

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

IN THE MATTER OF:)	
)	R.2024-017
PROPOSED CLEAN CAR AND)	
TRUCK STANDARDS)	(Rulemaking – Air)

**TRUCK AND ENGINE MANUFACTURERS ASSOCIATION
RESPONSE TO PETITIONERS' ANSWERS TO QUESTIONS REGARDING
PRE-FILED TESTIMONY**

November 21, 2024

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IN THE MATTER OF:)
) **R.2024-017**
PROPOSED CLEAN CAR AND)
TRUCK STANDARDS) **(Rulemaking – Air)**

The Truck and Engine Manufacturers Association (EMA) hereby files its response to certain of the explanations that the Petitioners have submitted to the Illinois Pollution Control Board (IPCB) regarding the Petitioners' pre-filed testimony. That pre-filed testimony relates to the initial public hearing that the IPCB will hold on December 2-3, 2024, to consider the Petitioners' request that the IPCB adopt various California motor vehicle emission standards, including California's Advanced Clean Truck (ACT) standards. The ACT standards mandate that manufacturers produce and sell an increasing percentage of new zero-emission medium-duty and heavy-duty vehicles ("MHD ZEV Trucks"). The Petitioners are asking the IPCB to implement the ACT standards in Illinois starting in model year 2029. EMA submitted its initial comments and questions regarding the Petitioners' pre-filed testimony on October 24, 2024. EMA is submitting this additional response to address a material misstatement in the Petitioners' answers.

More specifically, at page 77 of their answers, Petitioners note that the California Air Resources Board (CARB) recently adopted a series of amendments to the ACT regulations. Petitioners go on to claim that "[t]hese amendments **do not significantly affect** the rule's overall structure, **stringency**, or expected outcomes, but instead are designed to facilitate smooth implementation of the rule." (Emphasis added.) That is incorrect. CARB's recent ACT amendments, which were approved on October 24, 2024 (see CARB Board Resolution 24-5), include the addition of new regulatory section 1963.6 – "2036 and Subsequent Model Year Requirements." (A copy of CARB's ACT amendments, including section 1963.3 is attached.) That new section of the ACT regulations requires manufacturers to produce and sell **100% ZEV Trucks starting in 2036**. That ACT amendment most definitely and most significantly impacts the stringency of the ACT regulations that the Petitioners are trying to convince the IPCB to adopt. It is noteworthy that the Petitioners fail to acknowledge or discuss that significant amendment in their submission to the IPCB.

Petitioners' oversight is material because the IPCB will have to adopt CARB's addition of a 100% sales mandate for MHD ZEV Trucks starting in model year 2036 if the IPCB determines to grant the Petitioners request. Section 177 of the federal Clean Air Act, the provision of law that potentially allows Illinois to adopt California's motor vehicle emission standards, mandates that any States "opting-in" to California standards "must ensure that such standards are **identical to the California standards**" at issue. (See 42 U.S.C. section 7507.) In this case, those California standards now include a mandate for the sale of 100% ZEV Trucks starting in model year 2036. Importantly, Petitioners concede this point, stating that "[i]n all cases, states will need to adopt amendments made in California to the extent that those amendments alter California's vehicle emission standards within the meaning of the identity requirement in Clean Air Act Section

177, and **any rule changes affecting future model years must be adopted by Illinois.**" (Petitioners' Answers to Pre-filed Questions, p. 77.)

Notwithstanding the foregoing, in a different section of their answers, Petitioners claim that they "do not propose that Illinois adopt the 100% MHDV ZEV sales requirement for model years 2036 and later at this time," and that their proposed rules "do not include the 100% sales requirement beginning in model year 2036." (Petitioners' Answers to Pre-filed Questions, p. 50.) But Petitioners do not have the discretion to pick and choose which particular parts of a California emission regulation they would like the IPCB to adopt, while omitting those parts they might find problematic. As they themselves have conceded, any amendments that CARB adopts to its motor vehicle emission standards that affect future model years "**must be adopted by Illinois**" in order to comply with the identity requirement that lies at the heart of CAA section 177, the statute that enables other states to adopt California motor vehicle emission standards. Accordingly, in its deliberations regarding this matter, the IPCB needs to understand that in light of CARB's recent amendments to the underlying ACT regulations, those regulations will need to include a 100% sales mandate for MHD ZEV trucks starting in 2036 in order to be adopted and implemented in Illinois consistent with the dictates of CAA section 177. Similarly, the IPCB needs to recognize that there is no legal basis for the Petitioners' efforts, in effect, to lop off and thereby nullify a core component of the recently amended ACT regulations.

