

State of California
AIR RESOURCES BOARD

**Notice of Public Availability of Modified Text
and Availability of Additional Documents and Information**

**PROPOSED AMENDMENTS TO THE PROPOSED ADVANCED CLEAN TRUCKS
REGULATION**

Public Hearing Date: December 12, 2019
Public Availability Date: April 28, 2020
Deadline for Public Comment: May 28, 2020

At its December 12, 2019, public hearing, the California Air Resources Board (CARB or Board) considered staff's proposed adoption of new sections 1963, 1963.1, 1963.2, 1963.3, 1963.4, 1963.5, 2012, 2012.1, 2012.2, and 2012.3, title 13 California Code of Regulations. These new sections comprise the Advanced Clean Trucks (ACT) rulemaking, which seeks to accelerate the widespread adoption of zero-emission vehicles (ZEVs) in the medium-and heavy-duty truck sector and reduce the amount of harmful emissions generated from on-road mobile sources.

At the public hearing, the Board directed staff to consider modifications to the manufacturer mandate that would increase the number of zero-emission trucks sold and deployed, give consideration to the Truck and Engine Manufacturers Association proposal of 100% ZEV sales by market segment, extend near-zero emission vehicle credit, and accelerate emissions benefits in disadvantaged communities. The Board also directed staff to work with industry to streamline the reporting requirement, expedite the establishment of complementary zero-emission fleet rules, and establish pathways to the Governor's 2045 carbon neutrality goal.

Pursuant to Government Code section 11346.8, CARB staff is making modified regulatory language, conforming modifications, and additional supporting documents and information available for public comment for 30 days. The Executive Officer will consider written comments submitted during the public review period and make any further modifications that are appropriate available for public comment for at least 15 days, the minimum required per section 11346.8. The Executive Officer will evaluate all comments received during the public comment periods, including comments raising significant environmental issues, and prepare written responses to such comments as required by CARB's certified regulations at California Code of Regulations, title 17, sections 60000-60008 and Government Code section 11346.9(a). The Executive Officer, at a subsequently scheduled public hearing, will present staff's written responses to environmental comments and the final environmental analysis for consideration for approval, along with the finalized regulation for consideration for adoption.

All regulatory documents for this rulemaking are available online at the following CARB website:

<https://ww2.arb.ca.gov/rulemaking/2019/advancedcleantrucks>

The text of the modified regulatory language is shown in Attachment A. The originally proposed regulatory language is shown as “normal type” to be added to the California Code of Regulations. New deletions and additions to the originally proposed language are shown in ~~strike through~~ to indicate deletions and underline format, respectively.

In the Final Statement of Reasons, staff will respond to all comments received on the record during the comment periods. The Administrative Procedure Act requires that staff respond to comments received regarding all noticed changes. Therefore, staff will only address comments received during this 30-day comment period that are responsive to this notice, documents added to the record, or the changes detailed in Attachment A.

Summary of Proposed Modifications

Staff proposes changes to increase the number of ZEVs sold by manufacturers in California and to streamline reporting requirements for large fleets as directed by the Board.

For the proposed manufacturer ZEV sales requirement, staff proposes changes to sections 1963 through 1963.5 to strengthen ZEV sales requirements and to provide a clear market signal on the pathway to reach carbon neutrality by 2045 in California, which is consistent with Board direction and many public comments received for the ACT rulemaking. These changes are critical to California achieving its future ZEV adoption goals and to meet both climate and health-based air quality targets.

Staff proposes increasing the percentage of ZEV sales in California across all vehicle groups from 2024 to 2030 and to increase the percentage requirements from 2030 to 2035 rather than keeping them constant during that period. Staff proposes including pickups in the ZEV sales requirement for the Class 2b-3 vehicle group beginning with the 2024 model year, rather than excluding them until 2027. This change will increase the number of minimum ZEVs required to be sold in the Class 2b-3 vehicle group in 2024 through 2026 and is supported by new information in recent market announcements showing that a number of zero emission pickup and additional van models will be commercially available from several manufacturers well before the 2024 model year. Changes in the Class 2b-3 vehicle group are necessary to ensure strong market signals align with future demand for ZEVs. Proposed increases in the Class 7 and 8 tractor group sales percentages are necessary to ensure there are sufficient tractor sales to meet the goal of achieving an all zero-emission drayage fleet by 2035 which would directly benefit disadvantaged communities. In combination, these changes would increase ZEV sales in all vehicle size categories and would provide a clear path towards achieving carbon neutrality by 2045.

Staff also proposes changes that would provide additional flexibility for manufacturers that produce a small number of tractors each year, and changes to ZEV and NZEV credit lifetimes to align credit life for manufacturers with California's Greenhouse Gas Phase 2 regulations. Staff also proposes extending NZEV credit for an additional five years from 2030 to 2035 for NZEVs that achieve more than 75 miles of all-electric range. A number of additional changes are being made to clarify definitions, better explain credit accounting and retirement order, prevent double counting of NZEV credits with the Advanced Clean Cars regulation, and non-substantive changes.

For the proposed large entity reporting requirement, staff proposes changes to sections 2012 through 2012.3 to streamline reporting while ensuring key data are still collected to support future ZEV fleet regulations. The changes would limit the required reporting to vehicle owners and brokers. Staff proposes removing the entirety of section 2012.2, which would eliminate reporting facility-based information along with weekly truck trip counts. CARB will still seek to gather this information through other means, including potentially a separate non-regulatory contracted survey.

Staff also proposes lowering the vehicle count threshold for the reporting requirement to fleets with 50 or more trucks and buses rather than the originally proposed 100 vehicle fleet size; this will ensure representative sampling of truck usage across more fleets. Staff proposes including language that specifies a period of time for entities to respond to requests for clarification of apparent anomalies in reported information, to the extent they exist. A number of other changes include clarifying definitions, removing references to the facility reporting information, clarifying that personal residence information is not part of the reporting requirement, and adding language providing example methods to assist when responding to questions.

These changes are necessary to meet Board direction by strengthening ZEV sales requirements consistent with vehicle availability and technological feasibility. These changes would ensure long term market signals are placed to help achieve carbon neutrality in California by 2045. Additionally, streamlining and clarifying large entity reporting is necessary to meet Board direction and stakeholder concerns, while ensuring critical information is gathered to support future rulemakings.

The following summary does not include all modifications to correct typographical or grammatical errors, changes in numbering or formatting, nor does it include all of the non-substantive revisions made to improve clarity.

A. Modifications to Section 1963. Purpose, Applicability, Definition, and General Requirements.

Most of the changes to section 1963 and its subsections further clarify the intent of the original language. They include edits making it clear that yard tractors are included in the Class 4-8 vehicle group, parts and powertrain suppliers are excluded from the definition of a vehicle manufacturer, and other changes to definitions in conjunction with the extension of credits for near-zero-emission vehicles (NZEV).

1. In section 1963(a), staff proposes adding “on-road” to clarify that the provisions of this section apply to on-road vehicles. This is necessary to clarify the original intent to not include off-road vehicles and equipment as part of the ZEV manufacturer sales requirement. Staff also proposes specifying that the purpose applies to sections 1963, 1963.1, 1963.2, 1963.3, 1963.4, and 1963.5. This is necessary to avoid confusion to which sections the purpose is describing.
2. In section 1963(b), staff proposes adding “on-road” to clarify that the provisions of this sections apply to on-road vehicles. This is necessary to clarify the original intent to not include off-road vehicles and equipment as part of the ZEV manufacturer sales requirement.
3. In section 1963(c), a number of definitions have been added, deleted, or modified:
 - a. In section 1963(c)(1), staff proposes modifying the definition of “all-electric range” to mean the number of miles a vehicle can travel using stored on-board electricity, and to eliminate the reference to the CA Phase II GHG regulation definition of “all-electric range”. This is necessary to avoid confusion about whether the definition of “all-electric range” includes the minimum range limits identified in CA Phase II GHG. Additionally, staff proposes adding “on-road” to clarify that the provisions of this section apply to on-road vehicles. This is necessary to clarify the original intent to not include off-road vehicles and equipment as part of the ZEV manufacturer sales requirement.
 - b. In section 1963(c)(2), staff proposes adding “on-road” to clarify that the provisions of this section apply to on-road vehicles. This is necessary to clarify the original intent to not include off-road vehicles and equipment as part of the ZEV manufacturer sales requirement.
 - c. In section 1963(c)(3), staff proposes adding “on-road” to clarify that the provisions of this section apply to on-road vehicles. This is necessary to clarify the original intent to not include off-road vehicles and equipment as part of the ZEV manufacturer sales requirement.
 - d. In section 1963(c)(4), staff proposes adding “on-road” to clarify that the provisions of this section apply to on-road vehicles. This is necessary to clarify the original intent to not include off-road vehicles and equipment as part of the ZEV manufacturer sales requirement.
 - e. In section 1963(c)(5), staff proposes adding language to clarify that the Class 4-8 group includes “yard tractors,” as defined in section 1963(c)(21). This is necessary as the duty cycle of yard tractors is characterized by low speed operation at a central location and are

suitable for early electrification, similar to other vehicles in the Class 4-8 group. Staff also proposes adding “on-road” to clarify that the provisions of this section apply solely to on-road vehicles. This is necessary to clarify the original intent to not include off-road vehicles and equipment as part of the ZEV manufacturer sales requirement.

