

# **Appendix H-2**

## **Purpose and Rationale for High-Priority and Federal Fleet Requirements**

Advanced Clean Fleets Regulation

California Air Resources Board

Date of Release: August 30, 2022  
Date of Hearing: October 27, 2022

## **Section 2015. High Priority and Federal Fleets Applicability, Definitions, and General Requirements**

### **Purpose**

The purpose of this section is to identify the scope and applicability, exemptions, definitions, and general requirements of this proposed regulation.

### **Rationale**

This section is necessary to identify all regulated entities and vehicles responsible for complying with the proposed regulation. It is important to establish the responsible entities to ensure success in maximizing emissions reductions by transitioning affected entity fleets to ZEVs. It is necessary to identify all excluded entities and vehicles to prevent unintended vehicles or entities from complying with the proposed requirements. Defining the various terms used in the proposed language is necessary to avoid misinterpretation of regulation terms. Setting forth the general requirements is necessary to inform regulated parties of the proposed regulation's compliance requirements.

To achieve California's climate change goals, CARB must maximize efforts to increase fleet deployment of ZEVs statewide. Executive Order N-79-20 set a state goal to transition the state's fleet of medium- and heavy-duty vehicles to ZEVs by 2045, where feasible.

## **Section 2015(a)(1), 2015(a)(1)(A-D). Scope and Applicability, Fleet Applicability**

### **Purpose**

The purpose of this section is to set forth the applicability criteria for entities to determine whether they are subject to the proposed regulation requirements. The section establishes as subject to the rule any entity that owns, operates, or directs one or more vehicles, as described in the vehicle scope, in California on or after January 1, 2024, and that meets any of the applicability criteria. Applicability criteria include entities with \$50 million or more in total gross annual revenue in the prior year; fleet owners that own, operate, or direct 50 or more vehicles in the total fleet, excluding light-duty package delivery vehicles; fleet owners or controlling parties with combination fleets operated under common ownership or control totaling more than 50 vehicles in the total fleet, excluding light-duty package delivery vehicles; and any federal government agency.

## Rationale

This section is necessary as it establishes the thresholds that entities must meet to be subject to the proposed regulation requirements.

It is necessary to specify that entities own, operate, or direct one or more vehicles in California because vehicles operated in the state impact local air pollution, affecting the health of Californians. Entities that control those vehicles must do their part to reduce the impact of their vehicle emissions. The January 1, 2024 start date is necessary to establish because that is the proposed start date of the compliance requirements, and affected entities need to know when the applicability portions of the proposed regulation will take effect to comply.

\$50 million or more in total gross annual revenue establishes a threshold for companies that have the financial means to make the capital investments in ZEVs and associated infrastructure in the early transition. Incorporating fleets that own, operate, or direct 50+ vehicles is necessary because entities with larger fleets and revenues are expected to have more flexibility to identify vehicles or routes in the fleet that can be transitioned to ZEs and are considered to be those best suited for transitioning to ZEVs before other fleets that more frequently tend to purchase used vehicles on the secondary market. Fleets that own, operate, or direct 50+ vehicles also represent a substantial portion of the market and typically have multiple locations that may allow for infrastructure investments to likely be more prioritized. Additionally, the LER results largely support that the appropriate threshold is represented by the applicability criteria as it incorporates approximately 70 percent of larger trucks that have a disproportionate impact on emissions. It is necessary to specify that the applicability criteria apply to the total fleet of vehicles, not just the California fleet, because total fleet size is an indicator of financial means to make the capital investments needed.

Light-duty package delivery vehicles are excluded from the applicability requirements as the initial focus of the proposed regulation applicability was on medium- and heavy-duty vehicles and the staff modification to expand the scope to include light-duty vehicles would not change who would be in the scope of the proposed regulation; however, fleets with such vehicles will be expected to upgrade them along with the rest of the medium- and heavy-duty vehicles as described in the scope.

The applicability criteria encompasses fleet owners or controlling parties with combination fleets operated under common ownership or control totaling more than 50 vehicles to maintain a level playing field with other regulated parties who own their trucks and compete for the same business, and because they are positioned to have visibility and control over the fleet as a whole that the owner-operators of these vehicles do not have. It is necessary to specify that the applicability criteria apply to the total fleet of vehicles, not just the California fleet, because total fleet size is an indicator of financial means to make the capital investments needed.

Federal government agencies are incorporated as part of the applicability criteria because the government is in a position to lead the initial transition to ZEVs. Federal

agencies are also included in the High Priority fleet group to align with the Clean Air Act Section 118 requirements where federal fleet vehicles are to be treated the same as the general vehicle population. There is a significant fleet of federal government vehicles in California that are already well-suited for electrification, including light-duty package delivery vehicles, that operate daily on fixed routes in neighborhoods with frequent stops.

## **Section 2015(a)(2). Scope and Applicability, Vehicle Scope**

### **Purpose**

The purpose of this section is to set forth the scope of vehicles subject to this proposed regulation as vehicles operated in California that: have a gross vehicle weight rating (GVWR) greater than 8,500 lbs., are light-duty package delivery vehicles with a GVWR equal to or less than 8,500 lbs., or are yard tractors.

### **Rationale**

This section is necessary to set forth the types of vehicles subject to the proposed regulation. It is necessary to include vehicles operated in California in the scope as they impact localized air pollution and disadvantaged communities. Medium- and heavy-duty vehicles are responsible for much of California's criteria pollutant and GHG emissions, and many are concentrated around warehouse and freight corridors that disproportionately impact emissions in disadvantaged communities.

Furthermore, the ACT regulation requires manufacturers to produce ZEVs and the proposed ACF regulation requires fleets to begin the initial transition to these ZEVs. These vehicles tend to be owned and operated as fleets. For these reasons, it is necessary to include vehicles with a GVWR over 8,500 lbs. in the scope of the proposed regulation to align the vehicles that are in the scope of two regulations.

It is also necessary to include light-duty package delivery vehicles because they comprise a large fleet that are well-suited for electrification as they operate daily on fixed, predictable routes in neighborhoods with frequent stops. The population of these vehicles are expected to grow rapidly with expanding e-commerce deliveries, and it minimizes the potential for fleets to shift deliveries to light-duty vehicles if excluded, which would become a growing part of emissions. This vehicle classification also applies equally to regulated mail, package, and parcel delivery companies. Over 10,000 ZEVs of this type are currently on order by the United States Postal Service for placement throughout the United States, showing clear operational and technological feasibility for integration into fleet applications.<sup>1</sup>

---

<sup>1</sup> United States Postal Service, [USPS Places Order for 50,000 Next Generation Delivery Vehicles; 10,019 To Be Electric](https://about.usps.com/newsroom/national-releases/2022/0324-usps-places-order-for-next-gen-delivery-vehicles-to-be-electric.htm), March 24, 2022 (web link: <https://about.usps.com/newsroom/national-releases/2022/0324-usps-places-order-for-next-gen-delivery-vehicles-to-be-electric.htm>, last accessed April 2022)

On- and off-road yard tractors are well-suited for electrification due to their duty cycle and fleet operational profiles, as described in the Introduction. These vehicles operate on and near warehouse properties and facilities that are typically concentrated around disadvantaged communities. Off-road tractors are included because they are nearly identical to on-road yard tractors except that they can legally have higher emitting engines due to differing engine emissions standards and would present a potential loophole if excluded from the scope. For these reasons, yard tractors are necessary to include in the scope of this proposed regulation.

## **Section 2015(a)(3). Scope and Applicability, Hiring Entities**

### **Purpose**

The purpose of this section is to establish the applicability of the proposed regulation requirements on hiring entities. The section requires compliance with the proposed regulation's requirements when hiring any motor carrier, broker, governmental agency, person, or entity that hires and operates or hires and directs the operation of vehicles in fleets subject to title 13, CCR sections 2014 through 2014.3, title 13, CCR sections 2013 through 2013.4, or vehicles in fleets subject to this proposed regulation per the scope and applicability of section 2015(a)(1-2).

### **Rationale**

This section is necessary to set forth the entities required to comply with the proposed regulation's hiring requirements to provide another enforcement tool. It is necessary to include motor carriers, brokers, governmental agencies, persons, or entities because all of these are entities that can hire fleets. Requiring that the entities are hiring and operating or hiring and directing the operation of vehicles is necessary because entities that operate or direct vehicles have direct control over the types of fleets and vehicles hired. For hiring entities, this section maintains consistency with the Truck and Bus regulation that has the same type of requirements for fleets that remain subject to the Truck and Bus regulation if not within the scope of the proposed ACF regulation.

It is necessary to specify that hiring entities are only required to comply when hiring fleets subject to the proposed ACF regulations because other CARB regulations already have similar hiring requirements. If the requirement were excluded from the proposed regulation, it would be difficult for the hiring entity to know whether to check compliance because it would not know if a fleet were subject to the proposed regulation or the existing Truck and Bus regulation.

## **Section 2015(b). Definitions**

### **Purpose**

The purpose of this section is to set forth definitions for terms used in the proposed regulation order and identifies the sections for which the definitions apply.

### **Rationale**

This section is necessary to set forth definitions for terms used throughout the proposed regulation.

### **“Authorized dealer”**

#### **Purpose**

The purpose of this definition is to define "authorized dealer" as a sales, service, or repair facility that is recognized by a motor vehicle manufacturer as a sales representative or is authorized and capable of performing repairs to factory specifications, including warranty repair work.

#### **Rationale**

This definition is necessary to set forth the meaning of an authorized dealer to validate vehicle purchases only if made from an authorized dealer, commonly recognized by industry. Verification of the ability to perform repair work under warranty is necessary for the sake of excluding dealers that are not authorized to ensure purchased vehicles and emissions systems are fully compliant with original equipment manufacturer specifications. This is necessary to ensure fleets meet the requirements by purchasing ZEVs from authorized dealers of the ZEV manufacturer.

### **“Backup vehicle”**

#### **Purpose**

The purpose of this definition is to define "backup vehicle" as a vehicle, excluding yard tractors, that is operated infrequently as specified in section 2015.3(a).

#### **Rationale**

This definition is necessary to establish a definition of a backup vehicle for regulated entities to identify which of their vehicles can be designated as backup and are excluded from requirements to upgrade to ZEVs.

Yard tractors are excluded from the definition as they typically operate for low annual miles with a high number of hours and significant emissions. Most yard tractors have

## Appendix H-2

hour meters as opposed to odometers. Due to operations with high hours and low mileage, yard tractors should not be exempt and are highly suitable for electrification as they typically operate within warehouses and freight facilities, which are often concentrated around disadvantaged communities. As a result, electrification of these vehicles would ensure emissions benefits in those areas.

### **“Box truck”**

#### **Purpose**

The purpose of this definition is to define "box truck" as means a single-unit vehicle with a fully- or partially-enclosed space with a roof and at least three sides designed for transporting cargo or payload, excluding the driver and passengers. Examples of included vehicles are those commonly referred to as step vans, refrigerated vans, dry vans, chipper trucks, and box reefer trucks.

#### **Rationale**

This definition is necessary to provide a specific description of a box truck so fleet owners can differentiate between various vehicle types commonly understood by industry when reporting or determining in which Milestone Group a vehicle should be included if using the ZEV Milestone compliance option. The description selected is supported by market research into vehicle body manufacturers.<sup>2</sup>

### **“Broker”**

#### **Purpose**

The purpose of this definition is to define "broker" as any person that, as a principal or agent, sells, offers for sale, negotiates for, or holds itself out by solicitation, advertisement, or otherwise as selling, providing, or arranging for, transportation by motor carrier for compensation. A motor carrier, or person who is an employee or bona fide agent of a carrier, is not a broker when it arranges or offers to arrange the transportation of shipments which it is authorized to transport and which it has accepted and legally bound itself to transport.

#### **Rationale**

This definition is necessary to set forth the entities required to comply with the proposed regulation's hiring requirements. It is necessary to include motor carriers, brokers, governmental agencies, persons, or entities because all of these are entities that can hire and direct fleets.