With that recognition in mind, the Petitioners will need to squarely address a number of new questions, including the following, in their presentations to the IPCB. Is it realistic for Illinois to implement a 100% MHD ZEV Truck sales mandate starting in model year 2036? Have Petitioners adequately addressed the feasibility and cost issues related to the 100% MHD ZEV Truck sales mandate that is now a component of the amended ACT regulations, or have they instead tried to introduce their own truncated version of the ACT regulations in contravention of section 177 of the CAA?

While EMA is not taking a position on the merits of the Petitioners' requests, it is important that the IPCB be fully apprised of the scope of the Petitioners' request. EMA has submitted this supplemental response toward that end.

Respectfully submitted,

TRUCK & ENGINE
MANUFACTURERS ASSOCIATION

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 15-Day Changes) to the originally 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 originally proposed regulatory text made available on March 26, 2024, for public comment for at least 45 days (from March 29, 2024, to May 13, 2024) referred to as the 45-Day Changes, is incorporated into this version as plain, clean text (shown in "normal type") because it is not being made available for public comment by this Notice. The Proposed 15-Day Changes are shown in tracked changes and are made public with this Notice and available for comment. The 15-Day Changes are being presented in multiple versions. For ease of readability, and to review these 15-Day Changes in an Accessible format, please refer to the Word (.docx) version (Appendix A-2).]

Date of release: October 7, 2024

Date of 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 (NOx), 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.

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

"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(b)(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 ~~June 17, 2013~~ 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 vehicles produced and delivered for sale in California, the manufacturer must indicate the vehicle is or is not intended for sale as a new vehicle in California. If that information 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, 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. A vehicle is only eligible to generate deficits once.
- (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%

Model Year	Class 2b-3 Group	Class 4-8 Group	Class 7-8 Tractors Group
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, 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, 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) ~~Zero-Emission Powertrain Certification to Receive ZEV Credit for ZEVs: Heavy-Duty and Incomplete Medium-Duty 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.
- (i) ~~Certification to Receive ZEV Credit for Complete Medium-Duty Vehicles.~~ On-road complete medium-duty ZEVs from 8,501 through 14,000 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 as amended by the Zero-Emission Powertrain and Enhanced Fuel Cell and Electric Vehicle Certification regulation, or (d), 13 CCR section 1962.2, 13 CCR section 1962.4, or the certification procedures in 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.
- (ij) 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 ~~or~~ 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 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 ~~vehicle credit nor a deficit~~ in the determination of the manufacturer's ZEV deficit under section 1963.1. ~~Manufacturers must comply with reporting requirements specified in section 1963.4(d) including the vehicles they elect to be counted towards compliance with section 1962.4.~~

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. ~~Deficits carried over~~In accordance with section 1963.3(d), up to 50 percent of the subsequent deficits generated in a model years cannot year may be made up with NZEV credits. The net deficit balance must be offset by the end of the three-model year deficit makeup period. 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 yearand 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. A manufacturer making up a deficit may not transfer ZEV 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(e):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)~~(4) Applicable engine family name or zero-emission powertrain family name;
- ~~(5)~~ Whether the vehicle is an incomplete or complete vehicle;
- ~~(5)~~(6) Whether the vehicle type is a tractor, yard tractor, excluded bus, school bus, cutaway vehicle, or other;
- ~~(6)~~(7) Fuel type;
- ~~(7)~~(8) Advanced technology type (BEV, FCEV, NZEV, other);
- ~~(8)~~(9) If the vehicle is a NZEV, the tested all-electric range of the vehicle;
- ~~(9)~~(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.
- (b) *Reporting Updates.* ~~Reported~~A manufacturer may update a vehicle report for up to three previous model years should a manufacturer determine that 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 ~~added~~ credits from another manufacturer or secondary vehicle manufacturer must submit to the Executive Officer ~~an annual~~ 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 end of each model year ~~to demonstrate compliance~~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) ~~Class 2b-3 Credit Declaration.~~ A manufacturer that generates ZEV or NZEV credits from the ~~Class 2b-3 group~~ must submit no later than 90 days following the end of each model year a declaration to the Executive Officer which includes:

- ~~(1) The number of on-road vehicles produced and delivered for sale in California to generate credits per section 1963.2; and~~
- ~~(2) The number of on-road vehicles produced and delivered for sale in California to generate credits per 13 CCR section 1962.2.~~
- (e) *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 ~~from~~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 ~~from~~between the manufacturer and dealership that shows the delivery destination to a dealership in California;
 - (3) A new vehicle registration in California;
 - (4) ~~Documentation~~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 based on false information, the credit will be deemed invalid.
 - (A) If the Executive Officer identifies that any ZEV or NZEV is not registered or domiciled 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 in California as a new vehicle and is 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.