- f. In section 1963(c)(6), staff proposes adding “on-road” to clarify that the provisions of this section apply to on-road vehicles. This is necessary to clarify the original intent to not include off-road vehicles and equipment as part of the ZEV manufacturer sales requirement.
- g. In section 1963(c)(7), staff proposes adding “on-road” to clarify that the provisions of this section apply to on-road vehicles. This is necessary to clarify the original intent to not include off-road vehicles and equipment as part of the ZEV manufacturer sales requirement. Additionally, staff proposes changing the bottom threshold GVWR for Class 6 to apply to vehicles with 19,501 lbs. GVWR instead of 19,001 lbs. GVWR. This is necessary to clarify staff’s original intent in matching the GVWR thresholds with commonly accepted EPA vehicle class definitions.
- h. In section 1963(c)(8), staff proposes adding “on-road” to clarify that the provisions of this section apply to on-road vehicles. This is necessary to clarify the original intent to not include off-road vehicles and equipment as part of the ZEV manufacturer sales requirement.
- i. In section 1963(c)(9), staff proposes adding “on-road” to clarify that the provisions of this section apply to on-road vehicles. This is necessary to clarify the original intent to not include off-road vehicles and equipment as part of the ZEV manufacturer sales requirement.
- j. In section 1963(c)(10), staff proposes adding “on-road” to clarify that the provisions of this section apply to on-road vehicles. This is necessary to clarify the original intent to not include off-road vehicles and equipment as part of the ZEV manufacturer sales requirement. Additionally, staff proposes changing the bottom threshold GVWR for Class 8 to apply to vehicles with 33,001 lbs. GVWR instead of 33,000 lbs. GVWR. This is necessary to clarify staff’s original intent in matching the GVWR thresholds with commonly accepted EPA vehicle class definitions.
- k. In section 1963(c)(11)(A), staff proposes removing language that refers to California Vehicle Code section 350 for the definition of “GVWR.” This is necessary to avoid confusion as this reference is redundant with the “GVWR” definition in renumbered section 1963(c)(13).

- l. In renumbered section 1963(c)(13), staff proposes adding language in the text to modify the provisions of this section to be the definition of “Gross Vehicle Weight Rating” or “GVWR” instead of “Gross Vehicle Weight Rating (GVWR).” This is necessary to avoid confusion and use consistent styling with other definitions with acronyms.
- m. In renumbered section 1963(c)(14), staff proposes changing the definition of “manufacturer” to exclude persons who supply parts to the importer or vehicle manufacturer of record from the provisions of this section. This change is necessary so that entities that do not assemble vehicles are not inadvertently included. Staff also proposes adding “on-road” to clarify that the provisions of this section apply to on-road vehicles. This is necessary to clarify the original intent to not include off-road vehicles and equipment as part of the ZEV manufacturer sales requirement.
- n. In renumbered section 1963(c)(14), staff proposes removing the phrase “including a trailer” from the definition of manufacturer, which is necessary to clarify staff’s original intent of not including manufacturers that exclusively manufacture trailers as regulated parties.
- o. In renumbered section 1963(c)(16), staff proposes adding “or NZEV” to clarify that this is the abbreviation for “Near-zero-emission vehicle”. This is necessary to avoid confusion and use consistent styling with other definitions with acronyms.
 - 1. In section 1963(c)(15)(A), staff proposes adding “on-road” to clarify that the provisions of this section apply to on-road vehicles. This is necessary to clarify the original intent to not include off-road vehicles and equipment as part of the ZEV manufacturer sales requirement. Staff also proposes removing reference to “minimum” for all-electric range, as minimum all-electric range is not defined in section 1963(c)(1). This is necessary to avoid conflict with the minimum all-electric range requirements in newly added section 1963.2(b)(2).
 - 2. In section 1963(c)(15)(B), staff proposes adding “on-road” to clarify that the provisions of this section apply to on-road vehicles. This is necessary to clarify the original intent to not include off-road vehicles and equipment as part of the ZEV manufacturer sales requirement. Staff also proposes removing reference to “minimum” for all-electric range, as minimum all-electric range is not defined in section 1963(c)(1). This is necessary to avoid conflict with the

minimum all-electric range requirements in newly added section 1963.2(b)(2).

- p. Former section 1963(c)(17) is proposed to be removed. This is necessary because the definition for “pickup truck” is no longer used within the regulation language due to changes made to the Class 2b-3 vehicle group to strengthen the ZEV sales requirements.
 - q. In section 1963(a)(18), staff proposes adding “on-road” to clarify that the provisions of this section apply to on-road vehicles. This is necessary to clarify the original intent not to include off-road vehicles and equipment as part of the ZEV manufacturer sales requirement. Staff also proposes removing “definitions” as it is redundant with the language in the subsections of 1963(a)(17).
 - r. In section 1963(a)(19), staff proposes stating that “on-road vehicles” have the same definition as “vehicles”. This is necessary to clarify staff’s original intent that this regulation applies to vehicles intended for on-road or on-highway usage and does not apply to off-road vehicles. Staff also proposes adding “new” to clarify that the definition of the word “vehicle” only applies to new vehicles. This is necessary to clarify the original intent to not include used vehicles that are sold when calculating credits, deficits, and exemptions.
 - s. In section 1963(c)(20), staff proposes modifying the “yard tractor” definition to mean a vehicle originally designed to be operated on-road and that has a movable fifth wheel, but may not be hydraulically elevated in future ZEV designs. This is necessary to ensure zero-emission yard tractors, which do not have engines and may not have hydraulically-powered fifth wheels, are included in deficit and credit generation calculations.
 - t. In section 1963(c)(21), staff proposes adding “on-road” to clarify that the provisions of this section apply to on-road vehicles. This is necessary to clarify the original intent to not include off-road vehicles and equipment as part of the ZEV manufacturer sales requirement.
4. In section 1963(d), staff proposes removing subsections (1), (1)(A), (1)(B), and any references to these subsections. In addition, staff proposes adding language that specifies that ZEV and NZEV credits retired must equal or exceed total annual deficits each model year using methods specified in section 1963.3. This modification is necessary due to the proposed restructuring of section 1963.3 which makes sections (1), (1)(A), and (1)(B) unnecessary, and to simplify and clarify the language requiring credits retired to meet or exceed deficits.

5. In section 1963(e), staff proposes modifying the Low Volume Exemption by defining that the calculation to determine whether a manufacturer is low volume begins with the 2024 model year. This is necessary because the original proposal did not specify when this calculation began, which created an unintentional open ended requirement for any manufacturer that had ever exceeded the threshold in the past to be included even if they more recently qualified to use the exemption. Staff also proposes specifying sales are of “on-road vehicles produced and delivered for sale in California”. This is necessary to clarify the original intent to not include off-road vehicles and equipment as part of the ZEV manufacturer sales requirement, and to remain consistent with language in the Phase 2 GHG and Advanced Clean Cars regulations.
6. In section 1963(f), staff proposes removing language referring to section 1963(e). This is necessary to correct an error in the original proposal that would have prevented exempt manufacturers from voluntarily electing to generate credits.

B. Modifications to Section 1963.1. Deficits.

Subsections of Section 1963.1 have been rearranged to account for the removal of the pickup truck exclusion and the addition of clarifying language that would specify how to round credits and how to account for different types of credits.

1. In renumbered section 1963.1(a), staff proposes removing language referring to the aggregation of annual deficits incurred. This modification is necessary due to this provision being redundant and covered elsewhere in the newly proposed regulation language. Staff also proposes adding language that the provisions of this section apply to on-road vehicles. This is necessary to clarify the original intent to not include off-road vehicles and equipment as part of the ZEV manufacturer sales requirement. In addition, staff proposes adding language specifying sales are of “on-road vehicles produced and delivered for sale in California”. This is necessary to clarify the original intent to not include off-road vehicles and equipment as part of the ZEV manufacturer sales requirement, and to remain consistent with language in the Phase 2 GHG and Advanced Clean Cars regulations. Staff also proposes specifying that deficits are incurred upon sale to the ultimate purchaser. This is necessary to clarify when exactly the deficit is generated.
2. Staff proposes former section 1963.1(a)(1)(A) be removed so that pickup trucks are included in deficit calculations starting in the 2024 model year instead of excluding them until the 2027 model year. This change is necessary to increase the number of ZEVs required to be sold in the Class 2b-3 Group as directed by the Board. Recent announcements from several manufacturers demonstrate that zero-emission heavy-duty pickup

trucks will be commercially available well before 2024, which was not anticipated in the original proposal. The rationale and necessity of this change is discussed in detail in Attachment B.

