

Appendix A-1

Proposed Regulation Order

Proposed Amendments to the Advanced Clean Trucks Regulation and the Zero-Emission Powertrain Certification Test Procedure

[Note: The proposed modifications (referred to as Second 15-Day Changes) to the proposed regulations are shown below. This version, (Appendix A-1) complies with Government Code sections 11346.2, subdivision (a)(3), and 11346.8, subdivision (c). The proposed regulatory language released for a period of 15-days on October 7, 2024, is shown in "normal type." The deletions and additions to the originally proposed language that comprise the Second 15-day Changes that are made public with this Notice and available for comment are shown in strikethrough to indicate deletions and underline to indicate additions. The Second 15-Day Changes are being presented in multiple versions. For ease of readability, and to review the Second 15-Day Changes in an Accessible format, please refer to the Word (.docx) version (Appendix A-2).]

Date of release: November 21, 2024

Date of first hearing: May 23, 2024

Date of second hearing: October 24, 2024

Proposed Regulation Order

Advanced Clean Trucks Regulation

Amend Sections 1963, 1963.2, 1963.3, 1963.4, and 1963.5 of title 13, California Code of Regulations, to read as follows:

Section 1963. Advanced Clean Trucks Purpose, Applicability, Definitions, and General Requirements.

- (a) *Purpose.* The purpose of sections 1963, 1963.1, 1963.2, 1963.3, 1963.4, 1963.5, and 1963.6 is to accelerate the market for on-road zero-emission vehicles and to reduce emissions of oxides of nitrogen (NO_x), fine particulate matter (PM), other criteria pollutants, toxic air contaminants, and greenhouse gases (GHG) from medium- and heavy-duty on-road vehicles.
- (b) *Scope and Applicability.* Any manufacturer that certifies on-road vehicles over 8,500 lbs. gross vehicle weight rating for sale in California is subject to sections 1963, 1963.1, 1963.2, 1963.3, 1963.4, 1963.5, and 1963.6 except as specified in section 1963(e).
- (c) *Definitions.* The following definitions apply for sections 1963 through 1963.6:
 - "All-electric range" means the number of miles a vehicle can travel using electricity stored on-board the vehicle as tested per the requirements of 17 CCR section 95663(d) for on-road vehicles with a GVWR over 8,500 lbs.
 - "Battery-electric vehicle" or "BEV" has the same definition as "Electric Vehicle" in 40 Code of Federal Regulations (CFR) section 1037.801, last amended by the United States Environmental Protection Agency (U.S. EPA) on June 17, 2013, incorporated by reference herein.
 - "Class 2b-3" means an on-road vehicle with a GVWR that is 8,501 pounds up to 14,000 pounds.
 - "Class 2b-3 group" means the group of all on-road vehicles with a GVWR that is 8,501 pounds up to 14,000 pounds.
 - "Class 4" means an on-road vehicle with a GVWR that is 14,001 pounds up to 16,000 pounds.
 - "Class 4-8 group " means the group of all on-road vehicles with a GVWR that is 14,001 pounds and above, including "yard tractors" as defined in 1963(c), except for a "tractor" as defined in section 1963(c).

"Class 5" means an on-road vehicle with a GVWR that is 16,001 pounds up to 19,500 pounds.

"Class 6" means an on-road vehicle with a GVWR that is 19,501 pounds up to 26,000 pounds.

"Class 7" means an on-road vehicle with a GVWR that is 26,001 pounds up to 33,000 pounds.

"Class 7-8 tractor group" means a group of on-road vehicles, that have a GVWR 26,001 and above, including all vehicles that meet the definition of "tractor" as defined in section 1963(c), except "yard tractors" as defined in section 1963(c).

"Class 8" means an on-road vehicle with a GVWR that is 33,001 pounds and above.

"Complete vehicle" has the same definition as 17 CCR section 95662(b)(1).

"Excluded bus" means a vehicle that meets all the following conditions:

- (A) A passenger-carrying vehicle with a GVWR that is 14,001 pounds or more;
- (B) Has a load capacity of fifteen (15) or more passengers;
- (C) Is not a cutaway vehicle as defined in 13 CCR section 2023 (b)(17); and
- (D) Is not a school bus as defined in the California Vehicle Code section 545.

"Executive Officer" means the Executive Officer of the California Air Resources Board (CARB) or his or her authorized representative.

["Family emission limit" has the same definition as 13 CCR 1956.8\(j\)\(7\).](#)

"Gross vehicle weight rating or "GVWR" has the same meaning as GVWR in California Vehicle Code section 350.