---

<sup>2</sup> SpecialtyResearch.net, [Truck Body Manufacturing in North America](https://www.specialtyresearch.net/), June 15, 2018 (weblink: <https://www.specialtyresearch.net/>, last accessed April 2022)

## Appendix H-2

This definition is also selected to be consistent with other existing CARB regulations that define “broker” for purposes of hiring requirements to align the proposed ACF regulation with other fleet regulations and to maintain consistency in fleet education and enforcement.

### **“Bus”**

#### **Purpose**

The purpose of this definition is to define "bus" as any vehicle designed, used, or maintained for carrying more than ten persons, including the driver, and is configured with seats for the primary purpose of transporting persons including the driver.

#### **Rationale**

This definition is necessary to provide a description of a bus so fleet owners can differentiate between various vehicle types commonly known as vans or shuttles when reporting, assessing commercial availability, or determining in which Milestone Group a vehicle should be included if using the ZEV Milestone compliance option. The description selected is supported by market research into vehicle body manufacturers.<sup>3</sup>

### **“California fleet”**

#### **Purpose**

The purpose of this definition is to define "California fleet" as the subset of vehicles, including those under common ownership or control, in the total fleet operated by a fleet owner or controlling party in California during a calendar year. If a vehicle is operated in California at any time during a calendar year, it will be considered part of the California fleet for the entire calendar year. Rental vehicles are counted as specified in section 2015.2(d).

#### **Rationale**

This definition is necessary to establish a definition for the term “California fleet” which is used for determining which vehicles must be brought into compliance and have emissions impacts in California. Designating the California fleet as the subset of the total fleet of vehicles operated in the state is necessary to address vehicles that are directed into and out of California and impact emissions in the state. The requirement that all vehicles be counted makes it straight forward to identify vehicles that

---

<sup>3</sup> SpecialtyResearch.net, [Truck Body Manufacturing in North America](https://www.specialtyresearch.net/), June 15, 2018 (weblink: <https://www.specialtyresearch.net/>, last accessed April 2022)



## Appendix H-2

physically operate in California for enforcement purposes. Interstate fleets have the ability to manage their fleet of trucks that come to California.

If vehicles were only counted when a mileage threshold for miles travelled in California were met, it would result in a loophole for fleet owners to send in different trucks during the year to remain below the mileage thresholds and to be excluded from being counted in the regulated fleet size. This would create an additional administrative burden to track mileage inside California for each truck and would create an unfair advantage for out of state fleets compared to instate fleets and would make it difficult to determine whether the truck should be counted in the fleet if inspected or seen in California. It would also reduce the total number of ZEVs and would reduce the expected emissions benefits.

However, it is necessary to establish the exclusion of certain rental vehicles from the California fleet utilizing the provisions of section 2015.2(d) as explained later.

### **"CARB"**

#### **Purpose**

The purpose of this definition is to define "CARB" to mean the acronym for the California Air Resources Board.

#### **Rationale**

This definition is necessary to identify the State Board within CalEPA as the governing body for reporting and recordkeeping requirements, applications for exemptions or extensions, and for enforcement. CARB has been granted the authority to develop and adopt this proposed regulation, and if adopted, CARB staff will implement and enforce it.

### **"Class 4", "Class 5", "Class 6", "Class 7", "Class 8"**

#### **Purpose**

The purpose of this definition is to define each vehicle weight class category by gross vehicle weight rating. "Class 4" means a vehicle with a GVWR greater than 14,000 and less than or equal to 16,000 lbs. "Class 5" means a vehicle with a GVWR greater than 16,000 and less than or equal to 19,500 lbs. "Class 6" means a vehicle with a GVWR greater than 19,500 and less than or equal to 26,000 lbs. "Class 7" means a vehicle with a GVWR greater than 26,000 and less than or equal to 33,000 lbs. "Class 8" means a vehicle with a GVWR greater than 33,000 lbs.

## **Rationale**

This definition is necessary to distinguish the different vehicle classes because the weight class is an indicator of vehicle size, type, and function, and are terms commonly used by industry to differentiate vehicles by GVWR. The definition is necessary because the weight range varies slightly depending on the source. Vehicle class distinction is necessary for reporting purposes and for identifying vehicles that may utilize exemptions or extensions.

## **“Common ownership or control”**

### **Purpose**

The purpose of this definition is to define "common ownership or control" as being owned or managed on a day-to-day basis by the same person or entity. Vehicles managed by the same directors, officers, or managers, or by distinct corporations that are controlled by the same majority stockholders are under common ownership or control, even if their titles are held by different business entities or they have different taxpayer identification numbers. Furthermore, a vehicle is under an entity's control if the vehicle is operated using that entity's state or federal operating authority or other registration. Vehicles owned by different entities but operated using common or shared resources to manage the day-to-day operations using the same motor carrier number, displaying the same name or logo, or contractors whose services are under the day-to-day control of the same entity are under common ownership or control. Common ownership or control of a federal government vehicle shall be the primary responsibility of the governmental agency that is directly responsible for the day-to-day operational control of the vehicle. Common ownership or control includes relationships where the controlling party has the right to direct or control the vehicle as to the details of when, where, and how work is to be performed or where expenses for operating the vehicle, such as fuel or insurance, are shared. Common ownership or control does not include agreements for individual loads that are competitively bid and issued to the lowest qualifying bid.

## **Rationale**

This definition is necessary to define “common ownership or control” because it describes complex relationships in the industry that covers a wide range of business models for entities that compete for the same contracts and work.

Vehicles that are owned or managed on a day-to-day basis by the same person or entity are effectively under the control of that entity. The controlling entity is therefore positioned to manage the composition of the whole fleet and should be responsible for compliance. This ensures that entities with a vehicle ownership model are treated the same as entities that use a common ownership and control model. For example, UPS owns most if not all of its fleet, while FedEx Ground typically services its customers and many of its routes with contractors that own their own vehicles that

## Appendix H-2

display the FedEx logo and are directed by FedEx on a day-to-day basis. This approach maintains a level playing field for companies using different vehicle ownership or control models and minimizes the potential for regulated parties to circumvent the rule requirements by changing their business model.

The same reasoning applies to vehicles managed by the same directors, officers, managers, or corporations controlled by the same majority stockholders, necessitating inclusion of the language. Additionally, this clause prevents avoiding the applicability thresholds by separating into distinct legal entities while effectively providing the same services as a single fleet.

It is necessary to state vehicles using an entity's operating authority or other registration are considered under common ownership or control because operating authority gives the entity the right to control which loads to take or jobs the vehicle must do. Operating authority is required to offer services for hire to shippers.

It is necessary to include vehicles operated using common resources to manage the day-to-day operations using the same motor carrier number, displaying the same name or logo, or contractors who represent the hiring entity because fleets have many different business practices when it comes to managing a fleet and its composition. Using the same motor carrier number gives the controlling entity the right to control which loads to take or jobs the vehicle must do. Including language about displaying the same name or logo is necessary because it is another simple way to identify vehicles operated as part of the same hiring fleet in the field. Logos can be trademarked or copyrighted, and their use on the vehicles provide a clear indicator of a controlling relationship. In this way, the entity that uses contractors with day-to-day control of the fleet of vehicles is treated the same as other fleets and the language is necessary to maintain a level playing field and to minimize the potential for loopholes. The compliance responsibility lies with the controlling party because they ultimately determine the total fleet composition and which contractors are used where an individual contractor cannot have visibility over the whole fleet of vehicles manage by the controlling party and does not have any influence over the rest of the fleet.

It is necessary to establish that federal vehicles are the responsibility of the governmental agency with day-to-day operational control of the vehicles; the same agency is responsible for reporting and compliance with the vehicles they manage. This makes it clear the responsibility lies with the individual agency and that the federal government is not burdened with a requirement to track every vehicle in the State to determine compliance as a single entity when there would be no expected advantages to doing so.

It is necessary to establish that the definition includes relationships where the controlling party has the right to direct or control when, where, and how work is to be performed whether the right is exercised or not. Additionally, it is necessary to establish that the definition includes relationships where expenses for operating the vehicle are shared as another method to show the vehicle operation is not independent and is under common control. Fuel and insurance are examples of expenses that are commonly shared and are clear indicators of a controlling

relationship that is straight forward to determine and relatively simple to audit for enforcement purposes.

## **“Configuration”**

### **Purpose**

The purpose of this definition is to define “configuration” to mean the primary intended function for which a vehicle is designed as determined by the body of a complete vehicle or by the equipment integrated into the body that is permanently attached to the chassis. It does not include auxiliary equipment or secondary uses of equipment that is added to or carried on the vehicle body.

### **Rational**

This definition is necessary to identify what is meant by configuration in terms of vehicle body type. A drivetrain along with a cab and chassis is typically fitted with a body and will be finished into one of many final configurations depending on use. For example, the incomplete chassis is built-out or ‘upfitted’ to a final configuration intended to function as a box truck, construction truck, dump truck, refuse truck, school bus, etc. It is necessary to exclude add-on or auxiliary equipment because these are variable items typically added as aftermarket parts and have no bearing on whether the vehicle configuration is available as a ZEV.

## **“Controlling party”**

### **Purpose**

The purpose of this definition is to define "controlling party" as the motor carrier, broker, or entity that dispatches, directs or otherwise manages the day-to-day operation of one or more fleets under common ownership or control to serve its customers or clients.

### **Rationale**

This definition is necessary to establish the types of entities that may be considered as the controlling parties for purposes of compliance with the proposed regulation for situations where the fleet of vehicles are managed under common ownership and control. Motor carriers and brokers are entities that commonly have common ownership or control over vehicles, and other entities are included to ensure all entity types are included in the definition. The controlling party with common ownership or control of trucks shall ensure that the trucks under their control are compliant with all provisions of this proposed regulation the same as a fleet owner with the same vehicle composition. The importance of this responsibility necessitates establishing a clear definition for controlling party.

## **“Corporate parent”**

### **Purpose**

The purpose of this definition is to define “corporate parent” to mean a business that possesses the majority of shares in another business.

### **Rationale**

This definition is necessary to establish that corporate parents are those that have the majority of another business’s shares. Owning a majority of another business’s shares indicates a controlling interest in the business such that the corporate parent would be responsible for compliance.

## **“Day cab tractor”**

### **Purpose**

The purpose of this definition is to define "day cab tractor" as an on-road tractor without a berth designed for resting or sleeping at the back of the cab and is not a yard tractor.

### **Rationale**

This definition is necessary to provide a description of a day cab tractor so fleet owners can differentiate between various vehicle types commonly understood by industry when reporting, when assessing commercial availability, or when determining which Milestone Group a vehicle should be included if using the ZEV Milestone compliance option. The description selected is supported by market research into vehicle body manufacturers.<sup>4</sup>

## **“Declared emergency event”**

### **Purpose**

The purpose of this definition is to define "declared emergency event" as the time period of an emergency event declared or duly proclaimed by a local governing body, state Governor, or the President of the United States during the emergency conditions described in California Government Code section 8558.

---

<sup>4</sup> SpecialtyResearch.net, [Truck Body Manufacturing in North America](https://www.specialtyresearch.net/), June 15, 2018 (weblink: <https://www.specialtyresearch.net/>, last accessed April 2022)

## **Rationale**

This definition is necessary to establish a period of time during which vehicles may operate in emergency support operations and are excused from immediate compliance as specified in the proposed regulation. It is necessary to specify that emergencies must be declared events by the U.S. President, a State Governor, or other local governing body because those are the entities that have authority to declare such events. The list of event types points to existing California Government Code definitions for various conditions of emergency for simplicity and to align with existing definitions. Events that occur routinely, or are scheduled maintenance activities to prevent potential emergencies, are not included because they are planned daily operations that are part of normal business practices or services and should not be exempt due to foreseeable occurrences.

The duration of each declared emergency is unique and cannot be predicted in advance and the period of time vehicles need to be used to respond to emergencies is established in the declaration or in supporting contracts in response to the declaration. The intent of provisions relying on this definition are to alleviate immediate threats to public safety while establishing a specific time period when the emergency operation has ended for each unique event.

## **“Dedicated snow removal vehicle”**

### **Purpose**

The purpose of this definition is to define "dedicated snow removal vehicle" as a vehicle that has permanently affixed snow removal equipment such as a snow blower or auger and is operated exclusively to remove snow from public roads, private roads, or other paths to allow on-road vehicle access.