3. In renumbered section 1963.1(b), staff proposes changing language on how deficits are calculated for clarity. This change is necessary to make the language consistent with credit calculation language. In addition, staff proposes adding “on-road” to clarify that the provisions of this section apply to on-road vehicles. This is necessary to clarify the original intent to not include off-road vehicles and equipment as part of the ZEV manufacturer sales requirement.
4. In renumbered section 1963.1(b), Table A-1, staff proposes increasing existing ZEV sales percentages between 2024 and 2030 and to continue increasing the sales requirements through the 2035 model year instead of maintaining a constant percentage requirement after 2030. This modification is necessary to increase the expected ZEV population in California as directed by the Board, consistent with new developments in the market and newly released studies indicating greater than originally expected feasibility of ZEV technologies in a wider variety of use cases. Rationale and necessity for these changes are discussed in depth in Attachment B. Staff also proposes removing the footnote that refers to the exclusion of pickup trucks, which is necessary for consistency with removing former section 1963.1(a)(1)(A) to include pickup trucks starting in 2024.
5. In renumbered section 1963.1(b), Table A-2, staff proposes changing the heading descriptions of the table to indicate which vehicle group the vehicles would belong to. This change is necessary because previously it was unclear which columns applied to yard tractors, so staff used the defined vehicle group categories to specify to which columns various vehicle classes apply. Staff also proposes changing the weight class modifier for Class 2b-3 vehicles to 0.8. This change is necessary as there is a higher risk to manufacturers that produce vehicles in this category due to relatively high proportion of personal-use and small fleet purchasers of pickups and vans. Smaller fleets are expected to have additional challenges adopting electric vehicles. The change provides more flexibility to offset required ZEV sales in other vehicle groups. Staff also proposes changing the weight class modifier for vehicles in the Class 7-8 tractor group from 2.0 to 2.5. The weight class modifiers were developed based on the emissions per mile of different vehicle classes and as a result tractors and Class 8 straight trucks had the same modifier. However, because tractors have higher annual mileages than other vehicles, conventional tractors generate more emissions and electric tractors generate greater emission benefits on a per vehicle basis. This change is necessary to provide better emissions equity when moving

credits between vehicle groups, and to encourage manufacturers to produce tractors that can provide more benefits in disadvantaged communities.

6. In new section 1963.1(c), staff proposes adding language to describe rounding for the summed number of deficits for a vehicle group, which is necessary to be consistent with the method of rounding for credits.
7. In new section 1963.1(d), staff proposes adding language that specifies that deficits generated from Class 7-8 tractors are accounted separately from other deficits. This addition is necessary because compliance requirements as outlined in section 1963.3 generally require Class 7-8 tractor deficits to be offset by Class 7-8 tractor credits, and therefore the deficits must be accounted for separately to accurately track this requirement.

C. Changes to 1963.2. Credit Generation, Banking, and Trading

Most changes to the subsections of Section 1963.2 are clarifications to improve consistency with other sections of the regulation and to ensure that the same NZEV may not be double counted by receiving credit in the Advanced Clean Cars regulation and the proposed regulation simultaneously.

1. In section 1963.2(a), staff proposes adding language specifying sales are “produced and delivered for sale in California”. This is necessary to remain consistent with language in the Phase 2 GHG and Advanced Clean Cars regulations. Staff also proposes specifying that ZEV credits are earned once a new vehicle is sold to an ultimate purchaser. This is necessary to ensure vehicles do not remain on dealer lots and are placed in service by an ultimate purchaser.
2. In section 1963.2(b), staff proposes changing the final model year of NZEV credit generation from 2030 to 2035. This is necessary to meet Board direction to encourage further development of near-zero-emission technologies which could enable widespread electrification for vehicles that may not always have access to charging stations or hydrogen fueling stations. staff proposes adding language specifying sales are “produced and delivered for sale in California”. This is necessary to remain consistent with language in the Phase 2 GHG and Advanced Clean Cars regulations. Staff also proposes specifying that NZEV credits are earned once a new vehicle is sold to an ultimate purchaser. This is necessary to ensure vehicles do not remain on dealer lots and are placed in service by an ultimate purchaser.
 - a. In new section 1963.2(b)(2), staff proposes adding language to have the NZEV credit calculation take into account a minimum all-electric

range, which will be an all-electric range that meet or exceed the criteria specified in 17 CCR section 95663(d) until the end of the 2029 model year, at which point the minimum all-electric range will be 75 miles. This change is necessary to establish a performance threshold for NZEVs that align with other regulations until the end of the 2029 model year, at which point a more robust all-electric range requirement will be established to promote technology advancements.

3. In section 1963.2(c), staff proposes specifying that this section applies to ZEV or NZEV credits. This is necessary to clarify staff's original intent that this provision applies to both types of credits. Staff also proposes adding language to specify that credit rounding is applicable to the sum of the credits generated each model year. This change is necessary to establish a rounding convention that will avoid disparate credit calculations resulting from manufacturers using rounding at different points in the credit generation calculation.
4. In section 1963.2(d), staff proposes specifying that this section applies to ZEV or NZEV credits. This is necessary to clarify staff's original intent that this provision applies to both types of credits. Staff also proposes removing language indicating that only credits to be generated in excess of deficits may be banked. This change is necessary as credits and deficits are being calculated and accounted for independently, thus the language is not needed.
5. In section 1963.2(e), staff proposes specifying that this section applies to ZEV or NZEV credits. This is necessary to clarify staff's original intent that this provision applies to both types of credits.
6. In section 1963.2(f), staff proposes specifying that this section applies to ZEV or NZEV credits. This is necessary to clarify staff's original intent that this provision applies to both types of credits. Staff also proposes replacing the stated vehicle groups with "other credits", which is necessary to improve readability of the language.
7. In section 1963.2(g), staff proposes specifying that this section applies to ZEV or NZEV credits. This is necessary to clarify staff's original intent that this provision applies to both types of credits.
8. In section 1963.2(g)(1), staff proposes specifying that this section applies to ZEV or NZEV credits. This is necessary to clarify staff's original intent that this provision applies to both types of credits.
9. In section 1963.2(g)(2), staff proposes specifying that this section applies to ZEV or NZEV credits. This is necessary to clarify staff's original intent that this provision applies to both types of credits. Staff also proposes

revising language to change the expiration of credits from four to five model years after they are generated for credits generated beginning in the 2024 model year. This change is necessary to align credit lifetime with the California and Federal Phase 2 GHG regulations.

10. In section 1963.2(h), staff proposes adding “on-road” to clarify that the provisions of this section apply to on-road vehicles. This is necessary to clarify the original intent to not include off-road vehicles and equipment as part of the ZEV manufacturer sales requirement.
11. In section 1963.2(i), staff proposes revising language to clarify that both ZEVs and NZEVs may only generate credits in either the Advanced Clean Trucks Regulation (13 CCR 1963.2) or the Advanced Clean Cars Regulation (13 CCR 1962.2) for each vehicle, not both. This change is necessary to prevent double counting of credits and thus reducing expected emissions benefits. Staff also proposes adding language that requires manufacturers to comply with reporting requirements specified in subsection 1963.4(c), which is necessary to inform staff of the specific regulation they will claim credit under for any Class 2b-3 vehicles. Staff also proposes adding language specifying sales are of “on-road vehicles produced and delivered for sale in California”. This is necessary to clarify the original intent to not include off-road vehicles and equipment as part of the ZEV manufacturer sales requirement, and to remain consistent with language in the Phase 2 GHG and Advanced Clean Cars regulations.

D. Modifications to Section 1963.3. Compliance Determination.

Along with clarifying edits, some subsections of Section 1963.3(c) have been rearranged, added, or removed to outline that the retirement order of credits is primarily determined by the model year of expiration followed by NZEV credits and ZEV credits. A new section was added to provide flexibility for manufacturers that produce a very small number of Class 7-8 Tractors by including a provision to meet compliance by retiring credits generated from non-tractor ZEV sales.

1. In section 1963.3(a), staff proposes modifying language on how compliance for a manufacturer is determined, which is necessary to improve readability and clarity.
2. In section 1963.3(b), staff proposes clarifying that the manufacturer has until the end of the next model year to make up a deficit rather than only a few months as originally drafted in error.
3. In section 1963.3(c), staff proposes adding language that refers to a newly added subsection 1963.3(c)(3) containing an exception in the credit retirement order, which is necessary to allow manufacturers who incur a

small number of deficits in the Class 7-8 tractor group to use credits from other vehicle groups to achieve compliance.