["Heavy heavy-duty engine" has the same definition as 13 CCR 1956.8\(j\)\(9\).](#)

"Hydrogen fuel-cell electric vehicle" or "FCEV" has the same definition as 13 CCR section 1962.2.

"Incomplete vehicle" has the same definition as 17 CCR section 95662(a)(26)(B)(2).

"Manufacturer" means any person who assembles new on-road motor vehicles, or imports such vehicles for resale, or who acts for and is under the control of any such person in connection with the distribution of new motor vehicles, but shall not include any dealer with respect to new motor vehicles received in commerce. In general, this term includes any person who manufactures or assembles an on-road vehicle or other incomplete on-road vehicle for sale in California or otherwise introduces a new on-road motor vehicle into commerce in California as the manufacturer of record. A manufacturer includes importers who import on-road vehicles for resale and persons who assemble glider vehicles. A manufacturer does not include persons who supply parts to the importer or to the vehicle manufacturer of record, nor does it include the secondary vehicle manufacturer.

"Model year" means a designation meeting the definition of "model year" under 17 CCR section 95662(a)(16).

"Near-zero-emission vehicle" or "NZEV" means one of the following:

- (A) An on-road plug-in hybrid electric vehicle which has the same definition as that in 40 CFR section 86.1803-01, amended on July 1, 2011, incorporated by reference herein, that achieves all-electric range as defined in section 1963(c); or
- (B) An on-road hybrid electric vehicle that has the capability to charge the battery from an off-vehicle conductive or inductive electric source and achieves all-electric range as defined in section 1963(c).

"NZEV credit" means a credit generated by producing and selling a NZEV in California.

"Secondary vehicle manufacturer" has the same definition as 40 CFR section 1037.801, last amended by the U.S. EPA on April 22, 2024, incorporated by reference herein.

"Tractor" means an on-road vehicle meeting one of the following:

- (A) The definition of "tractor" in 17 CCR section 95662(a)(23); or
- (B) The definition of "vocational tractor" in 17 CCR section 95662(a)(27).

"Vehicle" or "on-road vehicle" means new equipment that meets the following criteria:

- (A) Has a GVWR that is 8,501 pounds and above;

- (B) Is equipment intended for use on highways, and meets the definition set forth in 17 CCR section 95662(a)(26);
- (C) Is not a trailer as defined in 17 CCR section 95662(a)(24); and
- (D) Is not an excluded bus as defined in section 1963(c).

"Yard tractor" means a vehicle that was originally designed to be operated on-road and has a movable fifth wheel that can be elevated and is used in moving and spotting trailers and containers at a location or facility. Yard tractors are also commonly known as yard goats, hostlers, yard dogs, trailer spotters, or jockeys.

"Zero-emission vehicle" or "ZEV" means an on-road vehicle with a drivetrain that produces zero exhaust emission of any criteria pollutant (or precursor pollutant) or greenhouse gas under any possible operational modes or conditions.

"ZEV credit" means a credit generated by producing and selling a ZEV into California.

- (d) *General Requirements.* Except as provided in section 1963(e), a manufacturer must retire a number of ZEV or NZEV credits that equals or exceeds the total annual deficits each model year, subject to the provisions of section 1963.3.
- (e) *Low Volume Exemption.* For each model year through the end of the 2035 model year, manufacturers that do not exceed 500 average annual sales of on-road vehicles produced and delivered for sale in California for the three prior model years are exempt from the requirements of sections 1963 through 1963.5. Manufacturers that meet this exemption as of 2021 but subsequently exceed 500 average annual vehicle sales in any model year become subject to the requirements of sections 1963 through 1963.5 starting the second model year after the average annual sales exceeded the threshold.
- (f) *Voluntary Credit Generation.* Any manufacturer that is exempt may elect to generate ZEV or NZEV credits per the provisions of section 1963.2. If a manufacturer chooses to generate ZEV or NZEV credits, it must comply with the credit generation, banking, and trading provisions of section 1963.2, the reporting and recordkeeping requirements of section 1963.4, and the enforcement provisions of section 1963.5.
- (g) *Vehicle Labeling.* For all new 2025 model year or later on-road vehicles produced and delivered for sale in California, the manufacturer ~~must~~may optionally indicate whether the vehicle is or is not intended for sale as a new vehicle in California as described in sections 1963(g)(1-2). If ~~that~~the information described in sections 1963(g)(1-2) is included, the manufacturer shall not be subject to sections 1963.5(a)(2)(A-B). ~~Conversely, should this information be~~

~~excluded upon the sale of a new 2025 model year or later vehicle~~Otherwise, the manufacturer shall be subject to sections 1963.5(a)(2)(A-B).