### **Rationale**

This definition is necessary to establish a definition of a dedicated snow removal vehicle and identify these vehicles as exempt. It is necessary to only include vehicles with permanently affixed snow removal equipment exclusively removing snow because those vehicles are fairly uncommon, and purpose built in low volumes used exclusively for snow removal in relatively short periods of time. Other vehicles with removable equipment are repurposed for other routine uses throughout the year, have a higher impact on emissions and fuel use, and should not receive the same consideration.

## **“Dispatch”**

### **Purpose**

The purpose of this definition is to define "dispatch" as meaning to provide direction or instruction for routing a vehicle, whether owned or under contract, to specified

destinations for specific purposes, including delivering or receiving cargo, passengers, property, or goods, or providing a service.

## **Rationale**

This definition is necessary because it defines the action that links the motor carrier to the truck moving the cargo. Motor carriers and entities with common ownership and control may dispatch truck operators and it is critical that motor carriers only dispatch compliant vehicles.

## **“Emergency operations”**

### **Purpose**

The purpose of this definition is to define "emergency operation" as the operation of an emergency support vehicle to help alleviate an immediate threat to public health or safety in response to a declared emergency event. Emergency operation includes emergency support vehicle travel to and from a declared emergency event when dispatched by a local, State, federal, or other responsible emergency management agency. Routine operation to prevent public health risks does not constitute emergency operation.

### **Rationale**

This definition is necessary to set forth the circumstances during which authorized emergency support vehicles, in addition to vehicles claiming exemptions for emergency use, can provide emergency response services.

It is necessary to limit operations to alleviating immediate threats to public health or safety and only when responding to declared emergency events because many fleets have emergencies, they routinely respond to within their normal service territories. The intent of this definition is to limit operations to extraordinary circumstances to enable nimble response to major declared emergencies, not to cover issues that fleets deal with on a daily basis, nor to cover emergency prevention service.

Including vehicle travel to and from an event when dispatched by local, state, or federal agencies is necessary because the vehicles may need to travel some distance to assist with the event and it would potentially be impractical to transport all vehicles in a rapid response situation.

## **“Emergency support vehicle”**

### **Purpose**

The purpose of this definition is to define an “emergency support vehicle” as a vehicle other than an authorized emergency vehicle as defined in CVC section 165 that has

been dispatched by a local, State, or federal agency that is used in emergency operations.

### **Rationale**

This definition is necessary to establish a definition of an emergency support vehicle for the purposes of regulated entities identifying which vehicles can be dispatched to provide transport services or supplies in connection with an emergency. The definition is also necessary as it applies to exemptions contained within the proposed regulation and extends to related reporting and recordkeeping requirements.

### **“Energy storage system”**

#### **Purpose**

The purpose of this definition is to define an “energy storage system” to mean a system that is designed to store energy on a ZEV or NZEV, such as the battery pack or hydrogen storage tank.

#### **Rationale**

This definition is necessary to establish a definition for energy storage system, as it is used in determining qualification for exemptions. Zero-emissions vehicles can have battery packs or hydrogen storage tanks and may have other energy storage mechanisms such as flywheels or capacitors.

### **“Executive Officer”**

#### **Purpose**

The purpose of this definition is to define “Executive Officer” as the Executive Officer of CARB, or their delegated representative.

#### **Rationale**

This definition is necessary to establish which Executive Officer is being referenced throughout the proposed regulation. The Executive Officer can grant exemptions to vehicles and request records from regulated entities. These authorities associated with this role necessitates a specific definition.

### **“Federal fleet”**

#### **Purpose**

The purpose of this definition is to define "federal fleet" as vehicles owned by a department, agency, or instrumentality of the federal government of the United States



## Appendix H-2

of America and its departments, divisions, public corporations, or public agencies that operate in California. With respect to the Department of Defense and its service branches, federal fleets may be managed regionally, locally, or a combination of regional and local management. There may be multiple federal fleets within a branch of military service or an installation.

### **Rationale**

This definition is necessary to establish which vehicles are classified as part of the federal fleet. It is necessary to list the types of divisions of the United States government that would be included if operating in California because it is a large entity with many subdivisions and many fleets owned by various subdivisions. Vehicles operated in California contribute to local air pollution, climate pollution, and have outsized impacts in disadvantaged communities.

The Department of Defense has multiple fleets under their authority, and it is necessary to establish how said fleets may be managed or combined for purposes of compliance with the proposed requirements.

### **“Fleet” or “total fleet”**

#### **Purpose**

The purpose of this definition is to define "fleet" as one or more vehicles owned by a fleet owner or under common ownership or control of a controlling party. It also includes rental or leased vehicles that are considered owned by the fleet owner as defined in section 2015(b).

#### **Rationale**

This definition is necessary to establish which vehicles are included when using the term "fleet" throughout the proposed regulation. This definition is based on the "fleet" definition currently being used in existing regulations for consistency. This definition encompasses all vehicles, including those outside of California, because the total fleet size is an indicator of a fleet's ability to make the needed capital investments to transition to ZEVs.

### **“Fleet owner”**

#### **Purpose**

The purpose of this definition is to define "fleet owner" as the person or entity that owns the vehicles comprising the fleet. The owner shall be presumed to be either the person registered with the California Department of Motor Vehicles (DMV) as the owner or lessee of a vehicle, or its equivalent in another state, province, or country.

## Appendix H-2

Vehicle ownership is based on the vehicle registration document or the vehicle title with some exceptions, specified below.

For vehicles that are owned by the federal government and not registered in any state or local jurisdiction, the owner shall be the department, agency, branch, or other entity of the United States, including the United States Postal Service, to which the vehicles in the fleet are assigned or which has responsibility for maintenance of the vehicles.

For vehicles that are rented or leased from a business that is regularly engaged in the trade or business of renting or leasing motor vehicles without drivers, including truck leases that are part of a bundled service agreement, the owner shall be presumed to be the rental or leasing entity for purposes of compliance, unless the rental or lease agreement for the vehicle is for a period of one year or longer and the terms of the rental or lease agreement or other equally reliable evidence identifies the renting operator or lessee of the vehicle as the party responsible for compliance with State laws.

For purposes of enforcement, if the vehicle is inspected and cited for noncompliance with this proposed regulation and neither the operator of the vehicle nor the rental or leasing entity can produce evidence of the party responsible for compliance with State laws, the owner shall be presumed to be both the rental or leasing entity and the renting operator or lessee of the vehicle.

A financing company or a person that only provides financing to a third party in the form of "finance leases," as defined in California Uniform Commercial Code Section 10103(a)(7), is not considered to own the vehicles that are financed. Similarly, a financing company or a person that only provides financing to a third party for powertrain retrofits is not considered to be the owner of the vehicle.

### **Rationale**

This definition is necessary to establish the party responsible for meeting the proposed requirements. It is necessary to set forth who is presumed to own a vehicle by using DMV or other equivalent registration because owners typically register vehicles in their own name or in the name of the company for which the vehicle will work.

Establishing the fleet owner for federal governments is necessary because the vehicles may not be registered in any state, and CARB would need an avenue to identify who would be responsible for compliance. Assigned division or maintenance responsibility are reliable and easy to identify methods by which CARB can identify the fleet owner of such vehicles.

It is necessary to set forth who is presumed to be the owner in rental and leasing arrangements because CARB needs to know who is claiming responsibility for compliance of the rented or leased vehicles. It is common practice in the industry to engage in long term lease contracts of more than one year during which the fleets

## Appendix H-2

may have full control over the vehicle. For example, Truck-as-a-Service business models could lease zero-emission trucks, infrastructure, parking space, and other services as part of a packaged bundle for fleets to lease for multi-year agreements. In those cases, CARB needs to be able to identify who is responsible for compliance with State law, necessitating the clause requiring the contract specify clearly who is responsible in long term lease contracts. It is necessary to apply this clause to contracts of a year or longer because rental or leasing entities would not have operational control over vehicles in such agreements.

The ability to take enforcement action against both the rental or leasing entity and the operator or lessee is necessary for situations where the responsible party cannot be determined because it offers a fail-safe. If neither party is taking responsibility for the vehicle, CARB can take enforcement action against both parties.

Owners of finance leases or powertrain retrofit financiers are necessary to exclude from being considered fleet owners because they do not have any operational control over the vehicle, and therefore cannot be expected to comply with the proposed requirements.

### **“Government agency”**

#### **Purpose**

The purpose of this definition is to define "government agency" as any federal, State, or local public agency, or any other public entity with taxing authority.

#### **Rationale**

This definition is necessary to establish the types of agencies referred to when describing documentation to show the dispatch of a vehicle to support an emergency event.

### **“Gross annual revenue”**

#### **Purpose**

The purpose of this definition is to define "gross annual revenue" as the total revenue, receipts, and sales for a consecutive 12-month period as filed with the Internal Revenue Service.

#### **Rationale**

This definition is necessary to establish a definition for the term “gross annual revenue” as it distinguishes entities subject to the proposed regulation based on applicability criteria. It is necessary to specify revenue, receipts, and sales for a consecutive 12-month period to be consistent with the IRS definitions of gross receipts

to enable enforcement based on tax filings businesses already have to report and keep for IRS purposes.

## **“Gross vehicle weight rating” or “GVWR”**

### **Purpose**

The purpose of this definition is to define "gross vehicle weight rating" or "GVWR" as the same as CVC section 350, as indicated by the characters in the 4-8 positions in a standard 17-character Vehicle Identification Number (VIN).

### **Rationale**

This definition is necessary because it identifies the specific vehicle weights that are subject to the proposed regulation order. The GVWR definition in the CVC is chosen to be consistent with commonly used definitions of GVWR.

## **“Heavy front axle”**

### **Purpose**

The purpose of this definition is to define "heavy front axle" as meaning any front steering axle whose gross weight imposed upon the highway by the wheels is rated to exceed 12,500 lbs. The axle weight rating is typically found on the manufacturer's affixed certification label which contains the Gross Axle Weight Ratings and the GVWR.

### **Rationale**

This definition is necessary to establish criteria for determining whether a vehicle will qualify as a specialty vehicle. An appropriate axle weight is 12,500 lbs. because it exceeds standard maximum axle weight ratings. It was selected by staff to leave out non-specialized Class 8 vehicles, which typically do not have front axles rated over 12,500 lbs. It is easy to identify because it is required to be listed on the label manufacturers must affix to vehicles sold in California that also lists the vehicle's various weight limitations, including the GVWR, gross combined weight rating, and other axle weight ratings. This enables simple identification for the fleet owner, implementation and enforcement of this requirement.

## **“Historical vehicle”**

### **Purpose**

The purpose of this definition is to define "historical vehicle" as a vehicle that meets the qualifications for a historical vehicle and has been issued a historical vehicle license

## Appendix H-2

plate pursuant to the CVC section 5004 and is operated or moved over the highway primarily for the purpose of historical exhibition or other historic vehicle club activities.

### **Rationale**

This definition is necessary to define what is considered a historical vehicle for the vehicle to be exempted from the requirements. The definition was selected to be consistent with existing CVC definitions and requirements for historical vehicles. The requirement that the vehicle only be operated or moved over highway for the purpose of historical exhibition or club activities is necessary to ensure historical vehicles are not used for commercial purposes where they would have a significant impact on emissions.

### **“Hubodometer”**

#### **Purpose**

The purpose of this definition is to define "hubodometer" as a non-resettable device mounted on the axle of a vehicle that measures distance traveled that has a serial number and a lock-out feature that permanently prevents tampering.

#### **Rationale**

This definition is necessary to define a hubodometer as it applies to the vehicle information fleets are required to report, which includes odometer readings. If a vehicle's odometer is not functional, the serial number from a hubodometer with a non-resettable odometer is required to be reported in addition to its readings. It is necessary that the hubodometer have a serial number and lock-out features to enhance enforceability of requirements based on vehicle mileage.

### **“Internal combustion engine vehicle” or “ICE vehicle”**

#### **Purpose**

The purpose of this definition is to define "internal combustion engine vehicle" or "ICE vehicle" as a vehicle with a powertrain powered by gasoline, diesel, natural gas, propane, or other fuel where the sole source of power is from the combustion of the on-board fuel to provide motive power.