- a. In newly added and renumbered section 1963.3(c)(1), staff proposes adding language specifying that credits must be retired in order of model year beginning with the earliest expiring credit. This modification is necessary to change the credit retirement order to reduce the potential that a manufacturer's credits would expire without the opportunity to use them.
- b. In renumbered section 1963.3(c)(2), staff proposes modifying language in the text that would specify that NZEV credits must be used before ZEV credits for each weight class group. This change, as well as changes in the subsections of 1963.3(c)(2), are necessary to avoid scenarios where a manufacturer's credits could expire without the opportunity to use them since there is a cap on how many can be used each year.
 1. In renumbered section 1963.3(c)(2)(A)-(C), staff proposes adding language that makes these subsections applicable to NZEVs. This modification would specify that, when retiring credits by order of credit type, manufacturers must first retire credits generated by NZEVs in the Class 7-8 tractor vehicle group to offset Class 7-8 tractor deficits, after taking into account all limitations.
 2. In newly added subsection 1963.3(c)(2)(D-F), staff proposes adding language that makes these subsections occur after renumbered section 1963.3(c)(2)(C) and applicable to ZEVs. This addition is necessary to specify that, when retiring credits by order of credit type, manufacturers must retire credits generated by ZEVs after accounting for NZEV credits for each vehicle group.
4. Staff proposes removing former section 1963.3(c)(2), which is necessary as the provisions detailed in this section have been moved to newly added section 1963.3(c)(1).
5. Staff proposes removing former section 1963.3(c)(3), which is necessary as the provisions detailed in this section have been moved to the relevant subsections of renumbered section 1963.3(c)(2).
6. In newly added and renumbered section 1963.3(c)(3), staff proposes adding language on how manufacturers who have up to 25 deficits in the Class 7-8 Tractors vehicle group may use credits generated from other vehicle groups to offset these deficits. This change is necessary to

address manufacturer concerns that it does not make economic sense that manufacturers who sell relatively few vehicles in the Class 7-8 Tractors vehicle group should have to produce even fewer zero-emission tractors to achieve compliance.

7. In section 1963.3(d), staff proposes changing the language to specify no more than 50 percent of the Class 2b-3 and Class 4-8 deficits may be met with NZEV credits. This is necessary to avoid a potential loop-hole that could allow a manufacturer to exceed the 50 percent limit as originally worded. In addition, staff proposes using the phrase “annual summed deficits” to match the rest of the regulation text.
8. In section 1963.3(e), staff proposes modifying the requirement that Class 7-8 tractor deficits may only be met with tractor credits to incorporate the new flexibility outlined in section 1963.3(c)(3).

E. Modifications to Section 1963.4. Reporting and Recordkeeping

A section of 1963.4 referring to the pickup truck exclusion has been removed to reflect changes in other sections of the regulation language and the remaining sections are renumbered. Another notable change is the credit transfer reporting deadline, which is now 90 days following the end of the model year as opposed to March 31st of each calendar year. This change will align reporting with the model year definition already established in other regulations as well as make the language consistent across different sections of the regulation language.

1. In section 1963.4(a), staff proposes adding language that clarifies that reporting must be completed no later than 90 days following the end of each model year. This is necessary to clarify the reporting deadline and to better match with the reporting deadlines of the California Phase II GHG regulation, thus reducing the burden of reporting for multiple rules. In addition, staff proposes adding language specifying sales are of “on-road vehicles produced and delivered for sale in California”. This is necessary to clarify the original intent to not include off-road vehicles and equipment as part of the ZEV manufacturer sales requirement, and to remain consistent with language in the Phase 2 GHG and Advanced Clean Cars regulations.
 - a. Staff proposes removing former section 1963.4(a)(2) since the provisions detailed within this section are no longer applicable after the removal of the pickup truck exemption.
 - b. In renumbered section 1963.4(a)(3), staff proposes replacing “yard truck” with “yard tractor” which is necessary to be consistent with the term used for the definition. Staff also proposes removing the

requirement to report pickup trucks as it is no longer needed after the removal of the pickup truck exemption.

- c. In renumbered section 1963.4(a)(5), staff proposes adding language specifying sales volume for vehicles “produced and delivered for sale in California”. This is necessary to remain consistent with language in the Phase 2 GHG and Advanced Clean Cars regulations.
2. In section 1963.4(b), staff proposes specifying that this section applies to ZEV or NZEV credits. This is necessary to clarify staff’s original intent that this provision applies to both types of credits.
3. In section 1963.4(b)(1), staff proposes modifying language to clarify that manufacturers must report credit transfers no later than 90 days following the end of the model year to demonstrate compliance. This change is necessary to match the timeline for other reporting deadlines in the regulation text and to simplify language.
4. In section 1963.4(b)(2), staff proposes specifying that this section applies to ZEV or NZEV credits. This is necessary to clarify staff’s original intent that this provision applies to both types of credits.
5. In section 1963.4(b)(2)(E), staff proposes specifying that this section applies to ZEV or NZEV credits. This is necessary to clarify staff’s original intent that this provision applies to both types of credits.
6. In section 1963.4(c), staff proposes clarifying that manufacturers must declare which regulation Class 2b-3 ZEV or NZEV vehicles will generate credits towards compliance no later than 90 days following the end of the model year. This change is necessary to match the timeline for other reporting deadlines in the regulation text.
 - a. In section 1963.4(c)(1), staff proposes adding language specifying sales are of “on-road vehicles produced and delivered for sale in California”. This is necessary to clarify the original intent to not include off-road vehicles and equipment as part of the ZEV manufacturer sales requirement, and to remain consistent with language in the Phase 2 GHG and Advanced Clean Cars regulations .
 - b. In section 1963.4(c)(2), staff proposes adding language specifying sales are of “on-road vehicles produced and delivered for sale in California”. This is necessary to clarify the original intent to not include off-road vehicles and equipment as part of the ZEV manufacturer sales requirement, and to remain consistent with

language in the Phase 2 GHG and Advanced Clean Cars regulations .

7. In section 1963.4(d), staff proposes clarifying that manufacturers must maintain records for eight years after the end of the model year the vehicles were produced. This change is necessary to match recordkeeping requirements of other CARB zero-emission vehicle regulations to reduce the burden of recordkeeping. Additionally, staff proposes adding a requirement that manufacturers keep records documenting vehicle delivery to the ultimate purchaser's location in California. This is necessary as often fleets will place an order for vehicles at their headquarters location and manufacturers will deliver vehicles to the fleet's locations, including California certified vehicles to California. The purpose of this requirement is to provide a mechanism to verify that vehicles that are delivered to and placed in service in California even if they are purchased outside of the state.
8. In newly added section 1963.4(e), staff proposes adding language to allow manufacturers to group non-ZEV or non-NZEV sales information together without providing specific VINs. This is necessary to more closely match California Phase II GHG reporting, which staff originally intended.

F. Modifications to Section 1963.5. Enforcement

1. In section 1963.5, staff proposes replacing references to "CARB" with references to the "Executive Officer." These changes are necessary to provide consistency in meaning for respondents to know to whom information should be submitted.
2. In section 1963.5(a)(3)(A), staff proposes removing "production", which is necessary to reflect the original intent that production data were not intended to be collected, and therefore are not subject to public disclosure per the requirements of this section. Staff also proposes specifying that the sales information disclosed is based on volume of on-road vehicles produced and delivered for sale in California to match the information manufacturers will be reporting and to be consistent with language in the Phase 2 GHG and Advanced Clean Cars regulation.
3. In newly added section 1963.5(a)(4), staff proposes adding language that specifies what happens in the event a manufacturer has failed to meet their credit and deficit requirements and how to calculate the number of vehicles in violation. This is necessary to provide stakeholders clarity in the event of manufacturer noncompliance and ensuring a consistent methodology in determining how what the penalty should be based off of.

G. Modifications to Section 2012. Large Entity Reporting Requirement

Proposed changes in Section 2012 include modifying the scope of the regulation to limit reporting to large entities with one or more vehicles with a GVWR greater than 8500 lbs. under common ownership and control, reducing the fleet size threshold from 100 to 50 for fleets and brokers, and deletion of the sections pertaining to facility characteristics, including where trucks are not domiciled, contracting practices, and truck trip counts. Other changes include examples to assist with compiling requested responses, additional exemptions for military tactical vehicles and facilities, and conforming changes to definitions and numbering.

1. In section 2012(a), staff proposes modifying the purpose language to apply to the sections 2012, 2012.1, and 2012.2 rather than “this article”, which is necessary to avoid confusion about which the purpose applies.
2. In section 2012(b), staff proposes adding the word “entities” to the statement, which is necessary to clarify that the regulation applies to entities specified in subsections 2012(b)(1)-(5).
 - a. In section 2012(b)(1), staff proposes clarifying which entities must report consistent with the removal of former section 2012.2, which is necessary to reduce the burden of reporting for entities that are not brokers and do not operate trucks. This modification is in response to Board direction and stakeholder feedback seeking a more streamlined reporting requirement. The language excluding entities that own but do not operate facilities in California was deleted as it is no longer needed since reporting would be limited to vehicle owners and brokers. Staff also proposes adding language limiting the subsection applicability to entities that operated a facility in California in 2019, and that had one or more vehicles operated under common ownership and control. This is necessary to reduce the burden of reporting for businesses that do not have a physical presence in California or that do not operate or dispatch vehicles in the state.
 - b. In section 2012(b)(2), staff proposes adding language limiting the subsection applicability to entities that had vehicles under common ownership or control. This is necessary to ensure separate entities with less than the threshold number of trucks that may operate as a single business are counted together for purposes of determining the threshold.
 - c. In sections 2012(b)(2) and 2012(b)(3), staff proposes modifying the applicability threshold from 100 down to 50 or more vehicles owned or controlled by fleets, and from 100 down to 50 or more vehicles directed by brokers. These modifications are necessary to ensure that more truck fleets provide information which will be used to better determine how to craft future ZEV fleet rules.