- (1) For all vehicles produced and delivered for sale in California, manufacturers must permanently affix, engrave, or stamp an identification label with the term "~~for sale in~~ CA". The label must be affixed to either the engine, ZEV powertrain, next to the powertrain's emergency disconnect or charge port, or the vehicle's driver side door jamb. Alternatively, manufacturers may include the "~~for sale in~~ CA" language on the label required under 17 CCR section 95663(d).
- (2) For all vehicles produced and delivered for sale in California, manufacturers must disclose to the ultimate purchaser, secondary vehicle manufacturer, or dealer that the vehicle is intended for sale in California on the manufacturer's Statement of Origin.

NOTE: Authority cited: Sections 38501, 38510, 38560, 38566, 39500, 39600, 39601, 39650, 39658, 39659, 39666, 39667, 43013, 43018, 43100, 43101, 43102, 43104 Health and Safety Code. Reference: Sections 38501, 38505, 38510, 38560, 38580, 39000, 39003, 39650, 39655, 43000, 43000.5, 43013, 43016, 43018, 43100, 43101, 43102, 43104, 43105, 43106, 43205, 43205.5 Health and Safety Code.

Section 1963.1. Advanced Clean Trucks Deficits

Basic Requirement. Beginning with the applicable effective dates, a manufacturer must comply with the following requirements:

- (a) *Deficit Generation.* Starting with the 2024 model year, a manufacturer accrues deficits for each on-road vehicle produced and delivered for sale in California for the model year, except for vehicles counted towards compliance with 13 CCR section 1962.4. ~~or vehicles specified in subsection 1963.1(a)(1)~~. A vehicle is only eligible to generate deficits once.

(1) 2026 Model Year California-Certified Engine Flexibility. A manufacturer does not accrue deficits for any on-road vehicles produced and delivered for sale in California that are powered by new 2026 model year California-certified heavy heavy-duty engines that are certified at or below an applicable oxides of nitrogen exhaust emission standard or family emission limit of 0.050 grams per brake horsepower-hour on the Federal Test Procedure cycle, as specified in 13 CCR section 1956.8(a)(2)(C)(1).

- (b) *Deficit Calculation.* Deficits shall be calculated each model year. For each on-road vehicle, the deficit is calculated as the product of the model year percentage requirement from Table A-1, and the appropriate weight class modifier for each vehicle from Table A-2. Every model year, the deficits generated by each vehicle are summed for each vehicle group.

Table A-1. ZEV Sales Percentage Schedule

Model Year	Class 2b-3 Group	Class 4-8 Group	Class 7-8 Tractors Group
2024	5%	9%	5%
2025	7%	11%	7%
2026	10%	13%	10%
2027	15%	20%	15%
2028	20%	30%	20%
2029	25%	40%	25%
2030	30%	50%	30%
2031	35%	55%	35%
2032	40%	60%	40%
2033	45%	65%	40%
2034	50%	70%	40%
2035	55%	75%	40%

Table A-2. Weight Class Modifiers

	Vehicles in the Class 2b-3	Class 4-5 Vehicles in the Class 4-8 Group	Class 6-7 Vehicles in the Class 4-8 Group	Class 8 Vehicles in the Class 4-8 Group	Vehicles in the Class 7 and 8 Tractor Group
Weight Class Modifier	0.8	1	1.5	2	2.5

- (c) *Deficit Rounding.* If the sum of deficits generated in a model year for a vehicle group is not equal to a whole number, the sum of deficits shall round up to the nearest tenth when the fractional part is equal to or greater than 0.05, and round down to the nearest tenth if less than 0.05.
- (d) *Deficit Accounting.* Deficits generated from vehicles in the Class 7-8 tractor group must be accounted separate from other deficits.

NOTE: Authority cited: Sections 38501, 38510, 38560, 38566, 39500, 39600, 39601, 39650, 39658, 39659, 39666, 39667, 43013, 43018, 43100, 43101, 43102, 43104 Health and Safety Code. Reference: Sections 38501, 38505, 38510, 38560, 38580, 39000, 39003, 39650, 39655, 43000, 43000.5, 43013, 43016, 43018, 43100, 43101, 43102, 43104, 43105, 43106, 43205, 43205.5 Health and Safety Code.