#### **Rationale**

This definition is necessary to establish the definition of an internal combustion engine vehicle because the proposed regulation includes limited exemptions and exclusions to operate or purchase ICE vehicles, including situations where ZEVs or NZEVs are not commercially available in certain body configurations, available ZEVs would not meet a fleet's daily needs, for backup vehicles that operate less than 1,000 total miles per

year, and for authorized emergency use purposes. The description chosen is necessary because combustion of fuel onboard fuel to provide motive power is a necessary condition for a vehicle to be considered an ICE vehicle.

## **“Interstate rental fleet owner”**

### **Purpose**

The purpose of this definition is to define "interstate rental fleet owner" as a fleet owner that regularly engages in the trade or business of renting vehicles without drivers with rental origins and destinations outside of California.

### **Rationale**

This definition is necessary to establish a definition for an interstate rental fleet owner so entities that match the description may utilize the Rental Vehicle provision in section 2015.2. Vehicles are usually rented to a fleet without drivers, because the renter typically uses the vehicle or supplies a driver. It is necessary to specify that the fleet must have rental origins and destinations outside of California because the provision that uses this definition is crafted specifically to deal with challenges with rental vehicles that cross state lines.

## **“Lessee”**

### **Purpose**

The purpose of this definition is to define “Lessee” to have the same meaning as in CVC section 371.

### **Rationale**

This definition is necessary to establish a definition of a lessee because the lessee of a truck is considered a truck owner and will be responsible for compliance with this proposed regulation if the leasing contract specifies that the lessee is responsible for compliance and the contract is for more than one year. The CVC definition was selected to be consistent with already established definitions in the state Vehicle Code.

## **“Light-duty package delivery vehicle”**

### **Purpose**

The purpose of this definition is to define "light-duty package delivery vehicle" as a motor vehicle with a GVWR equal to or less than 8,500 lbs. with equal to or greater than 100 cubic feet of cargo-carrying volume, as defined in title 49, CFR section 523.2

## Appendix H-2

as it existed on June 3, 2022, that is regularly used to deliver packages, parcels, or mail.

### **Rationale**

This definition is necessary to provide a description of a light-duty package delivery vehicle so fleet owners can differentiate between various vehicle types commonly understood by industry when reporting, assessing commercial availability, or determining in which Milestone Group a vehicle should be included if using the ZEV Milestone compliance option. The description selected is supported by market research into vehicle body manufacturers and assessments of available vehicle cargo space supplied on original equipment manufacturer websites.<sup>5</sup>

The limitation to only include vehicles with 100 cubic feet of cargo-carrying volume is necessary to exclude from requirements cars, light SUVs, and other light duty vehicles with open cargo space, such as pickup trucks, that are not equipped or configured to have space for regularly transporting parcels, packages, or mail. United States Postal Service mail carrier trucks are typically configured with over 100 cubic feet of cargo space. The definition of cargo-carrying volume is necessary to point to an existing defined term that is used and commonly understood by industry.

The limitation to only include vehicles used to deliver packages, parcels, or mail to the destination from the last point of distribution is necessary to exclude light-duty vehicles that do not engage in last mile delivery-type operations.

### **“Manufacturer”**

#### **Purpose**

The purpose of this definition is to define "manufacturer" as any entity or person who manufactures or assembles new on-road motor vehicles or yard tractors, 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, the term manufacturer includes any person who manufactures or assembles an on-road vehicle, a cab and chassis, or other incomplete on-road vehicle for sale in California, or otherwise introduces a new on-road motor vehicle into commerce in California. This includes importers who import on-road vehicles for resale. This does not include persons who supply parts to the importer or vehicle manufacturer of record.

#### **Rationale**

This definition is necessary to describe what a manufacturer is in order to limit the scope of the regulations to only affect intended parties. The definition closely aligns

---

<sup>5</sup> SpecialtyResearch.net, [Truck Body Manufacturing in North America](https://www.specialtyresearch.net/), June 15, 2018 (weblink: <https://www.specialtyresearch.net/>, last accessed April 2022)

## Appendix H-2

with existing regulations for consistency. Dealers are excluded because they do not manufacture vehicles but may be construed as representing a manufacturer and are a point of sale. Importers of vehicles for resale are included to minimize the potential for importers to gain a competitive advantage and to guard against manufacturers from circumventing the requirements by passing vehicles for sale in California through another entity to artificially reduce compliance obligations.

### **“Milestone Group 1”, “Milestone Group 2”, “Milestone Group 3”**

#### **Purpose**

The purpose of this definition is to define "Milestone Group 1", "Milestone Group 2", and "Milestone Group 3". Milestone Group 1 means the light-duty package delivery vehicles, box trucks, vans, buses with two axles, and yard tractors in the California fleet. Milestone Group 2 means the work trucks, day cab tractors, and buses with three axles in the California fleet. Milestone Group 3 means the sleeper cab tractors and specialty vehicles within the California fleet.

#### **Rationale**

This definition is necessary to define the vehicle body types that are classified under each milestone group as the concept is pertinent in determining which milestone group a vehicle should be included in if using the ZEV milestone compliance option. The distinction of which vehicles are in each milestone group is also crucial for the purpose of the ZEV milestone calculation in the determining compliance for the fleet which relies on the correct classification of each vehicle in each milestone group.

### **“Minimum useful life”**

#### **Purpose**

The purpose of this definition is to define "minimum useful life" as the minimum period of time a vehicle may remain in the California fleet, distinguished as 13 years commencing from the model year that the engine and emissions control system in a commercial vehicle was first certified for use by CARB or U.S. EPA, or the date that the commercial vehicle exceeded 800,000 vehicle miles traveled or 18 years from the model year that the engine and emissions control system of that vehicle was first certified for use by CARB or U.S. EPA (whichever is earlier).

#### **Rationale**

This definition is necessary to define "minimum useful life" as it applies to ICE vehicle removal as part of the Model Year Schedule requirements of section 2015.1(b). It matches the California Health and Safety Code (HSC) section 43021(a) requirements for providing a minimum useful life for commercial vehicles but expands the definition slightly to include all vehicle types; "commercial" as defined in the HSC exempts



## Appendix H-2

certain vehicles from these protections. This provides some additional flexibility to fleets and simplifies the proposed regulation by applying the definition uniformly to all affected vehicles.

### **“Model year”**

#### **Purpose**

The purpose of this definition is to define "model year" as a designation meeting the definition of "model year" under title 17, CCR section 95662(a)(16).

#### **Rationale**

This definition is necessary to inform fleet owners when reporting purchased vehicles what the model year is defined as. The definition was selected to be consistent with the definition of model year as defined in California Phase 2 Greenhouse Gas regulation.

### **“Motor carrier”**

#### **Purpose**

The purpose of this definition is to define "motor carrier" as the same as defined in CVC section 408.

#### **Rationale**

This definition is necessary to establish a definition for "motor carrier" because some requirements and definitions are only applicable to motor carriers. The motor carrier definition in the CVC was chosen to be consistent with commonly used definitions of motor carrier.

### **“Near-zero-emissions vehicle” or “NZEV”**

#### **Purpose**

The purpose of this definition is to define "near-zero-emissions vehicle" or "NZEV" as a vehicle as defined in title 13, CCR section 1963(c)(16) that is capable of operating like a ZEV using electricity stored on-board the vehicle for a minimum number of miles, or "all-electric range", as specified and tested in accordance with section 1037.150p(2)(ii) of "California Greenhouse Gas Exhaust Emission Standards and Test Procedures for 2014 and Subsequent Model Heavy-Duty Vehicles," as last amended September 9, 2021, which is incorporated by reference herein.

## **Rationale**

This definition is necessary to establish which vehicles are NZEVs. The definition was selected to be consistent with the definition of NZEV in the ACT regulation and the test procedures for determining all-electric range established in the California Phase 2 Greenhouse Gas regulations. The NZEV definition is broader than the California Phase 2 GHG definition for PHEV because it also includes vehicles that can be charged without a plug from an external source such as wireless charging or catenary systems.

NZEVs are considered a bridge technology which will help the development of the full ZEV market by electrifying sectors not well suited to full electrification and supporting the ZEV supply chain. Conventional hybrid technologies have been commercially available in the heavy-duty sector for over a decade at this point, and other regulations including the California Phase 2 GHG regulation already incentivize their purchase and use. Because the objective of the proposed regulation is to foster the deployment of ZE technologies, hybrid vehicles without ZE capability are not sufficient to meet the proposed regulation's goals. Staff is allowing these near-zero-emission plug-in hybrids to count as a ZEV for a limited period of time.

Additionally, the definition of "NZEV" used in the proposed regulation and the existing ACT regulation applies to 2024 and later model years when all new engines sold are expected to have significantly lower emissions as required by the Heavy-Duty Omnibus regulation. At that point, it is not meaningful to include solely combustion-powered vehicles in the definition of NZEV as all new ICE vehicles sold in California will simply meet the new standards and certification requirements.

## **"Notice to proceed"**

### **Purpose**

The purpose of this definition is to define "notice to proceed" as a written direction to a vehicle manufacturer or powertrain conversion installer or to commence production or conversion of a vehicle as provided in a contract.

### **Rationale**

This definition is necessary to establish a definition for the "notice to proceed" that certain fleets must supply as proof of a vehicle addition to the fleet. The definition chosen is a commonly understood term used in industry as the official written instruction to a contractor that a project timeline can officially begin; this carries over to instructing manufacturers to produce contractually agreed upon vehicles. It is an official document CARB can use to implement and enforce requirements.

## **“Pickup truck”**

### **Purpose**

The purpose of this definition is to define "pickup truck" as a vehicle that is configured with an open box-type bed and meets the definition set forth in CVC section 471.

### **Rationale**

This definition is necessary to provide a description of a pickup truck so fleet owners can differentiate between various vehicle types commonly understood by industry when reporting or assessing commercial availability. The definition was selected to be consistent with existing definition for pickup trucks in the CVC.

## **“Rated energy capacity”**

### **Purpose**

The purpose of this definition is to define "rated energy capacity" means the amount of electrical energy, in watt-hours (Wh), that can be extracted from a fully charged energy storage system, based on or derived from the results of testing or analysis. The rated energy capacity includes the electrical energy of the battery pack that is not accessible due to a manufacturer-programmed decrease in energy capacity for battery pack protection.

### **Rationale**

This definition is necessary to explain what a rated energy capacity means in terms of a ZEV's energy system. This definition is needed to provide context for the daily usage exemption that only applies to certain vehicle body types if their rated energy capacity falls below a minimum threshold. The definition was selected to be consistent with CARB's Zero-Emission Powertrain Certification regulation, which manufacturers will be required to follow to earn ZEV credits in the ACT regulation starting in 2024. This alignment is necessary because the Daily Usage exemption will rely on information that must be supplied by manufacturers selling ZEVs into California that must comply with the certification requirements.

## **“Removed from the California fleet”**

### **Purpose**

The purpose of this definition is to define "removed from the California fleet" as a vehicle that is no longer operated in California by the fleet owner on or after the date the vehicle meets one of the following conditions: destroyed or scrapped, sold out of

## Appendix H-2

the fleet or transferred out-of-state, or for controlling parties, common ownership or control of the vehicle ends.

### **Rationale**

This definition is necessary to establish criteria by which CARB will consider a vehicle permanently removed from the California fleet. It is necessary to require vehicles are no longer operated in California by the fleet owner, in addition to one of the other criteria, to prevent potential loopholes with fleets repairing, re-purchasing, or reintroducing vehicles to the California fleet after having claimed to remove them. This ensures vehicles are no longer impacting emissions in California after the fleet removes them.

If a vehicle is destroyed or scrapped, it is a clear indicator the vehicle will no longer be used in the fleet. Filing for planned non-operation or affidavits of non-use with the DMV provide a clear paper trail with the fleet's intent to not use the vehicles.

Selling the vehicle out of the fleet or transferring it out of state show the vehicle is either no longer under the control of the fleet owner, or the vehicle will no longer be operated in California. It provides flexibility to fleets to move their vehicles into the secondary market and provides flexibility for national fleets to manage their vehicles by moving them to operate in other states with less air quality challenges.