- d. In section 2012(b)(3), staff proposes adding language clarifying that brokers or entities dispatching vehicles must have operated a facility in California during 2019 to be subject to the regulation. This is necessary to reduce the burden of reporting for businesses that do not have a physical presence in California.
 - e. In section 2012(b)(4) and 2012(b)(5), staff proposes adding language to make it clear that the reporting requirement applies to federal, state, and local agencies who owned or controlled at least one vehicle over 8,500 lbs. GVWR and operated a facility in California in the 2019 calendar year. This is necessary to reduce the burden of reporting for businesses that do not have a physical presence in California or that do not operate or dispatch vehicles in the state.
3. In section 2012(c), staff proposes adding facilities and vehicles to the list of exemptions, which is necessary to account for newly added exemptions for certain vehicles and facilities described in sections 2012(c)(4) and 2012(c) (5).
- a. In section (c)(1), staff proposes adding language in the regulation to clarify that the school buses being used by K-12 schools and school districts are defined in California Vehicle Code section 545, which is necessary as school buses were not defined in the original proposal in error.
 - b. In section 2012(c)(2), staff proposes adding language to more clearly specify that the Innovative Clean Transit (ICT) regulation is part of title 13 of the California Code of Regulations, and that transit buses and other vehicles that exclusively support transit service are exempt from the reporting requirement. This is necessary to make it clear what vehicles are excluded from the reporting requirements when transit service is provided by a city or other entity that also uses trucks for other purposes.
 - c. In section 2012(c)(3), staff proposes modifying language to specify that light-duty vehicles that are dispatched but not owned by transportation network companies are exempt from the reporting requirements. This is necessary to clarify that any vehicles that might be owned by transportation network companies would still need to be reported.
 - d. In new section 2012(c)(4), staff proposes adding language to exempt military tactical vehicles and military tactical facilities. This is necessary to address concerns raised by stakeholders about national security.
 - e. In new section 2012(c)(5), staff proposes adding language that excludes vehicles awaiting sale, which is necessary because they

would not contribute any meaningful information regarding the use of medium and heavy-duty vehicles in California.

- f. In new section 2012(c)(6), staff proposes adding language that excludes emergency vehicles. This is necessary as authorized emergency vehicles are exempt from regulations regarding motor vehicle pollution control devices per Vehicle Code section 27156.2 so gathering this information would not aid in developing future fleet regulations.

4. Changes in 2012(d). Definitions

- a. Staff proposes removing former section 2012(d)(1) which is necessary as the language has been incorporated in section 2012(d)(22), which defines “vehicle home base.”
- b. In new section 2012(d)(1), staff proposes adding language on the definition of a “backup vehicle,” which is necessary to address stakeholder concerns that the term was previously undefined.
- c. In section 2012(d)(2), staff proposes adding language to clarify that the broker definition is a person that has the relevant broker authority from the Federal Motor Carrier Safety Association. This change is necessary for consistency with the federal definition of a “broker.”
- d. In renumbered section 2012(d)(3), staff proposes adding language on the definition of “common ownership or control.” This is necessary for consistency with established definitions in 13 CCR section 2025 and to clarify the responsible reporting entity in other sections of the regulation language.
- e. In newly added and renumbered section 2012(d)(5), staff proposes adding language to define “dispatched,” which is necessary to address stakeholder concerns that the term was previously undefined.
- f. In newly added and renumbered section 2012(d)(6), staff proposes adding a definition for “Executive Officer.” This is necessary to identify to whom entities must submit the data required by the regulation.
- g. In renumbered section 2012(d)(8)(G), staff proposes modifying the definition of restaurant to include only those businesses where the “primary purpose is serving meals or refreshments”. This is necessary to clarify the original intent that other businesses that have other primary business purposes but offer purchase of meals or refreshments, such as gas stations, are not included in this definition.

- h. In renumbered section 2012(d)(9), staff proposes adding language that specifies that it applies to vehicles that are self-propelled and under ownership or control of the fleet. This change is necessary to make the provisions of this section consistent with other sections in the regulation. Staff also proposes clarifying that long-term leases or rentals of vehicles for usage of a period of one or more years are part of the fleet. This change is necessary to clarify the applicability of the term fleet to leased vehicles. Staff proposes removing language that refers to the following subsections, as they are not used and are being removed as described below.
 - 1. Former subsection 2012(d)(6)(A) is proposed to be removed as the term “federal fleet” is not used elsewhere in the regulation language.
 - 2. Former subsection 2012(d)(6)(B) is proposed to be removed as the provisions relating to “rental or leased fleet” is not used elsewhere in the regulation language.
- i. In renumbered section 2012(d)(10)(B), staff proposes adding language to clarify that long-term leases or rentals of vehicles for usage of a period of one or more years are part of the owner’s fleet. This change is necessary to clarify the applicability of the leasing agreement.
- j. In renumbered section 2012(d)(16)(B), staff proposes expanding the definition of “responsible official” to include any individual that is a delegate or a designee of the appropriate decision making official. This change is necessary to address stakeholders concerns about unnecessary burden of narrowing the definition to a single individual in a large organization when other qualified staff are in a better position to confirm the responses are accurate.
- k. Staff proposes removing former section 2012(d)(15) as the definition of “subcontractor” is no longer used in the regulation language.
- l. In section 2012(d)(18), staff proposes expanding the definition of “subhauler” to include brokers, and including not-for-hire entities as the hiring agents. This is necessary to ensure information is gathered about all types of motor carrier and broker entities that contract out for subhaulers.
- m. In renumbered section 2012(d)(20), staff proposes adding a definition of “vehicle” to clarify that only self-propelled equipment that is designed for use on highways is included and does not include motorcycles. This is necessary to address stakeholder concerns, as the term vehicle was not previously defined and stakeholders believed staff intended to

have entities report trailers, off-road equipment, or motorcycles in the regulation.

- n. In section 2012(d)(21), staff proposes removing school buses and substituting “yard goat” for “yard tractor” for consistency with other language changes, and because school buses were intended to be exempt from reporting under this regulation. Staff also proposes adding two additional body types for garbage trucks, and bifurcating on-road from off-road yard tractors. This change is necessary to respond to stakeholder comments that the existing body type selections for garbage trucks were insufficient to cover the breadth of garbage operations, and to address the need to gather data from on-road yard tractors separately from off-road yard tractors.
 - o. In new section 2012(d)(22), staff proposes adding the definition of “Vehicle home base” to make it more clear what facility location should be used when responding to questions about the vehicles at a facility. This change is necessary to combine the prior definitions that described the domiciled facility and assigned facility to clarify when each description applies. This change also clarifies that the home base is not a personal residence and can only be a location operated by the entity and minimizes any security concerns.
 - p. In renumbered sections 2012(d)(24)(A) through 2012(d)(24)(D), staff proposes clarifying definitions of vehicle categories “Light duty”, “Class 2b-3”, “Class 4-6”, and “Class 7-8” to indicate that all the vehicles are self-propelled motor vehicle designed for on-highway use. This is necessary to address stakeholder concerns that off-road equipment or trailers could be interpreted to be required to report.
5. Changes in 2012(e), General Requirements.
- a. In section 2012(e)(1), staff proposes adding language specifying that information required under section 2012.1, General Entity Information Reporting, and section 2012.2, Vehicle Usage by Facility Reporting, may be submitted separately for each subsidiary or joint venture that have at least one medium or heavy-duty vehicle under common ownership or control. Staff also proposes requiring subsidiaries with brokerage or motor carrier authority to be reported even if no vehicles are owned by that subsidiary. Additionally, staff proposes adding guidance language allowing vehicles under common ownership or control of different entities to be submitted separately by each fleet owner if they so choose. These changes are necessary to clarify potential ambiguities and contradictory language that would have required subsidiaries to report separately, which was not staff’s original intent. Additionally, these changes are necessary to streamline the

applicability of reporting requirements so they only apply to subsidiaries that own vehicles, thus preventing unnecessary data collection. Staff also proposes allowing the fleet owner to submit information that is up-to-date at any time after January 1, 2019, to make it easier for the fleet to use historical records that may already be available. Staff intend to allow respondents to optionally provide information detailing any unusual characteristics or explanations of data provided.