Section 1963.2. Advanced Clean Trucks Credit Generation, Banking, and Trading

Beginning with the 2021 model year, the following requirements apply:

- (a) *ZEV Credit Calculation.* A manufacturer earns ZEV credits for each ZEV produced and delivered for sale in California for the model year except for vehicles counted towards compliance with 13 CCR section 1962.4. The ZEV credit generated for each vehicle delivered for sale is equal to the value of the appropriate weight class modifier in Table A-2 of section 1963.1. A vehicle is only eligible to earn credits once.
- (b) *NZEV Credit Calculation.* Until the end of the 2035 model year, a manufacturer earns NZEV credits for each NZEV produced and delivered for sale in California for the model year except for vehicles counted towards compliance with 13 CCR section 1962.4. The NZEV credit generated for each vehicle delivered for sale is calculated as the product of the appropriate weight class modifier in Table A-2 of section 1963.1, and the NZEV factor value as calculated in section 1963.2(b)(1). A vehicle is only eligible to earn credits once.
 - (1) *NZEV Factor Value.* The NZEV factor used to calculate NZEV credits shall be calculated as 0.01 multiplied by the all-electric range, and is not to exceed 0.75.
 - (2) *Minimum All-Electric Range.* To earn credit, NZEVs must have an all-electric range that equals or exceeds the criteria specified in 17 CCR section 95663(d) until the end of the 2029 model year and an all-electric range that equals or exceeds 75 miles or greater starting with the 2030 model year.
- (c) *Credit Rounding.* If the calculated number of summed ZEV or NZEV credits generated in a model year for a vehicle group is not equal to a whole number, the summed number shall round up to the nearest tenth when the fractional part is equal to or greater than 0.05, and round down to the nearest tenth if less than 0.05.
- (d) *Credit Banking.* ZEV and NZEV credits may be banked for future use. Banked credits may be used to satisfy deficits per section 1963.3 and have limited lifetimes per section 1963.2(g).
- (e) *Credit Trading and Transfer.* ZEV and NZEV credits may be traded, sold, [purchased](#), or otherwise transferred between manufacturers. ZEV or NZEV credits transferred in this manner may be used to satisfy deficits per section 1963.3 and have limited lifetimes per section 1963.2(g), and must be reported to the Executive Officer in accordance with the requirements of section 1963.4. Secondary vehicle manufacturers have the option to trade, sell, [purchase](#), or otherwise transfer ZEV and NZEV credits with manufacturers. Transferred ZEV

and NZEV credits must be reported to the Executive Officer in accordance with the requirements of section 1963.4(c).

- (f) *Credit Accounting.* ZEV and NZEV credits must be separately accounted for based on model year generated. NZEV credits must be accounted for separately from ZEV credits. Class 7-8 tractor group credits must be accounted for separately from other credits.
- (g) *Limited Credit Lifetime.* ZEV and NZEV credits have limited lifetimes as follows:
 - (1) *2021 to 2023 Model Year.* ZEV or NZEV credits generated in the 2021, 2022 and 2023 model years expire at the end of the 2030 model year, and are no longer available to be used to meet compliance for 2031 and later model years. For example, ZEV or NZEV credits generated during the 2022 model year may be used to meet compliance requirements until the end of the 2030 model year, and may not be used to meet 2031 model year compliance requirements.
 - (2) *2024 Model Year and Beyond.* ZEV or NZEV credits generated in 2024 and subsequent model years may be used only for five model years after the model year in which they are generated. For example, ZEV or NZEV credits generated for the 2024 model year may be used to meet compliance requirements until the end of the 2029 model year, and may not be used to meet 2030 model year compliance requirements.
- (h) *Certification to Receive ZEV Credit for Heavy-Duty and Incomplete ~~Medium-Duty~~ Class 3 Vehicles.* Beginning with the 2024 model year, heavy-duty on-road ZEVs over 14,000 pounds GVWR and incomplete medium-duty ZEVs from 10,001 through 14,000 pounds GVWR produced and delivered for sale in California must meet the requirements of the Zero-Emission Powertrain Certification Regulation in 13 CCR section 1956.8(a)(8) and 17 CCR section 95663(d) to receive ZEV credit under section 1963.2. Beginning with the 2026 model year, incomplete medium-duty ZEVs may alternatively meet the requirements of 13 CCR section 1962.4 to receive ZEV credit under section 1963.2.
- (i) *Certification to Receive ZEV Credit for Complete Medium-Duty Vehicles ~~and Incomplete Class 2b Vehicles.~~* On-road complete medium-duty ZEVs from 8,501 through 14,000 pounds GVWR and on-road incomplete medium-duty ZEVs from 8,501 through 10,000 pounds GVWR produced and delivered for sale in California must meet the requirements of either the Zero-Emission Powertrain Certification Regulation in 13 CCR section 1956.8(a)(8) and 17 CCR section 95663(d), 13 CCR section 1962.2, 13 CCR section 1962.4, or the certification procedures in sections B, D, and F(1-5) of the "California Exhaust Emission Standards and Test Procedures for 2018 and Subsequent Model Year Zero-Emission Vehicles and Hybrid Electric Vehicles, in the Passenger Car, Light-Duty