For controlling parties, it is necessary to establish a method to remove vehicles that are not owned by the controlling party; controlling parties would not be able to sell, PNO, or destroy vehicles they do not own. However, they can permanently end their common ownership or control relationship with the vehicle's owner, and thus remove the vehicle from operating as part of their fleet.

### **"Rental vehicle"**

#### **Purpose**

The purpose of this definition is to define "rental vehicle" as a vehicle that is rented to an entity for a period of less than one year without a driver.

#### **Rationale**

This definition is necessary to distinguish the definition of a rental vehicle to identify which vehicles are applicable to the rental vehicle provision and subsequent reporting. It is also necessary to specify the rental vehicle definition for the purpose of identifying the vehicle owner responsible for compliance of rental vehicles, as part of the California fleet, with the proposed regulation. The rental period of less than one year covers short-term rental relationships that the rental fleets have little control over, due to the unpredictable use of short-term rentals.

## **“Responsible official”**

### **Purpose**

The purpose of this definition is to define "responsible official". For a corporation, a responsible official is defined as president, chief executive officer, chief financial officer, secretary, treasurer, or vice president of the corporation in charge of a principal business function, or a delegate, designee, or any other person who performs similar policy or decision-making functions for the corporation. For a partnership or sole proprietorship, a responsible official is defined as general partner or the proprietor, or the delegate or designee of the aforementioned, or any other person who performs similar policy or decision-making functions for the business, or the chief executive officer, or the chief financial officer. For a federal government agency, a responsible official is defined as either a principal executive officer or ranking elected official. For the purposes of this part, a principal executive officer of a federal agency includes the chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., a Regional Administrator of the U.S. EPA). For the purposes of the Department of Defense Military Services, a principal executive officer includes a commanding officer of an installation, base, or tenant organization.

### **Rationale**

This definition is necessary to define who will be responsible for ensuring the entity or agency meets the proposed requirements. The definition was selected to be consistent with CARB’s Truck and Bus regulation. It is necessary to identify who would be responsible in various business types because complex business relationships can make it less clear who is responsible for compliance with regulations.

## **“Sleeper cab tractor”**

### **Purpose**

The purpose of this definition is to define "sleeper cab tractor" as a tractor with a berth designed for resting or sleeping at the back of the cab.

### **Rationale**

This definition is necessary to provide a description of a sleeper cab tractor so fleet owners can differentiate between various vehicle types commonly understood by industry when reporting, assessing commercial availability, or determining in which Milestone Group a vehicle should be included if using the ZEV Milestone compliance

option. The description selected is supported by market research into vehicle body manufacturers.<sup>6</sup>

### **“Specialty vehicle”**

#### **Purpose**

The purpose of this definition is to define "specialty vehicle" as a vehicle with a GVWR greater than 33,000 lbs. and with a heavy front axle, or a vehicle with a GVWR greater than 33,000 lbs. that is not designed to carry cargo and its primary intended function is to perform work that can only be done while the vehicle is stationary and the auxiliary mechanism to perform that work is an integral part of the vehicle design. Examples include vehicles commonly known as vacuum trucks, digger derricks, and concrete pump trucks.

#### **Rationale**

This definition is necessary to provide a description of the types of vehicles considered "specialty" so fleet owners can differentiate between various vehicle types commonly understood by industry when reporting, assessing commercial availability, or determining in which Milestone Group a vehicle should be included if using the ZEV Milestone compliance option.

The limitation vehicles with a GVWR greater than 33,000 lbs. and with a heavy front axle that is rated to exceed 12,500 lbs. is necessary for this definition. California's Government Code section 11343.3 requires state agencies, including CARB, to "take into account vehicle weight impacts and the ability of vehicle manufacturers or vehicle operators to comply with laws limiting the weight of vehicles."<sup>7</sup> CARB notes that the front axle weight limitation imposed by the CVC section 35551.5(b) for combination vehicles with trailers includes exemptions for many specialized vehicles which would have front axles rated over this weight, up to 20,000 lbs. which is the statutory limit per axle in CVC section 35550(a). Additionally, the CVC section 35551(f)(1) allows zero- and near-zero-emissions vehicles (as defined in HSC 44258(c) and (d)) up to 2,000 lbs. additional weight on the whole power unit. CARB has assessed these limitations to determine that 12,500 lbs. is appropriate lower limit for defining specialty vehicles because many types of specialty vehicles that are already weight-limited have front axles that exceed this weight and could take more time for ZEV technology improvements to reduce weight concerns or for retail infrastructure to be available so that smaller battery packs could be used.

It is necessary to limit the definition to Class 8 vehicles (GVWR >33,000 lbs.) because lighter vehicles can be rated into a higher weight class category if needed to adjust to

---

<sup>6</sup> SpecialtyResearch.net, [Truck Body Manufacturing in North America](https://www.specialtyresearch.net/), June 15, 2018 (weblink: <https://www.specialtyresearch.net/>, last accessed April 2022)

<sup>7</sup> California Government Code, GOV Section 11343.3 (web link: <https://codes.findlaw.com/ca/government-code/gov-sect-11343-3.html>, last accessed June 2022)

## Appendix H-2

any weight impacts from ZEV powertrains when Class 8 vehicle cannot. It is prudent to allow more time for technology improvements and expected weight reductions for heavier vehicles. Vehicles more sensitive to weight issues are those that already exceed the front axle limits imposed by the CVC (12,500 lbs.).

It is necessary to alternatively define specialty vehicles as Class 8 vehicles designed for stationary work with vehicle integrated equipment that typically use power take-off mechanisms to drive equipment with the vehicles' traction motor. This is necessary to address vehicles with high energy use as these vehicles will require bigger batteries or more hydrogen storage which result in potential weight concerns for weight limited vehicles. These vehicles are also more likely to remain on the worksite rather than return to the home base location. Considering the configurations that accommodate the necessary weight capacities of specialty vehicles, it is prudent to allow for ZEV technology to develop further to encompass heavier vehicles in the future.

### **"Standard rounding convention"**

#### **Purpose**

The purpose of this definition is to distinguish "standard rounding convention" as meaning to round the value up to the nearest whole number when the fractional part is equal to or greater than 0.5, and round down to the nearest whole number if less than 0.5 if the calculated value is not equal to a whole number.

#### **Rationale**

This definition is necessary to define "standard rounding convention" as it applies to the ZEV milestone calculation if the sum is not a whole number. The concept ensures consistency in determining the ZEV milestone in the circumstances that the sum is a fraction.

### **"Subsidiary"**

#### **Purpose**

The purpose of this definition is to define "subsidiary" as an entity controlled by another entity.

#### **Rationale**

This definition is necessary to define who will be responsible for ensuring the entity or agency meets the proposed requirements.

## **“Tractor”**

### **Purpose**

The purpose of this definition is to define "tractor" as an on-road vehicle meeting the definition of "tractor" in title 17, CCR section 95662(a)(23), or the definition of "vocational tractor" in title 17, CCR section 95662(a)(27).

### **Rationale**

This definition is necessary to provide a general description of a tractor so fleet owners can differentiate between various vehicle types commonly understood by industry when reporting or assessing commercial availability. The definitions selected are to be consistent with existing CARB regulations and are the same as used in the ACT regulation to align with that program's requirements to build and sell ZEV tractors.

## **“Two-engine vehicle”**

### **Purpose**

The purpose of this definition is to define "two-engine vehicle" as a specially constructed on-road mobile vehicle that was designed by the original equipment manufacturer to be equipped with two engines: one engine provides the primary source of motive power of the vehicle while the second engine is an auxiliary engine with 50 brake horsepower or greater that is permanently attached and integrated into the original design of the vehicle to perform a specific function, which may include providing auxiliary power to attachments, performing special job functions, or providing additional motive power. If a vehicle was originally designed with the capability to have an auxiliary engine installed, but the auxiliary engine was installed by someone else other than the original equipment manufacturer, the vehicle still qualifies as a two-engine vehicle. Two-engine street sweepers are not included in this definition.

### **Rationale**

This definition is necessary to establish a definition of a two-engine vehicle to identify that these vehicles are exempt from the compliance requirements of section 2015(c). This definition was selected to align with existing Truck and Bus regulation and the In-use Off-Road Vehicle regulation because these vehicles are specialized equipment that is fairly uncommon, has high energy use characteristics and are less likely to be manufactured as ZEVs.

It is necessary to exclude two-engine street sweepers from this definition because street sweepers are already available as ZEVs and are suited for electrification.



## **“Van”**

### **Purpose**

The purpose of this definition is to define "van" as a single unit vehicle with configured with seats to transport passengers or with an enclosed space for the primary purpose of transporting cargo and equipment.

### **Rationale**

This definition is necessary to provide a general description of a van so fleet owners can differentiate between various vehicle types commonly understood by industry when reporting or assessing commercial availability. The description selected is supported by market research into vehicle body manufacturers.<sup>8</sup>

## **“Vehicle” or “motor vehicle”**

### **Purpose**

The purpose of this definition is to define "vehicle" or "motor vehicle" as self-propelled equipment that has a GVWR greater than 8,500 lbs. that is intended for use on highways and meets the definition set forth in title 17, CCR section 95662(a)(26), equipment that has a GVWR equal to or less than 8,500 lbs. and meets the definition of light-duty package delivery vehicle per section 2015(b)(39) and is intended for use on highways, or is a yard tractor that is not intended for use on highways.

### **Rationale**

This definition is necessary to establish what constitutes a vehicle as this proposed regulation aims to reduce emissions from vehicles by transitioning them to ZE technology. In addition, the word “vehicle” is also referenced in the definitions of many other terms throughout this document and provides clarity to those definitions as well. It is necessary to include the three vehicle categories listed as the regulation requirements apply to all three categories.

## **“Vehicle awaiting sale”**

### **Purpose**

The purpose of this definition is to define "vehicle awaiting sale" as a vehicle in the possession of a dealer, financing company, a private party, or other entity that does not intend to operate the vehicle in California or offer the vehicle for hire for operation in California, and it is operated only to demonstrate functionality to potential buyers,

---

<sup>8</sup> SpecialtyResearch.net, [Truck Body Manufacturing in North America](https://www.specialtyresearch.net/), June 15, 2018 (weblink: <https://www.specialtyresearch.net/>, last accessed April 2022)

## Appendix H-2

to move short distances to make repairs, or for maintenance or storage. It also includes new vehicles when driven for the first time to be delivered to the ultimate purchaser outside of California.

### **Rationale**

This definition is necessary to establish a definition of a vehicle awaiting sale to identify these vehicles as exempt from the proposed requirements as stated in section 2015(c). The definition was selected to align with CARB's Truck and Bus regulation and is a recognition the vehicle is being removed from the fleet and is no longer being used and ensures a fleet owner would not be out of compliance due to the time it takes to sell a used vehicle on the open market or at auction.

### **"Vehicle Identification Number" or "VIN"**

#### **Purpose**

The purpose of this definition is to define "vehicle identification number" or "VIN" to mean an alpha numeric code which has been permanently assigned by the manufacturer to a vehicle.

#### **Rationale**

This definition is necessary to establish a definition of a vehicle identification number or VIN to be consistent with other regulations and the VIN is used as a primary and unique identification for reported vehicles.

### **"Vehicle purchase" or "purchase"**

#### **Purpose**

The purpose of this definition is to define "vehicle purchase" or "purchase" as meaning the fleet owner has placed an order for a vehicle or powertrain conversion for immediate delivery or installation and has already paid for or has entered into a binding agreement with the authorized dealer, powertrain conversion installer, third party, or manufacturer to pay for the vehicle or conversion.

A vehicle purchase includes where the fleet owner has executed one of the following: identified, committed and encumbered funds and executed a written notice to proceed executed by a fleet owner to a manufacturer or powertrain conversion installer to begin production of the vehicle either under a previously-entered purchase contract or to execute a contract option; a written purchase agreement between a fleet owner and the manufacturer or powertrain conversion installer that specifies the date when the work to manufacture or convert the vehicle is to proceed; a written purchase agreement between a fleet owner and another party for the purchase and immediate delivery of a used vehicle; or a signed written lease agreement between a

## Appendix H-2

fleet owner and the manufacturer or authorized dealer for a new vehicle to be placed in service for a contract term of one year or more.