- b. In section 2012(e)(3), staff proposes substituting “official” for “person”, which is necessary for consistency with other regulation language and to match the appropriate definition. Staff also propose removing the word “individual” as it is not necessary. In addition, staff proposes referring to the recordkeeping example specified in section 2012.2. This is necessary to provide additional clarity and maintain internal consistency in the regulation.
 1. In section 2012(e)(3)(A), staff proposes changes to clarify the records are for on-road owned vehicles and off-road yard tractors, which is necessary to make sure that records are kept for off-road yard tractors, which have been added as part of the reporting requirement in previously described modifications, and that entities must keep other records if used to determine their responses. This is necessary to allow entities that do not collect the information in the specified formats to sufficiently support their responses.
 2. In newly added and renumbered section 2012(e)(3)(B), staff proposes adding language to require records be kept for off-road yard tractors, which is necessary to make sure that records are kept off-road yard tractors, which have been added as part of the reporting requirement in previously described modifications. Additionally, staff proposes adding language requiring recordkeeping for vehicles that are not owned but are dispatched by an entity, which is necessary to ensure that data is collected from brokers, which will assist in the development of future regulations, as available data on brokers, and the volumes of vehicles and entities they contract with, is limited.
 3. In renumbered section 2012(e)(3)(C), staff proposes adding language to clarify that reporting entities should keep the vehicle registration for each vehicle owned by California fleets used to determine their responses. This is necessary to establish that this information is only expected from vehicles owned by the entity, and prevents brokers or other

contracting entities from having to supply the information, which was a stakeholder concern.

4. In renumbered section 2012(e)(3)(D), staff proposes removing language that would have required records be kept on contracts for ground transportation needs, as these records are no longer relevant due to the removal of facility category reporting section. Additionally, staff proposes adding language stating that other records are acceptable to submit besides those specifically listed, as long as the records contain the information the entity used to determine their responses. This is necessary to allow entities that do not collect the information in the specified formats to sufficiently support their responses. Staff also proposes modifying language to replace references to “subcontractors” with “entities”. This change is necessary due to the term “subcontractors” no longer being used.
- c. In new section 2012(e)(4), staff proposes adding language that would require fleets to respond to CARB audit requests within 14 days. This change is necessary to make it clear that staff intend to reach out to respondents to clarify apparent anomalies in the reported data to better understand if there may have been an inadvertent error or if the fleet operation differs significantly from another similar fleet. The timeframe to respond would make it clear what the period for a timely response is, and would ensure data is corrected or clarified quickly so staff can process the information being received in a very short timeframe.

H. Modification to Section 2012.1. General Entity Information Reporting.

Changes to Section 2012.1 focus primarily on clarifying existing sections, modifying or adding sections to account for the addition of regulation language relating to brokers, as well as renumbering subsections of Section 2012.1 to account for these changes.

1. In section 2012.1(a)(1), staff proposes adding language that would require fictitious business names to be reported, if applicable. This change is made in response to stakeholders stating they operate under a trade name, assumed business name, or doing business as (DBA).
2. In renumbered section 2012.1(a)(2), staff proposes adding “or P.O. box” to clarify that mailing address can contain either a street address or P.O. box for reporting, which is necessary for companies that prefer to use a mailing P.O. box number for communications with CARB. Staff additionally proposes adding “state” as a field for respondents to provide

as part of their mailing address, which is necessary to allow collection of complete mailing addresses.

3. In newly added and renumbered section 2012.1(a)(7), staff proposes adding language to include federal tax identification of the corporate parent company or other entity with which the respondent has vehicles under common ownership or control, which is necessary to improve the ability to match records to corporate parent linkages or business relationships where vehicles are under common ownership or control.
4. In renumbered section 2012.1(a)(9), staff proposes adding language to clarify that only active accounts with TRUCRS IDs need to be submitted, if applicable. This is necessary as inactive IDs would not offer any practical benefits for reporting purposes.
5. In renumbered section 2012.1(a)(10), staff proposes adding “Federal” to clarify that the federal taxpayer identification number is to be provided for reporting, which is necessary to avoid confusion.
6. In renumbered section 2012.1(a)(12), staff proposes clarifying that the provisions of this section are for non-governmental entities as opposed to non-governmental agencies, which is necessary to avoid confusion and ensure all non-governmental entities report their revenues.
7. In newly added and renumbered section 2012.1(a)(13), staff proposes adding a new question requiring entities to report whether they have broker authority from the Federal Motor Carrier Safety Administration. This change is necessary to identify and collect data from brokers to develop future regulations, as available data on brokers and the volumes of vehicles and entities they contract with is limited.
8. In renumbered section 2012.1(a)(15), staff proposes adding language to substitute “entities” for “subcontractors” and remove all references to subcontractors in this section. This change is necessary due to the term “subcontractors” no longer being used, and to improve clarity. Staff also proposes modifying language to make it clear the count requested only applies to those who use vehicles over 8,500 lbs. GVWR, and that respondents can answer for 2019 or 2020. Staff intend to allow respondents to optionally provide information detailing any unusual characteristics or explanations of data provided. Additionally, staff proposes clarifying that respondents should only count entities that represented the respondent entity’s brand. These changes are necessary to provide flexibility for entities to respond using relevant and timely information they may have already collected, to limit the scope of responses to only those for which the respondent entities are reasonably expected to have data, and to specify only those contracts which are to

serve the entity's customers on the entity's behalf e.g. a contractor for FedEx who serves FedEx's customers using a vehicle with FedEx's logo.

9. In renumbered section 2012.1(a)(16), staff proposes adding language that clarifies entities with broker authority are included. Additionally, staff proposes adding language stating that entities that do not have motor carrier or broker authorities should indicate that the questions do not apply. These changes are necessary to ensure brokers answer the questions needed to gather data to develop future regulations, as available data on brokers and the volumes of vehicles and entities they contract with are limited. Language was added to give respondents more flexibility to respond to the subsections for either the 2019 or the 2020 calendar year. This change is necessary to provide flexibility for entities to respond using information they may have already collected. Staff intend to allow respondents to optionally provide information detailing any unusual characteristics or explanations of data provided.
10. In renumbered section 2012.1(a)(16)(A), staff proposes adding language clarifying the subsection only applies to contracts with subhaulers that "transport goods or other property" and does not apply to other types of contracts such as for services, repairs, or maintenance work. This is necessary to limit responses to the originally intended scope of the question and to address stakeholder concerns about the broad scope of the wording of the original proposal.
11. In renumbered section 2012.1(a)(16)(C), staff proposes adding language clarifying that the subsection only applies to vehicles operated under the hiring entity's motor carrier authority. This is necessary to limit responses to only those operating under the entity's motor carrier authority, which was the originally intended scope, rather than brokerage or other authority.
12. Staff proposes to remove former section 2012.1(a)(17). This information would already be collected under the requirements of renumbered section 2012.2. This is necessary due to direction from the Board to streamline the reporting process.
13. In renumbered section 2012.1(a)(19), staff proposes modifying the language to indicate it only applies to vehicles over 8,500 lbs. GVWR and allows the respondent to use either 2019 or 2020 information, while updating the response to indicate it is only for vehicles that do not have a vehicle home base in California. These changes are necessary to provide flexibility to entities to use information that they may already have on hand for prior years. Staff intend to allow respondents to optionally provide information detailing any unusual characteristics or explanations of data provided.

14. In newly added section 2012.1(a)(20), staff proposes adding language requiring respondents to identify the year the data used to respond to questions was from. This is necessary to be able to add a time frame context to data collected for analysis purposes, and to be able to compare data across different time frames.

- I. Staff proposes removing former section 2012.2, Facility Category Reporting since the rule will no longer require grouped facility information to be reported. This change is necessary due to direction from the Board to streamline the reporting process. Instead, staff plan to collect the information via alternative means, likely through a contract in coordination with stakeholders.
- J. Modifications to Renumbered Section 2012.2. Vehicle Usage by Facility Reporting.

Staff proposes adding language that clarifies the entities responsible for reporting, such as brokers and entities that own or operate vehicles under common ownership and control. Staff also proposes removing language regarding an exemption for military vehicles, because that language has been moved to other sections of the regulation.

Changes to the subsections of renumbered Section 2012.2 focus mostly on clarifying language and the addition of examples to provide more guidance on how to fill out responses.

- 1. In renumbered section 2012.2(a), staff proposes replacing the phrasing “assigned and domiciled” with “vehicle home base”. This change is necessary due to updated definitions.
 - a. In section 2012.2(a)(1), staff proposes adding “state” as a field for respondents to provide as part of their facility address, which is necessary to allow collection of complete facility addresses.
 - b. In section 2012.2(a)(6)(D), staff proposes adding language to clarify that chargers with a power level of Level 2 or greater are to be included. This is necessary to avoid a potential situation where an entity reports every wall outlet as a Level 1 charger.
 - c. In renumbered section 2012.2(a)(7), staff proposes modifying the text from “less than 10 years ago” to “on or after January 1, 2010” which is necessary to give a more definite timeline for when to report infrastructure installations.
 - d. In renumbered section 2012.2(a)(8), staff proposes removing some language that is unnecessary to improve readability.