Truck and Medium-Duty Vehicle Classes” as amended on September 3, 2015, which is incorporated by reference herein, to receive ZEV credit under section 1963.2.

- (j) *No Double Counting ZEVs or NZEVs.* Manufacturers must comply with reporting requirements specified in section 1963.4(a)(10) including the vehicles they elect to be counted towards compliance with section 1962.4 ZEVs and NZEVs not claiming credits under 13 CCR section 1962.2, 13 CCR section 1962.4, or 13 CCR section 1963 may be excluded from the reporting and recordkeeping requirements of section 1963.4. For the 2024 and 2025 model years, Class 2b-3 ZEVs or NZEVs produced and delivered for sale in California may earn credits under 13 CCR section 1962.2, 1962.4, or 1963.2, but may not earn credits under more than one of these sections for the same vehicle. Beginning with the 2026 model year, Class 2b-3 ZEVs or NZEVs produced and delivered for sale in California may earn credits under 13 CCR section 1962.4 or 1963.2, but may not earn credits under more than one of these sections for the same vehicle. Beginning with the 2026 model year, medium-duty ZEVs or NZEVs produced and delivered for sale in California for which a manufacturer elects to count the vehicle towards the requirements of 13 CCR section 1962.4 will not be counted as a credit nor a deficit in the determination of the manufacturer’s ZEV deficit under section 1963.1.

NOTE: Authority cited: Sections 38501, 38510, 38560, 38566, 39500, 39600, 39601, 39650, 39658, 39659, 39666, 39667, 43013, 43018, 43100, 43101, 43102, 43104 Health and Safety Code. Reference: Sections 38501, 38505, 38510, 38560, 38580, 39000, 39003, 39650, 39655, 43000, 43000.5, 43013, 43016, 43018, 43100, 43101, 43102, 43104, 43105, 43106, 43205, 43205.5 Health and Safety Code.

Section 1963.3. Advanced Clean Trucks Compliance Determination

- (a) *Annual Compliance Determination.* For each model year, compliance is achieved when the manufacturer’s Class 7-8 tractor credits retired offset their Class 7-8 tractor deficits except as specified in 1963.3(c)(3) and when the manufacturer's total credits retired offset their total deficits.
- (b) *Flexibility to Make Up a Deficit.* A manufacturer that has a cumulative net deficit after the end of a given model year may use this flexibility to make up the deficit in a consecutive three-model year period. The three-model year period begins with the first model year following the model year in which the manufacturer had a net deficit. In accordance with section 1963.3(d), up to 50 percent of the deficits generated in a model year may be made up with NZEV credits. The total net deficit balance for all model years must be offset by the end of the three-model year deficit makeup period, and the manufacturer may not start a new deficit makeup period until all existing deficits are offset. If the net deficit balance is more than 30 percent of the deficits generated from the most recent model year, the net deficit must be reduced to below 30 percent

by the end of the first and second years of the makeup period. For example, a manufacturer that accrues 1,000 deficits in the 2024 model year must have a net deficit balance below 300 deficits (below 30 percent of the 1,000 deficits) by the end of the 2025 model year and must have a deficit below 30 percent of the manufacturer's 2025 model year net deficits (added together with the deficit balance from 2024) by the end of the 2025 model year. [By the end of the 2026 model year, the manufacturer's total net deficit balance for all model years in this example must be offset.](#) A manufacturer making up a deficit may not transfer ZEV nor NZEV credits to other manufacturers until the deficit is made up by the end of a compliance year.