### **Rationale**

This definition is necessary for fleet owners to identify the parameters of a vehicle purchase as it applies to various exemptions and extensions and in determining compliance. It is also necessary as it applies to the vehicle information fleets are required to report as well as the type of information needed for recordkeeping for vehicles that have been purchased.

Binding agreements with relevant parties are necessary because non-binding agreements are insufficient for indicating a fleet intends to purchase and take delivery of a vehicle, and CARB needs assurance the addition will take place. Encumbering funds with a written notice to proceed show a fleet owner is attempting to add a vehicle in good faith and provides assurance that the fleet intends to add the vehicle. Purchase agreements and lease agreements are legally binding contracts that provide assurance the fleet will add the vehicle.

### **“Work Truck”**

#### **Purpose**

The purpose of this definition is to define "work truck" as a vehicle that does not meet any of the definitions of box truck, van, bus, light-duty package delivery vehicle, day cab tractor, sleeper cab tractor, or specialty vehicle.

#### **Rationale**

This definition is necessary to establish a vehicle term that excludes all other vehicle types already identified in the proposed regulation so fleet owners can differentiate between various vehicle types commonly understood by industry when reporting or assessing commercial availability and which compliance Group each vehicle will be counted. This term is used as a catchall for all vehicle types that are not otherwise defined in the ZEV Milestone compliance option to ensure all vehicle types are transitioned to ZEs.

### **“Yard Tractor”**

#### **Purpose**

The purpose of this definition is to define "yard tractor" as a vehicle that 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.

## **Rationale**

This definition is necessary for fleet owners to identify which of their vehicles are in the scope of the proposed regulation. On-road and off-road yard trucks are commonly used in similar applications and therefore are both subject to the proposed regulation. Primarily, the difference between off- and on-road yard tractors are the addition of safety equipment which allow the vehicles to be legally driven on-road between warehouses or truck yards. Off-road yard trucks also may be equipped with off-road certified engines that tend to have higher emissions than on-road certified engines. Their appearance and primary duty cycles are almost identical.

## **“Zero-emissions powertrain”**

### **Purpose**

The purpose of this definition is to define "zero-emissions powertrain" per CCR 1956.8(i)(12), as an all-electric or hydrogen fuel-cell powertrain assembly, which includes (if applicable) the electric traction motor, system controller, generator, on-board charger, battery management system, thermal management systems, energy storage system (batteries, capacitors, and flywheels), inverter, fuel-cell stack, and the interface at which electrical power is converted to tractive mechanical power or vice-versa (in the case of a regenerative braking system), certified pursuant to the requirements incorporated by reference in title 13, CCR section 1956.8.

### **Rationale**

This definition is necessary because it describes the components of ZE technology. Fleet owners and operators are more familiar with other types of powertrains and this proposed regulation will provide them an opportunity to transition to newer technologies. As CARB transitions vehicles to ZE technology, it is important to clarify exactly what is required and the certification requirements. This definition of ZE powertrain is consistent with the Zero-Emission Powertrain Certification Regulation.

## **“Zero-emissions vehicle” or “ZEV”**

### **Purpose**

The purpose of this definition is to define "zero-emissions vehicle" or "ZEV" as a vehicle with a ZEs powertrain that produces zero exhaust emission of any criteria pollutant (or precursor pollutant) or greenhouse gas under any possible operational modes or conditions.

### **Rationale**

This definition is necessary to simplify the language by grouping all ZEV types in this definition. This allows the language to address all ZEVs together rather than needing

to describe each type of ZEV (including BEVs and FCEVs) separately each time it is needed.

## **Section 2015(c), 2015(c)(1-11). Exemptions**

### **Purpose**

The purpose of this section is to identify the types of vehicles that are exempt from this proposed regulation. Vehicles that would be excluded are: school buses as defined in CVC 545(a); military tactical vehicles as defined in title 13 CCR section 1905; vehicles awaiting sale; emergency vehicles as defined in CVC section 165; historical vehicles; dedicated snow-removal vehicles, two-engine vehicles; heavy cranes as defined in title 13 CCR section 2021(b)(16); transit vehicles subject to the ICT regulation commencing with title 13 CCR section 2023; vehicles subject to the regulation for Mobile Cargo Handling Equipment at Ports and Intermodal Rail Yards commencing with title 13, CCR section 2479; and public entities and the vehicles owned by them that are subject to the proposed regulation for State and Local Government Fleets commencing with title 13, CCR section 2013.

### **Rationale**

This section is necessary for fleet owners to identify which specific vehicles and fleets are outside of the scope of this proposed regulation.

School buses as defined in CVC section 545(a) are necessary to exempt because school buses are covered by other regulations<sup>9</sup> and are already being upgraded to with special incentives to replace older diesel vehicles with new, cleaner technologies including ZEV.<sup>10</sup>

Military tactical vehicles as defined in title 13, CCR section 1905 are exempt to ensure the military has maximum flexibility in determining the appropriate vehicle technology for vehicles that may be deployed to minimize any potential national security concerns.

Vehicles awaiting sale are necessary to be exempt because they are not driven for purposes other than demonstrating their capability to potential buyers, and therefore have minimal emissions impacts. Dealers with new vehicles sitting on lots awaiting sale have no ownership or control interest in the vehicles, nor do they operate the vehicles. Similarly, vehicles that are sold at auction must wait until the auction date and are not being operated. There is no purpose in making the owner or dealer responsible for upgrading the vehicles before they are sold to the ultimate purchaser.

---

<sup>9</sup> For more information see CARB's website, <https://ww2.arb.ca.gov/our-work/programs/school-buses/regulations-affecting-school-fleets>

<sup>10</sup> For more information see CARB's website, <https://ww2.arb.ca.gov/our-work/programs/school-buses/funding-clean-school-buses>

## Appendix H-2

It is necessary to exempt emergency vehicles, such as ambulances, as defined in CVC section 165 because CARB does not have authority to regulate these vehicles per VC 27156.2.

It is necessary to exempt historical vehicles because they are only driven for exhibition purposes with minimal emissions impacts from usage. The vehicles are also not used commercially to generate revenues. Upgrading the vehicle to ZEs would also lessen the historical or cultural value of these types of vehicles.

Dedicated snow removal vehicles are necessary to exempt because they have challenging duty cycles, high power needs, extreme operating conditions, and operate in remote locations. Additionally, low manufacturing volumes make these unlikely to be commercially available in the earlier years of the proposed implementation timeline.

Two-engine vehicles are necessary to exempt because they have challenging duty cycles, high power needs that would necessitate larger batteries to perform the same work as an ICE vehicle which may present challenges to vehicle design, payload, safety, and weight constraints. Additionally, low manufacturing volumes make these unlikely to be commercially available in the earlier years of the proposed implementation timeline.

It is necessary to exempt heavy cranes as defined in title 13, CCR section 2021(b)(16) because they already have existing requirements in other regulations that overlap with the proposed timeline for this regulation. Additionally, these vehicles have unique duty cycles, considerably higher capital cost compared to other vehicle types, Occupational Safety and Health Administration loading design safety requirements. Additionally, low manufacturing volumes make these unlikely to be commercially available in the earlier years of the proposed implementation timeline.

Transit vehicles subject to title 13, CCR section 2023 are necessary to exempt because they are already subject to ZE upgrade requirements in the ICT regulation.

Vehicles subject to the regulation for Mobile Cargo Handling Equipment at Ports and Intermodal Rail Yards commencing with title 13, CCR section 2479 are exempt because they already have requirements under separate regulations, and it is more practical to maintain continuity by addressing all vehicles operated on those sites in a separate regulation.

Public agencies subject to title 13, CCR section 2013 and their vehicles are also necessary to exempt because they are already subject to ZE upgrade requirements in that proposed regulation.

## **Section 2015(d). General Requirements**

### **Purpose**

The purpose of this section is to establish January 1, 2024 as the start date of the general requirements and to set forth the requirement for fleet owners to either comply with the Model Year Schedule requirements of section 2015.1 or voluntarily follow the alternative ZEV Milestone compliance path of section 2015.2.

### **Rationale**

This section is necessary to inform regulated entities when they will be expected to begin complying with either of the two compliance options for the proposed regulation. Setting the regulatory start date on January 1, 2024 is necessary to give regulated entities sufficient lead time to select a compliance option and plan compliance strategies for their fleets while balancing the needs for emissions reductions as soon as possible, meeting the Governor's Executive Order N-79-20, and meeting CARB's ZEs goals set forth in Resolution 20-19.

## **Section 2015(e). NZEV Flexibility**

### **Purpose**

The purpose of this section is to establish that NZEVs with a 2035 model year or older will be treated the same as ZEVs for complying with either the ZEV milestones or ZEV purchases compliance paths.

### **Rationale**

This section is necessary to provide flexibility to businesses that may have duty cycles or business models with extended range, high auxiliary power, or minimal refueling downtime operational needs.

This section acknowledges the role NZEVs play as a bridging technology between internal combustion powered vehicles and full zero-emissions vehicles. NZEVs generally have the same electric drive components and control systems as ZEVs and can provide fleets experience with ZEV technology in the early market without purchasing ZEVs and can result in the same benefits as ZEVs depending on all-electric range, how the vehicle is used and whether it can be charged daily.

Allowing fleets to count NZEVs towards compliance as a ZEV helps reduce the number of suitability or availability exemptions that might be needed and requested because NZEVs can be refueled like conventional vehicles and ensures progress can be made in applications that may not be fully suitable for ZEVs until the market develops further.

It is necessary to set a limit on the amount of time that NZEVs can be granted the same credit as ZEVs to ensure industry continues to progress towards full adoption of

ZEVs everywhere feasible. Staff expects that as ZEV technology improves over time and ZE fueling infrastructure becomes widespread, range and power needs will be met with available ZEVs and NZEVs will no longer need to be credited as a bridging technology. The 2035 model year cutoff was selected to be consistent with the NZEV crediting provisions of the complementary ACT regulation, which also sunset after 2035.

## **Section 2015(f). Controlling Party Compliance Requirements**

### **Purpose**

This purpose of this section is to require controlling parties to meet the same regulation requirements as fleet owners, to report and comply with vehicles operated under common ownership or control in California as part of the controlling party's fleet, and to direct the controlling parties to specific portions of the proposed regulation's reporting requirements. The section also specifies that controlling parties may take advantage of the same extensions, exemptions, or provisions that fleet owners may utilize, and refers to the reporting requirements unique to controlling parties.

### **Rationale**

This section is necessary to ensure that controlling parties meet the same requirements as fleet owners. It ensures that all fleets regardless of business model are treated equally in the proposed regulation.

Controlling parties may or may not own any vehicles but have control over vehicles owned by others such that they are effectively the same as a fleet owner in controlling when, how, with what vehicles, and in what manner work is to be performed; owner-operators do not have this same level of visibility over the fleet as a whole and have no control over the fleet composition. Controlling parties act, in effect, like a fleet owner and must be held to the same requirements to ensure equal conditions for all stakeholders. This approach also minimized the potential for regulated entities avoid compliance with the regulation by shifting business practices.

It is necessary to allow controlling parties to use the same exemptions, extensions, and provisions as fleet owners to allow controlling parties the same flexibilities as other fleet owners to maintain a level playing field.

Reporting is necessary by controlling parties for CARB to accurately calculate compliance for the fleet as a whole.



## **Section 2015(g), 2015(g)(1-3). Requirement to Hire Compliant Fleets**

### **Purpose**

The purpose of this section is to set forth the following requirements: any hiring entity that is subject to this section must verify that each fleet it hires, or dispatches is listed on CARB's ACF webpage as a compliant fleet. Alternatively, for each calendar year that an entity hires a fleet to operate in California, it must obtain a signed statement from the fleet stating it is not subject to the proposed High Priority and Federal Fleets regulation of title 13, CCR section 2015 through 2015.6, the proposed State and Local Government Fleets regulation of title 13, CCR section 2013 through 2013.4. These hiring entities must also provide the following disclosure in writing to the hired fleet in the hiring contract or agreement: "Vehicles with a GVWR greater than 8,500 lbs. and light-duty package delivery vehicles operated in California may be subject to the California Air Resources Board Advanced Clean Fleets regulations. It therefore could be subject to requirements to reduce emissions of air pollutants. For more information, please visit the California Air Resources Board website at <https://ww2.arb.ca.gov/our-work/programs/advanced-clean-fleets>." Hiring entities must also comply with recordkeeping requirements. This section also establishes that the requirements do not apply to the controlling party when the hired vehicles are included in the combined fleet subject to the controlling party compliance requirements of section 2015(f).