2. In renumbered section 2012.2(b), staff proposes removing language that specified that information must be reported for the entity's fleet as it consisted on January 1, 2021. This change is necessary due to changes to section 2012(e) that allow entities to report their fleet as comprised at any time after January 1, 2019. Staff intend to allow respondents to optionally provide information detailing any unusual characteristics or explanations of data provided. Staff proposes modifying the applicability of the section to apply to only vehicle home bases with vehicles over 8,500 lbs. GVWR, and to clarify that all vehicles over 8,500 lb. GVWR, including off-road yard tractors, must have usage information reported per the provisions of the section. This is necessary to be consistent with revisions of "facility" locations to vehicle home bases elsewhere in the regulation. It is also necessary to ensure only locations with vehicles over 8,500 lbs. GVWR are included in the responses to streamline the requirements per Board direction, while collecting detailed information about all vehicles over 8,500 lb. GVWR present at those locations to ensure staff have robust data samples to inform future rulemakings. Staff also proposes including language to allow fleets to report each vehicle individually instead of grouping similar vehicles together. This is necessary to respond to stakeholder requests indicating that some data is easier to gather on a vehicle-by-vehicle basis. Staff also proposes requiring entities who direct vehicles under their brokerage authority to report information about those vehicles separately from their own vehicles. This change is necessary because of the proposed change requiring that regulated entities report information about vehicles they dispatch, but entities are not expected to have certain information about those vehicles outside their contract. Staff also proposes moving the existing guidance language into later subsections which is necessary to improve readability and to further expand guidance on how to determine responses with existing fleet information.
 - a. In renumbered section 2012.2(b)(2), staff proposes adding language that would clarify how to determine the percentage of vehicles in determining responses to subsections of 2012.2(b)(2). This change is intended to provide more guidance on different methods that could be used to streamline reporting by using existing data. This is necessary to establish expectations for how entities should respond to questions that otherwise could be interpreted in different ways. Staff also proposes adding clarification language that would make certain questions optional for yard tractors, which is necessary because yard tractors typically do not record usage in miles, and would make gathering data for the newly optional questions irrelevant. Staff proposes adding language stating that backup or non-operational vehicles should not be included in calculating mileage in responding to the subsequent subsections, which is necessary to prevent skewed data from being collected.

1. In renumbered section 2012.2(b)(2)(A) through 2012.2(b)(2)(E), staff proposes adding language to clarify that miles per day is an average. This change is intended to provide more flexibility for respondents by allowing them to determine an average using existing data instead of an exact number. This is necessary to establish expectations for how entities should respond to questions that otherwise could be interpreted in different ways. Additionally, staff proposes modifying the categories to allow respondents to bin responses by easier to determine methods. This is necessary to respond to stakeholder concerns about how to respond for vehicle groups that can be interpreted as operating in multiple different bins with the current phrasing.
2. In renumbered section 2012.2(b)(2)(F), staff proposes adding an example that would clarify the provisions of this section. This change is intended to provide more guidance on interpreting what a predictable usage pattern might look like for a fleet. This is necessary to establish expectations for how entities should respond to questions that otherwise could be interpreted in different ways.
3. In renumbered section 2012.2(b)(2)(H), staff proposes adding language that changes facility to vehicle home base for improved clarity. Staff also proposes adding an example that would clarify the provisions of this section. This is necessary to establish expectations for how entities should respond to questions that otherwise could be interpreted in different ways.
4. In renumbered section 2012.2(b)(2)(J), staff proposes modifying the question to ask whether most of the vehicles in the group operate within a 50-mile radius daily as a best estimate, because it is not a metric that is normally tracked by most fleets. The response would be “yes or no” and entities would not need to make a percentage estimate for the vehicle group. This is necessary to establish expectations for how entities should respond to questions that otherwise could be interpreted in different ways.
5. In renumbered section 2012.2(b)(2)(O), staff proposes modifying language that requests the “approximate” percentage of the “vehicle group” that supports emergence operations. This is necessary because staff recognized the number will vary based on interpretation of the question and the timeframe entities choose to form a response to this

question, but will still be helpful in identifying potential barriers to electrification if infrastructure is not widely available. Staff also proposes adding some examples of emergency operations, which is necessary to clarify that emergency operation does not include routine operations associated with emergency systems or vehicles that are dispatched on short notice for common occurrences that are not associated with emergency events due to acts of nature.

- b. In renumbered section 2012.2(b)(4), staff proposes to change “vehicle group” to “vehicle type”. This is necessary to better characterize the purchasing patterns of different vehicle body types. Staff also proposes adding the word “typically” regarding how long vehicles are kept after acquisition. This is necessary to provide guidelines on how staff expects regulated entities to respond. Adding “typically” indicates that this question is intended to reflect general business practices for the most appropriate response bin and staff recognize it could change in the future for a variety of reasons.
- c. In new section 2012.2(b)(5), staff proposes adding a new question that would require entities to report whether they are the fleet owner for each vehicle group, or whether the vehicle group is dispatched under the entity’s brokerage authority. This language is necessary to differentiate vehicles dispatched by brokers from those that are owned.
- d. In new section 2012.2(b)(6), staff proposes adding a new question that would require entities to report the start and end date of the analysis period they selected when determining responses to the other questions in the section. This is necessary for staff to have the timeframe context for entity responses to be able to accurately analyze the data collected.
- e. In new section 2012.2(b)(7), staff proposes adding language that clarifies the time period entities should select when answering questions about daily operations. This is necessary to provide guidance that stakeholders have asked for in how staff expects regulated entities to collect information for varying business models. This language was moved from renumbered section 2012(b) to improve readability.
- f. In new section 2012.2(b)(8), staff proposes adding language that states entities may repeat the information reported for a vehicle or group of vehicles at one home base for similar vehicles at another home base if the entity determines the vehicles group operations are substantially similar at other locations. This change is necessary to reduce the data analysis burden for fleets that have similar usage at

multiple locations. This language was moved from renumbered section 2012.2(b) to improve readability.

- g. In new section 2012.2(b)(9), staff proposes inserting new language that further clarifies that brokers are only expected to provide information about vehicle usage for vehicles that are dispatched by a broker and to clarify that vehicle operational information would be based solely on information under the contract between the truck owner and the broker. This is necessary to provide expectations for brokers that would not have information about trucks that they do not own.

In addition to the modifications described above, modifications correcting numbering, grammar, punctuation and spelling have been made throughout the proposed changes. These changes are non-substantive.

Environmental Analysis

These proposed modifications to the proposed regulation do not change the existing environmental analysis of the reasonably foreseeable methods by which regulated entities will achieve compliance with the proposed regulation. The reasonably foreseeable methods of compliance were analyzed in their entirety in the Draft Environmental Analysis (Draft EA) in Appendix D of the Staff Report. In general, these proposed modifications will expand the project scope by increasing the number of zero-emission vehicles sold into California, which will in turn increase the environmental benefits related to greenhouse gas reductions and air quality improvements. However, since these proposed modifications will not alter the existing compliance responses identified in the Draft EA, there is no requirement to conduct additional environmental analysis under section 15187 of the CEQA Guidelines. As a result, the Draft EA's findings, overall significance conclusions, mitigation measures and alternatives adequately address the environmental review for the proposed modifications. Therefore, CARB staff has determined that the proposed modifications would not result in any of the circumstances requiring recirculation of the Draft EA as set forth in section 15088.5 of the CEQA Guidelines.

Additional Documents Added to the Record

In the interest of completeness, staff has also added to the rulemaking record and invites comments on the following additional documents:

1. Updated Analysis Regarding Increased Manufacturer Zero-Emission Vehicles Sales Requirements (included as Attachment B to this notice).
2. Updated Costs and Benefits Analysis (included as Attachment C to this notice).