- (c) *Credit Retirement Order.* Credit accounts are debited using the following conventions, except as provided in section 1963.3(c)(3):
- (1) First, credits must be retired by order of model year expiration, starting with the earliest expiring credit.
 - (2) Second, credits must be retired in the following order by credit type and weight class group:
 - (A) First, Class 7-8 tractor group NZEV credits to meet Class 7-8 tractor group deficits up to the cap specified in 1963.3(d);
 - (B) Second, Class 2b-3 group and Class 4-8 group NZEV credits to meet Class 2b-3 group and Class 4-8 group deficits up to the cap specified in 1963.3(d);
 - (C) Third, Class 7-8 tractor group NZEV credits to meet Class 2b-3 group and Class 4-8 group deficits;
 - (D) Fourth, Class 7-8 tractor group ZEV credits to meet Class 7-8 tractor group deficits;
 - (E) Fifth, Class 2b-3 group and Class 4-8 group ZEV credits to meet Class 2b-3 and Class 4-8 group deficits; and
 - (F) Sixth, Class 7-8 tractor group ZEV credits to meet Class 2b-3 group and Class 4-8 group deficits.
 - (3) *Low Tractor Volume Flexibility.* A manufacturer who generates 25 or fewer Class 7-8 tractor deficits in a model year and has tractor deficits remaining after retiring credits per the credit retirement order in sections 1963.3(c)(1) and 1963.3(c)(2) can use a maximum of 25 Class 2b-3 or Class 4-8 group ZEV credits, starting with the earliest expiring credits, to satisfy their Class 7-8 tractor group deficits.

- (d) *NZEV Credit Limit.* A manufacturer may use NZEV credits to satisfy, at maximum, 50 percent of the annual summed deficits for the Class 2b-3 group and the Class 4-8 group, and may use Class 7-8 tractor NZEV credits to satisfy, at maximum, 50 percent of the annual summed deficits for the Class 7-8 tractor group.
- (e) *Tractor Deficits Must Be Met With Tractor Credits.* Annual deficits accrued in the Class 7-8 tractor group can only be met with Class 7-8 tractor credits, except as described in section 1963.3(c)(3).
- (f) *Compliance Determination.* Compliance by the end of each model year is achieved when the cumulative credits exceed the total net deficits retired in prior model years. A manufacturer's compliance status for a given model year is determined based on the reported sales of vehicles delivered for sale in California.

NOTE: Authority cited: Sections 38501, 38510, 38560, 38566, 39500, 39600, 39601, 39650, 39658, 39659, 39666, 39667, 43013, 43018, 43100, 43101, 43102, 43104 Health and Safety Code. Reference: Sections 38501, 38505, 38510, 38560, 38580, 39000, 39003, 39650, 39655, 43000, 43000.5, 43013, 43016, 43018, 43100, 43101, 43102, 43104, 43105, 43106, 43205, 43205.5 Health and Safety Code.

Section 1963.4. Advanced Clean Trucks Reporting and Recordkeeping

- (a) *Sales Reporting.* Beginning with the 2021 model year, and no later than 90 days following the end of each model year, a manufacturer must report the following information to CARB for each on-road vehicle produced and delivered for sale in California for each model year until all vehicles designated by a given model year have been delivered for sale, except as provided in section 1963.4(d). Beginning with the 2027 model year, the information described in sections 1963.4(a)(13-15) is optional to report unless the information is requested by the Executive Officer:
 - (1) Vehicle Identification Number (VIN) for each vehicle;
 - (2) Vehicle weight class category (2b, 3, 4, 5, 6, 7, 8);
 - (3) Vehicle family name;
 - (4) Applicable engine family name or zero-emission powertrain family name;
 - (5) Whether the vehicle is an incomplete or complete vehicle;
 - (6) Whether the vehicle type is a tractor, yard tractor, excluded bus, school bus, cutaway vehicle, or other;
 - (7) Fuel type;