### **Rationale**

This section is necessary because without it, noncompliant fleets can offer their services at a discount to those who invested to comply which will result in unequal conditions and an economic incentive for noncompliance. This requirement enhances the enforceability and effectiveness of the regulation by providing another enforcement tool to ensure that hiring entities do not hire noncompliant fleets.

It is necessary to require hiring entities to check a CARB's ACF webpage because it is a central database of compliant fleets with relevant information listed to enable hiring entities to verify compliance with adopted in-use fleet rules.

The proposed regulation does not apply to all fleets, so it is necessary for hiring entities to have an alternative method to verify whether fleets are subject to the proposed regulations when the fleets are not required to report their fleet information. A signed statement requires minimal paperwork or documentation and provides a method to verify the hiring entity is checking for compliance and whether a hired fleet misrepresents their compliance status to the hiring entity.

Requiring specific disclosure language for the applicability of the proposed regulation is necessary to enhance the compliance with and enforceability of the proposed regulation. This requirement provides a clear notice to any hired fleet that their

vehicles may be subject to pollution reduction regulations in California and directs the fleets to the website where they can find out whether they are subject to the proposed regulation or other in-use regulations and what they must do to comply.

It is necessary to require hiring fleets to comply with specific recordkeeping requirements to enhance enforceability of this requirement through an auditable trail of documentation of hired fleets and relevant statements from fleets that are not subject to the proposed regulations.

This requirement does not extend to controlling parties because it is not necessary as they are already required to ensure that the fleets they hire under common ownership or control are compliant in combination with their own fleet.

## **Section 2015(h). Corporate Joint Compliance Requirements**

### **Purpose**

The purpose of this section is to set forth the option for subsidiaries, parent companies, or joint ventures to meet the fleet ZEV Milestones jointly when electing to comply with that compliance option. It also calls for these entities to meet special reporting requirements and requires all participants must immediately comply individually should the group fail to comply.

### **Rationale**

This section is necessary to allow subsidiaries, parent companies, or joint ventures the option to comply jointly because larger stakeholders have indicated a preference for flexibility in choosing how to comply with individual business units or subsidiaries. Some entities find the option of complying jointly beneficial as they would have the flexibility to deploy more ZEVs in one subsidiary than another provided the fleet milestone of the combined group is still met. Alternatively, some entities find more flexibility and autonomy in choosing to comply individually. Either approach achieves the same air quality benefit.

It is necessary to specify how compliance will be determined if the combined fleet does not comply by requiring individual business units to comply individually should the combined fleet be out of compliance. This narrows the focus on how to remedy non-compliance and simplifies enforcement.

Additionally, this option necessitates a reporting requirement to allow for CARB to identify vehicles operating under common ownership or control for implementation and enforcement purposes.

There is no benefit in applying this concept to fleets that comply using the Model Year schedule because the compliance structure is based on an individual vehicle basis and would not change compliance actions in any way.

## **Section 2015(i). Newly Formed Fleet**

### **Purpose**

The purpose of this section is to set forth requirements that for any fleet that is newly formed on or after January 1, 2024 and meets the applicability criteria specified in section 2015(a)(1), within 30 calendar days of newly adding vehicles to the California fleet must comply with the requirements of either section 2015.1 or 2015.2. Within 30 calendar days, the fleet owner must meet the reporting requirements specified in section 2015.4 and recordkeeping requirements specified in section 2015.5.

### **Rationale**

This section is necessary to establish that newly formed fleets on or after January 1, 2024 have the ability to use the ZEV milestone option by reporting within 30 calendar days. This option is necessary because a newly formed fleet was not in existence when reporting began and would not have the ability to select the ZEV milestone option and could only be formed by adding 100 percent ZEVs to the fleet. The Model Year schedule requires that all additions to the fleet must be ZEVs starting January 1, 2024 and could only be met by newly formed fleets if all vehicles are ZEVs when other fleets had the option to meet the ZEV milestones that are phase-in based on the total fleet composition. Upgrading the entire fleet at once is not likely to be feasible because it is likely to require significant lead time to make preparations for ZEV operation in the new fleet, including infrastructure installation, prior to beginning business operations. Additionally, January 1, 2024 is identified as the commencement date of this requirement as it is the start date of the compliance requirements and any fleet formed after has equal opportunity to be apprised of regulations that might affect their newly formed fleet. It is also important to provide sufficient time for fleets to select a compliance path and report, which necessitates the 30-day timeframe for fleets to opt-in to the ZEV Milestone option to be able to identify all of the vehicles in the California fleet.

## **Section 2015(j), 2015(j)(1-3). Newly Affected Fleet**

### **Purpose**

The purpose of this section is to set forth three requirements for any fleet that existed prior to January 1, 2024 and newly meets the fleet applicability criteria. First, fleets must meet the reporting requirements within 30 calendar days of the change. Second, fleets must notify CARB of the month and year that the fleet newly became subject to the proposed regulation within 30 calendar days of the change. Third, fleets must meet all requirements of the proposed regulation within 2 years of the change.

## **Rationale**

This section is necessary as it describes the specifications in which a fleet is newly subject to the proposed requirements and must comply. Thirty days is a reasonable amount of time for fleets to gather information and report when becoming newly affected while also informing CARB in a timely manner.

Meeting all requirements within two years of becoming subject to the rule is necessary as it allows for existing fleets sufficient time to coordinate timely infrastructure installation, if needed, and begin transitioning to ZEVs. Based on current estimates, some infrastructure installations can take over a year.

CARB also needs to be informed of the month and year in which the fleet became subject to the rule to determine when the fleet must start meeting all requirements, which is two years after the month and year the fleet became subject. Additionally, January 1, 2024 is identified as the commencement date of this requirement as it is the start date of the compliance requirements and is used to define the beginning of the timeframe for applicable changes.

## **Section 2015(k), 2015(k)(1-3). Mergers and Acquisitions**

### **Purpose**

The purpose of this section is to require that any entity that merges with another entity or acquires vehicles as part of the merger on or after January 1, 2024 must do the following within 30 calendar days from the date the merger or acquisition occurs: Comply with the requirements of either section 2015.1 or 2015.2; verify whether any previously granted exemption or extension still apply based on the exemption or extension criteria for the newly formed fleet; and meet the reporting requirements specified in section 2015.4 and recordkeeping requirements specified in section 2015.5.

### **Rationale**

This section is necessary to establish requirements for fleets that have wholly acquired another fleet's business or the other fleet's vehicles through mergers or acquisitions. January 1, 2024 is necessary to set forth as the start of the requirement because it is the start date of the compliance requirements. Thirty days is a reasonable amount of time for fleet owners to determine what changes are needed to comply with the requirements of the provision for the newly merged fleet. The entity acquiring the vehicles would already be aware of this provision and the compliance obligation for the newly formed fleet prior to the merger or acquisition. It is necessary for fleet owners subject to this provision to comply with the proposed regulation's requirements to ensure the newly formed fleet is making progress towards the proposed regulation goals. The fleet must verify whether the vehicles they have acquired still qualify for exemptions or extensions because the new owner may no

longer use the vehicles in the same way; for example, backup vehicles may no longer be used less than 1,000 miles per year and would not remain eligible for the exemption.

## **Section 2015(l). Fleets No Longer Affected**

### **Purpose**

The purpose of this section is to require fleets subject to the regulation that no longer meet the fleet applicability criteria for two consecutive calendar years be no longer subject to the proposed regulation requirements, until the fleet again is affected per the fleet applicability criteria.

### **Rationale**

This section is necessary to establish the conditions in which a fleet is no longer subject to the proposed regulation requirements. It is necessary to specify it is two consecutive years before being deemed no longer subject to the rule requirements to allow for sufficient time to account for short term fluctuations in fleet size or revenues for fleets that are near the thresholds that determine whether the fleet is within the scope of the proposed regulation. It also provides more certainty about whether the fleet must comply with the proposed regulation and minimizes the potential for the fleet owner to use this as a loophole to claim it is a newly affected fleet after falling below the threshold due to temporary factors.

## **Section 2015(m). Reporting and Recordkeeping Requirements**

### **Purpose**

The purpose of this section is to set forth the reporting and recordkeeping requirements beginning January 1, 2024.

### **Rationale**

This section is important as both reporting and recordkeeping is necessary for CARB to implement and enforce the proposed regulation. Additionally, these requirements begin on January 1, 2024 as it is the start date of the compliance requirements.

## **Section 2015(n). Vehicles Acquired with Incentive Funds**

### **Purpose**

The purpose of this section is to establish that beginning January 1, 2024, if a fleet owner receives California State-provided incentive funding for ZEVs or NZEVs and the funding program guidelines specify the vehicle cannot be used to count toward determining compliance with the general requirements section of 2015(d), the vehicle

will not be counted as a compliant vehicle during the funding contract period. The fleet owner must meet the reporting requirements specified in section 2015.4(c)(2)(O).

## **Rationale**

This section is necessary as it identifies the condition in which a ZEV or NZEV acquired through California State-provided incentive funding cannot be used to count toward determining compliance with the proposed general requirements. This language provides a mechanism for affected fleets to utilize funding programs that seek to achieve early and extra emissions reductions beyond what is already required by the proposed regulation. Without this language, some funding programs would not be able to be used to provide any financial incentives to affected fleets. The provision specifies California State-funded vehicles, as CARB's ability to claim SIP creditable emission reductions from vehicles purchased with those funds is not affected by local and federal funding programs. It is important to point back to the funding program guidelines to allow flexibility for the funding program to set requirements consistent with the funding policy or statutory requirements. Additionally, ZEVs and NZEVs are incorporated because both could be eligible for state funding programs and would receive credit in the proposed regulation; as such, both must be accounted for by this provision. It is also necessary to establish a reporting requirement for the funding contract period start and end dates as CARB must be able to implement the requirement as well as correctly calculate compliance for fleets. The January 1 start date is necessary to encourage early market purchases and ensure compliance credit for vehicles added before this proposed regulation takes effect.

## **Section 2015(o). Certificate of Reported Compliance and Compliant Fleet List**

### **Purpose**

The purpose of this section is to establish that CARB will provide the fleet owner with a Certificate of Reported Compliance if the compliance and reporting requirements have been met. It also establishes that, on the Advanced Clean Fleets webpage, CARB will list information for compliant fleets that have received a Certificate of Reported Compliance with a CARB-issued ID number, motor carrier number if applicable, fleet name, and whether the fleet is recognized as a "ZEV Fleet". It distinguishes that fleets that do not comply will not be listed on the website as well.

### **Rationale**

This section is necessary to identify the conditions in which a fleet will be awarded a Certificate of Reported Compliance by CARB. It is necessary to indicate that fleets will only receive a certificate of reported compliance after CARB determines all the requirements are met and all reporting has been received as those that have not reported or do not meet the proposed regulation requirements will not receive a

certificate. Certificates of reported compliance are needed to show the fleet and any other interested party that the fleet is in compliance with the requirements of the proposed regulation. This is necessary to provide as a service to fleet owners to indicate that CARB has received their reporting and is indicative that they meet the compliance requirements of the proposed regulation. It is necessary to list compliant fleets on the website so that hiring fleets can easily access the information to verify they are hiring fleets that comply. It is necessary to limit the list to only those fleets that have reported compliance so that non-compliant fleets do not appear on the list. Explicitly excluding non-compliant fleets from the list is also pertinent to avoid confusion from fleets that report but are not compliant with the proposed regulation. This will prevent a hiring entity from being out of compliance with the proposed regulation by inadvertently hiring a non-compliant fleet. Listing a CARB-issued ID number, fleet name, motor carrier, and compliance status including whether the conditions of being classified as a "ZEV Fleet" are important to easily identify complaint fleets on the website. A CARB-issued ID number is a unique number used to identify the fleet within CARB's reporting database. The fleet name and motor carrier number are the identifiers by which hiring fleets may most readily recognize and identify fleets to hire. The optional "ZEV Fleet" status is necessary to include to identify those fleets that have met the optional "ZEV Fleet" status requirements for anyone who chooses to utilize the information to support fleets that are making the transition to ZEVs.

