through the year 2016.

(i) A transit agency requesting approval for the purchase of diesel-fueled hybrid-electric buses pursuant to paragraph (c)(9), section 2023.1, title 13, CCR, shall:

(1) submit an application for approval that meets the requirements of paragraphs (c)(9)(A) and (c)(9)(B), section 2023.1, title 13, CCR;

(2) include in the application all of the following: the number, manufacturer, make and model year of diesel-fueled hybrid-electric buses to be purchased; the schedule for the purchase and delivery of the buses; a detailed description of all measures that will be used to offset the excess NOx emissions including identification of the specific buses to which the measures will be applied, and the schedule for implementing those measures; and

(3) submit a final report to the Executive Officer within 30 days of receipt of the last diesel-fueled hybrid-electric bus that documents the schedule of delivery of the diesel-fueled hybrid-electric buses, timing, and completion of all measures to achieve the NOx offset.

(j) A new transit agency shall submit the following information to the Executive Officer:

(1) within 60 days of formation, the name of the new transit agency, its mailing address, name of a contact person and that person's e-mail address and phone number; a description of the service area and proposed routes; and the planned number of urban buses and transit fleet vehicles, including model years of engines;

(2) within 120 days of formation, its NOx fleet average for its active fleet and, separately, its transit fleet vehicles, and its diesel PM emission total for its active fleet and, separately, its diesel PM emission total for its transit fleet vehicles.

(k) Failure to submit complete reports.

(1) A transit agency that fails to submit a complete report in accordance with this section is subject to civil penalties of not less than \$100 per day for every day past January 31 of each reporting year through 2016. For transit agencies with more than 150 urban buses civil penalties of not less than \$100 per day for every day past January 31 shall continue for each reporting year through 2027.

(2) A new transit agency that fails to submit its report or required information in accordance with this section is subject to civil penalties of not less than \$100 per day for every day past the required reporting dates in section 2023.4(j).

(3) A report that does not contain all required information will not be considered complete. A report will be considered to be complete as of the date that all required information is submitted.