- (8) Advanced technology type (BEV, FCEV, NZEV, other);
 - (9) If the vehicle is a NZEV, the tested all-electric range of the vehicle;
 - (10) Whether the ZEV is certified to the Zero-Emission Powertrain Certification Regulation in 13 CCR section 1956.8(a)(8) and 17 CCR section 95663(d) (yes or no);
 - (11) Whether the Class 2b-3 ZEV or NZEV will be excluded from ACT credit and deficit calculations (yes or no);
 - (12) Whether the reporting manufacturer is exempt under the Low Volume Exemption as provided in section 1963(e) (yes or no);
 - (13) Latest status of delivery into California (to a dealer, secondary vehicle manufacturer, ultimate purchaser, or other);
 - (14) Name of the person or entity that is the vehicle's recipient; ~~and~~
 - (15) Physical address, including the street address, city, state, and zip code, of the vehicle's last known delivery destination: or the physical address, including the street address, city, state, and zip code of the dealership that delivered the vehicle to person or entity that is the vehicle's recipient; and
 - (16) Whether the vehicle meets the requirements specified in subsection 1963.1(a)(1) (yes or no).
- (b) *Reporting Updates.* A manufacturer ~~may~~must update a vehicle report for up to three previous model years ~~should if~~ a manufacturer ~~determine that~~determines there is a change in previously reported information regarding whether a vehicle is or is not delivered for sale in California. All other reported information may be corrected or updated no later than 180 calendar days following the end of the initial 90-day report period as provided in section 1963.4(a).
- (c) *Credit Transfer Reporting.* A manufacturer or secondary vehicle manufacturer that transfers ZEV or NZEV credits to or receives ZEV or NZEV credits from another manufacturer or secondary vehicle manufacturer must submit to the Executive Officer a report of all credit trades, transfers, and transactions. CARB will not recognize any credit transfers until the date the report is received.
- (1) *Transfer Reporting Deadline.* Reports must be submitted no later than 90 days following the credit transaction date.
 - (2) *Required Credit Transfer Information.* Manufacturers or secondary vehicle manufacturers that transfer or receive ZEV or NZEV credits must submit a letter or document signed by authorized agents of both parties

to the transaction summarizing the transfer, which must include the following:

- (A) Corporate name of credit transferor;
 - (B) Corporate name of credit transferee;
 - (C) Number of ZEV credits transferred for each model year, rounded to the nearest tenth per 1963.2(c);
 - (D) Number of NZEV credits transferred for each model year, rounded to the nearest tenth per 1963.2(c); and
 - (E) Indicate whether the ZEV or NZEV credits are Class 7-8 Tractor credits, or other credits.
- (d) *Retention of Records.* Records of reported information required in section 1963.4, the manufacturer's Statement of Origin, and documentation showing vehicles are produced and delivered for sale in California must be kept by manufacturers and secondary vehicle manufacturers for CARB to audit for a period of eight (8) years from the end of the model year the vehicles were produced. Acceptable documentation for tracking vehicles produced and delivered for sale includes at least one of the following:
- (1) An invoice, receipt, contract, or purchase order between the manufacturer and ultimate purchaser that shows the delivery destination to an ultimate purchaser in California;
 - (2) An invoice, receipt, contract, or purchase order between the manufacturer and dealership that shows the delivery destination to a dealership in California;
 - (3) A new vehicle registration in California;
 - (4) An invoice, receipt, contract, or purchase order from a secondary vehicle manufacturer showing delivery of the manufacturer's vehicle in California;
 - (5) An invoice, receipt, contract, or purchase order from the manufacturer that shows the delivery destination to a secondary vehicle manufacturer who must have an order from a purchaser that will take delivery of the vehicle in California;
 - (6) A statement from the secondary vehicle manufacturer indicating delivery of the complete vehicle to a dealership or reseller in California; or
 - (7) A purchase order from the fleet owner showing delivery to California.

NOTE: Authority cited: Sections 38501, 38510, 38560, 38566, 39500, 39600, 39601, 39650, 39658, 39659, 39666, 39667, 43013, 43018, 43100, 43101, 43102, 43104 Health and Safety Code. Reference: Sections 38501, 38505, 38510, 38560, 38580, 39000, 39003, 39650, 39655, 43000, 43000.5, 43013, 43016, 43018, 43100, 43101, 43102, 43104, 43105, 43106, 43205, 43205.5 Health and Safety Code.

Section 1963.5. Advanced Clean Trucks Enforcement

(a) *Enforcement of Requirements.* A manufacturer is subject to the following:

- (1) *Audit of Records.* A manufacturer or secondary vehicle manufacturer must make records of vehicle sales into California available to the Executive Officer for audit to verify the accuracy of the reported information. In the event that records are not made available within 30 days of a request, CARB may assess penalties for noncompliance. Submitting false information is a violation of this regulation and violators will be subject to penalty.
- (2) *Authority to Suspend, Revoke, or Modify.* If the Executive Officer finds that any ~~ZEV or NZEV~~ credit ~~was obtained~~ or deficit amount is based on false information, the credit ~~or deficit amount~~ will be ~~deemed invalid~~ corrected when determining compliance.
 - (A) If the Executive Officer identifies that any ZEV or NZEV ~~is was~~ ultimately not ~~registered or domiciled~~ produced and delivered for sale in California as reported based on the documentation provided per section 1963.4(d), the Executive Officer shall revoke the credit ~~and the manufacturer may be subject to penalty~~, unless the requirements of section 1963(g) are met.
 - (B) If the Executive Officer identifies any vehicle ~~which is newly registered with the California Department of Motor Vehicles or newly domiciled~~ that was ultimately produced and delivered for sale in California ~~as a new vehicle~~ and ~~is was~~ not included in a manufacturer's reports, the Executive Officer shall add the deficits ~~and the manufacturer may be subject to penalty~~, unless the requirements of section 1963(g) are met.
- (3) *Public Disclosure.* Records in the Board's possession for the manufacturers subject to this regulation shall be subject to disclosure as public records as follows:
 - (A) Each manufacturer's annual vehicle sales data based on the volume of on-road vehicles produced and delivered for sale in California and the corresponding credits per vehicle earned for the 2021 and subsequent model years;