3. Emissions Inventory Methods and Results for the Proposed Advanced Clean Trucks Regulation Proposed Modifications (included as Attachment D to this notice).
4. (Atlas, 2020) Atlas Public Policy, Assessing Financial Barriers to Adoption of Electric Trucks, 2020. (web link: <https://atlaspolicy.com/wp-content/uploads/2020/02/Assessing-Financial-Barriers-to-Adoption-of-Electric-Trucks.pdf>)
5. (Avista, 2019) Avista Corp. Electric Vehicle Supply Equipment Pilot Final Report, 2019. (web link: <https://www.myavista.com/-/media/myavista/content-documents/energy-savings/electricvehiclesupplyequipmentpilotfinalreport.pdf?la=en>)
6. (Bollinger Motors, 2020a) Bollinger Motors, Bollinger B1, 2020. (web link: <https://bollingermotors.com/bollinger-b1/>)
7. (Bollinger Motors, 2020b) Bollinger Motors, Bollinger B2, 2020. (web link: <https://bollingermotors.com/bollinger-b2/>)
8. (CARB, 2019a) California Air Resources Board, Economic Cost Spreadsheet for the October 2019 Advanced Clean Trucks Staff Proposal, 2019.
9. (CARB, 2019b) California Air Resources Board, Emissions Inventory Spreadsheet for the October 2019 Advanced Clean Trucks Staff Proposal, 2019.
10. (CARB, 2020a) California Air Resources Board, Economic Cost Spreadsheet for the 2020 Advanced Clean Trucks Proposed Modifications, 2020.
11. (CARB, 2020b) California Air Resources Board, Emissions Inventory Spreadsheet for the 2020 Advanced Clean Trucks Proposed Modifications, 2020.
12. (Daimler, 2019) Daimler, Electrified segment founder: the new Mercedes-Benz eSprinter, 2019. (web link: <https://media.daimler.com/marsMediaSite/en/instance/ko.xhtml?oid=45225215&ls=L2VuL2luc3RhbmNIL2tvLnhodG1sP29pZD05MjY2MjYyJnJlbEIkPTYwODI5JmZyb21PaWQ9OTI2NjI2MiZib3JkZXJzPXRydWUmcmVzdWx0SW5mb1R5cGVJZD00MDYyNiZ2aWV3VHlwZT1saXN0JnNvcnREZWZpbml0aW9uPVBVQkxJU0hFRF9BVC0yJnRodW1iU2NhbGVJbmRleD0wJnJvd0NvdW50c0luZGV4PTU!&rs=11>)
13. (Daimler, 2017) Daimler, Daimler Trucks launches E-FUSO and all-electric heavy-duty truck Vision One, 2017. (web link: <https://media.daimler.com/marsMediaSite/en/instance/ko.xhtml?oid=30010405&rellid=1001&resultInfoTypeId=175&ls=L2VuL2luc3RhbmNIL2tvLnhodG1sP29pZD0zMDAxMDQ1OSZyZWxJZD02MDgyOSZmcm9tT2lkPTMwMDEwNDU5JmJvcn>)

21. (ICF, 2019) ICF International, Comparison of Medium-Duty and Heavy-Duty Technologies in California, 2019. (web link: https://caletc.com/wp-content/uploads/2019/12/ICF-Truck-Report_Final_December-2019.pdf)
22. (Kenworth, 2020) Kenworth, Kenworth Announces Collaboration with Dana on Electric Truck Powertrain Development, 2020. (web link: <https://dana.mediaroom.com/2020-01-08-Kenworth-Announces-Collaboration-with-Dana-on-Electric-Truck-Powertrain-Development>)
23. (LBNL, 2019) Lawrence Berkeley National Lab, Clean Truck Standards Consistent with Carbon Neutrality Are Economically and Environmentally Compelling, 2019. (web link: <https://www.arb.ca.gov/lists/com-attach/108-act2019-WzoHYlInVSsCZ1U6.zip>)
24. (Mack, 2020) Mack, Mack Trucks Demonstrates Mack® LR Electric Model for New York City Department of Sanitation, 2020. (web link: <https://www.macktrucks.com/mack-news/2020/mack-trucks-demonstrates-mack-lr-electric-model-for-new-york-city-department-of-sanitation/>)
25. (NACFE, 2019a) North American Council for Fuel Efficiency, Regional Haul, 2019 (web link: <https://nacfe.org/regional-haul/>)
26. (NACFE, 2019b) North American Council for Fuel Efficiency, Viable Class 7/8 Electric, Hybrid, and Alternative Fuel Tractors, 2019 (web link: <https://nacfe.org/future-technology/viable-class-7-8/>)
27. (Navistar, 2019) Navistar, Navistar Launches New Business Unit, NEXT eMobility Solutions, 2019. (web link: <https://news.navistar.com/2019-10-28-Navistar-Launches-New-Business-Unit-NEXT-eMobility-Solutions>)
28. (Nikola, 2020a) Nikola, Nikola unveils the Nikola Badger Pickup, 2020. (web link: https://nikolamotor.com/press_releases/nikola-unveils-the-nikola-badger-pickup-73.pdf)
29. (Nikola, 2020b) Nikola, Nikola Corporation, a Global Leader in Zero Emissions Transportation Solutions, to Be Listed on NASDAQ Through a Merger With VectoIQ, 2020. (web link: https://nikolamotor.com/press_releases/nikola-corporation-a-global-leader-in-zero-emissions-transportation-solutions-to-be-listed-on-nasdaq-through-a-merger-with-vectoIQ-74)
30. (Peterbilt, 2020) Peterbilt, Peterbilt Selects Meritor as Primary Supplier of Integrated Battery Electric Systems for Models 579EV and 520EV, 2020. (web link: <https://www.peterbilt.com/about/news-events/news-releases/peterbilt-selects-meritor-primary-supplier-integrated-battery>)

31. (Rivian, 2020) Rivian, Comments on the Control of Air Pollution from New Motor Vehicles: Heavy-Duty Standards Advanced Notice of Proposed Rulemaking, 2020. (web link: <https://www.regulations.gov/contentStreamer?documentId=EPA-HQ-OAR-2019-0055-0272&attachmentNumber=1&contentType=pdf>)
32. (Tesla, 2019) Tesla, Re: Support for a Stronger Advanced Clean Trucks Rule, 2019. (web link: <https://www.arb.ca.gov/lists/com-attach/120-act2019-VyMFZIAiWWYEWdY.pdf>)
33. (Tesla, 2020) Tesla, Press Kit, 2020. (web link: <https://www.tesla.com/presskit>)
34. (TTNews, 2018) Transport Topics, Thor Trucks to Launch New Entry in Battery-Electric Class 8 Market, 2018. (web link: <https://www.ttnews.com/articles/thor-trucks-launch-new-entry-battery-electric-class-8-market>)
35. (Toyota, 2020) Toyota, Toyota and Hino to Jointly Develop Heavy-Duty Fuel Cell Truck, 2020. (web link: <https://global.toyota/en/newsroom/corporate/32024083.html>)
36. (UCS, 2019) Union of Concerned Scientists, Ready to Work – Now is the Time for Heavy-Duty Electric Vehicles, 2019. (web link: <https://www.ucsusa.org/sites/default/files/2019-12/ReadyforWorkFullReport.pdf>)
37. (UCLA, 2019) University of California Los Angeles, Zero-Emission Drayage Trucks – Challenges and Opportunities for the San Pedro Bay Ports, 2019. (web link: https://innovation.luskin.ucla.edu/wp-content/uploads/2019/10/Zero_Emission_Drayage_Trucks.pdf)
38. (Volvo, 2020) Volvo Trucks, Volvo Trucks North America Demonstrates Pilot All-Electric VNR Models as Part of Volvo LIGHTS Innovation Showcase, 2020. (web link: <https://www.volvotrucks.us/news-and-stories/press-releases/2020/february/all-electric-vnr-models/>)

These documents are available for inspection by contacting Bradley Bechtold, Regulations Coordinator, at (916) 322-6533.

Agency Contacts

Inquiries concerning the substance of the proposed regulation may be directed to Craig Duehring, Air Resources Supervisor, In-Use Control Measures Section, at (916) 323-2361 or Paul Arneja, Air Resources Engineer, In-Use Control Measures Section, at (916) 322-5616.

Public Comments

Written comments will only be accepted on the modifications identified in this Notice.

Comments may be submitted by postal mail or by electronic submittal no later than the due date to the following:

Postal mail: Clerk's Office, California Air Resources Board
1001 I Street, Sacramento, California 95814

Electronic submittal: <http://www.arb.ca.gov/lispub/comm/bclist.php>

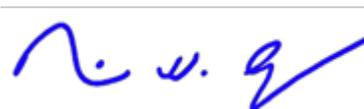
Please note that under the California Public Records Act (Gov. Code § 6250 et seq.), your written and verbal comments, attachments, and associated contact information (e.g., your address, phone, email, etc.) become part of the public record and can be released to the public upon request.

In order to be considered by the Executive Officer, comments must be directed to CARB in one of the two forms described above and received by CARB no later than the deadline date for public comment listed at the beginning of this notice. Only comments relating to the above-described modifications to the text of the regulations shall be considered by the Executive Officer.

If you need this document in an alternate format or another language, please contact the Clerk of the Board at (916) 322-5594 or by facsimile at (916) 322-3928 no later than five (5) business days from the release date of this notice. TTY/TDD/Speech to Speech users may dial 711 for the California Relay Service.

Si necesita este documento en un formato alternativo u otro idioma, por favor llame a la oficina del Secretario del Consejo de Recursos Atmosféricos al (916) 322-5594 o envíe un fax al (916) 322-3928 no menos de cinco (5) días laborales a partir de la fecha del lanzamiento de este aviso. Para el Servicio Telefónico de California para Personas con Problemas Auditivos, ó de teléfonos TDD pueden marcar al 711.

CALIFORNIA AIR RESOURCES BOARD



Richard W. Corey
Executive Officer

Date: April 28, 2020

Attachments

The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demand and cut your energy costs, see CARB's website at www.CARB.ca.gov.