- (B) Each manufacturer's annual credit balances for 2021 and subsequent years for ZEVs and NZEVs; and
 - (C) Credits earned under section 1963.2, including credits acquired from, or transferred to another party, and the parties themselves.
- (4) *Penalty for Failure to Meet Credit and Deficit Requirements.* Any manufacturer that fails to retire an appropriate amount of ZEV or NZEV credits as specified in section 1963.3(c) and does not make up deficits within the specified time allowed by section 1963.3(b) shall be subject to Health and Safety Code section 43212 civil penalty applicable to a manufacturer who does not comply with emission standards or the test procedures adopted by the state board. The cause of action shall be deemed to accrue when the deficit is not balanced by the end of the specified time allowed by section 1963.3(b). For the purposes of Health and Safety Code section 43212, the number of vehicles not meeting the state board's standards or procedures shall be equal to one half of the manufacturer's outstanding deficit.

NOTE: Authority cited: Sections 38501, 38510, 38560, 38566, 39500, 39600, 39601, 39650, 39658, 39659, 39666, 39667, 43013, 43018, 43100, 43101, 43102, 43104 Health and Safety Code. Reference: Sections 38501, 38505, 38510, 38560, 38580, 39000, 39003, 39650, 39655, 43000, 43000.5, 43013, 43016, 43018, 43100, 43101, 43102, 43104, 43105, 43106, 43205, 43205.5, 43212 Health and Safety Code.

Section 1963.6. 2036 and Subsequent Model Year Requirements

- (a) For 2036 and subsequent model year 100 percent medium- and heavy-duty ZEV requirements, see title 13, California Code of Regulations Article 3.5, section 2016.

NOTE: Authority cited: Sections 38501, 38510, 38560, 38566, 39500, 39600, 39601, 39650, 39658, 39659, 39666, 39667, 43013, 43018, 43100, 43101, 43102, 43104 Health and Safety Code. Reference: Sections 38501, 38505, 38510, 38560, 38580, 39000, 39003, 39650, 39655, 43000, 43000.5, 43013, 43016, 43018, 43100, 43101, 43102, 43104, 43105, 43106, 43205, 43205.5, 43212 Health and Safety Code.

Section 1956.8. Exhaust Emission Standards and Test Procedures - 1985 and Subsequent Model Heavy-Duty Engines and Vehicles and 2021 and Subsequent Zero-Emission Powertrains

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- (a)(8) Zero-Emission Powertrain Certification Standards. Model Year (MY) 2021 and subsequent MY all-electric and hydrogen fuel-cell powertrains used in heavy-duty vehicles (over 14,000 pounds gross vehicle weight rating) and medium duty vehicles (from 8,501 through 14,000 pounds gross vehicle weight rating)

may be certified in accordance with the "California Standards and Test Procedures for New 2021 and Subsequent Model Heavy-Duty Zero-Emission Powertrains," last amended <Insert Date of Amendment>, which is hereby incorporated by reference herein. Powertrains certified using these procedures shall be deemed to have exhaust emissions of zero for any criteria pollutant or greenhouse gas.

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Note: Authority cited: Sections 38501, 38505, 38510, 38560, 38580, 39500, 39600, 39601, 40000, 43013, 43018, 43100, 43101, 43102, 43104, 43105, 43106 and 43806, Health and Safety Code; and Section 28114, Vehicle Code. Reference: Sections 38501, 38505, 38510, 38560, 38580, 39002, 39003, 39010, 39017, 39033, 39500, 39600, 39601, 39610, 39650, 39657, 39667, 39701, 40000, 43000, 43000.5, 43009, 43009.5, 43013, 43017, 43018, 43100, 43101, 43101.5, 43102, 43104, 43105, 43106, 43202, 43204, 43205, 43205.5, 43206, 43210, 43211, 43212, 43213 and 43806, Health and Safety Code; and Section 28114, Vehicle Code.