## **Section 2015(p), 2015(p)(1-4). "ZEV Fleet" Recognition**

### **Purpose**

The purpose of this section is to set forth the criteria for which a fleet will be recognized as a certified "ZEV fleet" on CARB's website. To be recognized as a "ZEV fleet", the number of ZEVs in the California fleet must meet or exceed the milestones of the ZEV Milestone option, the California fleet must have at least one ZEV, the California fleet must consist of at least 5 percent ZEVs, and the fleet owner must meet or exceed the proposed reporting and recordkeeping requirements. Fleets can optionally elect for this recognition beginning January 1, 2024.

### **Rationale**

This section is necessary to establish the minimum criteria to identify a fleet as a "ZEV fleet." The designation simply identifies which fleets are making progress in transitioning their fleets to ZEVs. The designation does not change whether a fleet complies but can be used by hiring entities and others to voluntarily prioritize the use of fleets recognized as ZEV fleets. Fleet owners may also use the designation for their own promotional purposes. It is necessary to publicly identify which fleets meet the criteria on CARB's website to provide an official source of information that is already being reported by fleets and is being collected by CARB. Requiring at least 1 ZEV and 5 percent of the fleet to be ZEVs is necessary to establish a floor to ensure that a fleet

is not being recognized as a “ZEV fleet” without having any ZEVs in the fleet. It is also necessary for the recognition to be applied only to fleets that meet or exceed the ZEV percentages established in the ZEV milestone path to ensure there is a uniform ZEV requirement applied to all fleets that are recognized as ZEV fleets. The Model Year schedule is not suitable for this purpose because the number of ZEVs in a fleet vary with the fleet composition, vehicle mileage and vehicle age in every fleet. In addition, it is possible for a fleet to comply with the Model Year schedule without having any ZEVs well past 2030 when that is not possible with the ZEV milestone option. The reporting and recordkeeping requirement permits CARB to verify that recognition criteria are being met. Additionally, January 1, 2024 is identified as the commencement date of this option as it is the start date of reporting and compliance requirements begin.

## **Section 2015.1. Model Year Schedule**

### **Purpose**

The purpose of this section is to set establish the model year schedule which all regulated fleets must comply with beginning January 1, 2024, unless the fleet owner chooses to comply with the alternative ZEV Milestones requirements.

### **Rationale**

This section is necessary to establish the requirements of the Model Year Schedule, to set the schedule’s parameters, and how compliance will be determined. It is necessary that fleets comply with all conditions unless electing to comply with the ZEV Milestone option to make progress towards making a complete ZEV transition. Additionally, January 1, 2024 is identified as the commencement date of this option as it is the start date of the compliance requirements.

## **Section 2015.1(a-b). ZEV Additions and ICE vehicle Removal**

### **Purpose**

The purpose of this section is to set forth the requirement that all vehicles added to the fleet owner’s California fleet must be ZEVs, and that all ICE vehicles must be removed from the California fleet by January 1 of the calendar year following the end of the ICE vehicles’ minimum useful life. It also sets forth the stipulation that the ICE vehicle removal requirement also extends to any ICE vehicle purchased or added to the fleet through exemptions or extensions. Additionally, the section establishes that the California fleet complies if the fleet has no ICE vehicles added on or after January 1, 2024, except those granted extensions or exemptions.



## Rationale

This section is necessary as it requires that all vehicles added to the California fleet be ZEVs, which sets a straightforward course of action to achieve emissions reductions and goals specified in the Introduction to the ISOR. These requirements are designed to be as aggressive as feasible while ensuring fleet owners' have statutorily required minimum useful life of their existing vehicles.

A number of factors inform the feasibility of this requirement. First, there is a rapidly increasing number of ZEVs available with all chassis and weight class configurations today with more coming in upcoming years. More ZEVs are expected to enter the market due to California and other states' adoption of the ACT regulation which requires manufacturers to produce and sell an increasing number of ZEVs. The ACT requirement ensures manufacturers are investing in ZEVs and creating competitive products at a price point that meets fleet's needs. The proposed regulation recognizes however that there may be situations which inhibit a fleet's ability to purchase ZEVs. For this reason, staff's proposal includes a number of exemptions and extensions which cover cases where vehicles are not available, do not meet fleet's needs, or other scenarios. These requirements in aggregate will drive fleets to electrify while safeguarding them from situations outside of their control.

It is necessary to distinguish that the model year schedule applies to all vehicle additions and not solely purchases this will include vehicles operating under common ownership or control and used purchases. This ensures that fleets do not shift business practices or vehicle ownership models with the intention of circumventing compliance requirements.

Requiring the removal of ICE vehicles from the California fleet by January 1 of the calendar year following the end of the ICE vehicles' minimum useful life is necessary as it ensures that fleets do not retain and continue operating older combustion vehicles with substantially higher emissions. This requirement also aligns with the useful life definition specified in HSC 43021(a) to ensure the proposed regulation aligns with legislative intent. Additionally, establishing a removal deadline of January 1 of the calendar year following the end of the ICE vehicles' minimum useful life provides more certainty on the compliance deadline for the vehicle than using the date the mileage threshold was exceeded.

Establishing that the California fleet complies if the fleet has no ICE vehicles added on or after January 1, 2024, except those granted extensions or exemptions, is necessary for CARB to implement the regulation in a way that allows compliance to be determined by with a snapshot of the fleet as it exists when compliance is evaluated. This makes it possible for fleet owners to switch from one compliance option to the other provided the fleet composition meets the requirements of any compliance method.

## **Section 2015.1(a)(1). ICE vehicle Ordered in Advance**

### **Purpose**

The purpose of this section is to allow an ICE vehicle to be added to the California fleet after January 1, 2024 only if the vehicle was purchased on or before the effective date of the regulation. Fleet owners must email the purchase agreement to TRUCRS@arb.ca.gov when initially reporting the vehicle per section 2015.4 and keep records of the purchase agreement per section 2015.5(a)(2).

### **Rationale**

This section is necessary to address extended vehicle lead times for ICE vehicles due to delays currently being caused by supply chain issues. This provision protects fleets that have purchased a vehicle in advance of the start date of the proposed regulation but do not receive it from the manufacturer until after January 1, 2024. This ensures that the fleet owner would not become non-compliant with the Model Year Schedule when making a new vehicle purchase more than a year early.

The deadline of the effective date of the regulation aligns with existing Truck and Bus regulation and ensures that a fleet owner that is required to replace an existing truck is not penalized for purchasing a truck to comply with the Truck and Bus regulation and ensures the fleet owner will be able to use the vehicle for its useful life if subject to the proposed ACF regulation.

## **Section 2015.1(c), 2015.1(c)(1-6). Exemptions and Extensions**

### **Purpose**

The purpose of this section is to establish which exemptions and extensions a fleet owner may utilize, and how each extension or exemption will be treated when determining compliance with section 2015.1.

### **Rationale**

This section is necessary to establish how each exemption and extension provision would interact with the compliance requirements for the Model Year Schedule. Each section also provides a short summary of the provision requirements and points the reader to the section in the proposed regulation with the detailed criteria, which is necessary to provide regulated entities additional contextual information about each provision for ease of readability.

**Backup Vehicle Exemption:** It is necessary to establish that backup vehicles are excluded from the ICE vehicle removal requirement of section 2015.1(b) if the vehicle is designated as such because the exemption would allow fleet owners to keep an existing ICE vehicle they would have otherwise had to remove from the fleet at the

## Appendix H-2

end of its useful life. The 1,000-mile threshold limits the exemption to vehicles that are not commonly used and have a relatively small impact on emissions. Fleet owners must be made aware of how the exemption would impact their compliance choice.

**Daily Usage Exemption:** Fleet owners shall receive a one-year exemption from the ZEV addition requirement of section 2015.1(a) to purchase a new ICE vehicle of a given configuration if a new ZEV is available, but it cannot be placed anywhere in the California fleet while meeting the daily usage needs of any existing vehicle in the fleet provided the criteria specified in section 2015.3(b) are met. The one-year period is adequate to make ICE vehicle purchases under the exemption. It is necessary to limit the exemption to one year after which a fleet must apply again, because new vehicles and capabilities are likely to become available each year. It is necessary to include a limitation that all commercially available ZEVs cannot meet the needs of any existing ICE vehicle in the fleet to ensure that fleets focus their efforts on transitioning the vehicles that can be replaced first before focusing on vehicles that cannot, as improvements in ZEV technology and infrastructure availability may address duty-cycle concerns over time. It is necessary to specify the replacement ICE vehicle is a new vehicle to ensure the ICE vehicle has lower emissions than the one being replaced.

**Infrastructure Construction Delay Extension:** Fleet owners shall receive a one-year extension from the ICE vehicle removal requirements of section 2015.1(b) and delay delivery of ordered ZEVs that would be reliant on the ZEV charging or fueling infrastructure for one year if the criteria described in section 2015.3(c) are met. The section is necessary to establish that a fleet owner would receive a one-year extension from the ICE vehicle removal for the vehicle to be replaced by a ZEV that could not be used until the infrastructure is in place. This would allow the fleet owner to continue using the existing vehicle until the infrastructure construction is finished. Providing a one-year delay is reasonable because fleets must have already started construction and ordered ZEVs at least one year in advance of their deadline and providing an additional year of time would give at least two years for the construction to finish.

**Vehicle Delivery Delay Extension.** Fleet owners may exclude an existing ICE vehicle from the removal requirements of section 2015.1(b) if a new ZEV is ordered one year in advance of the compliance date for the ICE vehicle being replaced and the newly purchased ZEV will not be delivered by the compliance deadline for reasons beyond the fleet owner's control. Fleet owners must meet criteria of section 2015.3(d) to qualify. The section is necessary to establish that the exemption allows for an existing ICE vehicle to be excluded from the removal requirements of the Model Year Schedule if a replacement ZEV was ordered at least a year in advance and the ZEV would not be delivered by the compliance date. It is necessary to require fleets have ordered the vehicles at least a year in advance to show the fleets are doing their due diligence to comply with the rule by placing orders well in advance of the deadlines. One year is a reasonable time to expect for a vehicle to be delivered to the purchaser and the amount of time that infrastructure takes to install. Vehicles can typically take months to build and deliver, and possibly years if supply chain issues or other exacerbating conditions exist. It is necessary to specify that the delay must be for

reasons beyond the fleet owner's control to prevent abuse of the extension and loopholes.

**ZEV Unavailability Exemption.** Fleet owners may purchase a new ICE vehicle and exclude it from the ZEV addition requirement of section 2015.1(a) if no ZEV or NZEV of the needed configuration is commercially available and the conditions of section 2015.3(e) are met. This section is necessary to ensure that older high emitting vehicles are not kept in the fleet longer if a ZEV or NZEV is not available. It is necessary to specify the replacement ICE vehicle is a new vehicle to ensure the cleaner vehicles are purchases and that the replacement is not with a used ICE vehicle that is no cleaner than the one being replaced.

For exemptions pursuant to Declared Emergency Events, it is necessary to establish that fleet owners can purchase an ICE vehicle and exclude it from the removal requirements of the Model Year Schedule for up to 25 percent of the fleet if the exemption conditions are met. This is necessary because the vehicles may be used to assist in mutual aid to other jurisdictions, regions, or states, which can be unpredictable in usage, routes, and availability of fueling infrastructure. It is necessary to set forth the 25 percent limit because the exemption requires that 75 percent of the fleet's vehicles already be upgraded to ZEVs before applying. It is necessary to specify the replacement ICE vehicle is a new vehicle to prevent used ICE vehicle purchases.

### **Section 2015.2. Fleet ZEV Milestones Option**

#### **Purpose**

The purpose of this section is to establish an alternative compliance path that provides fleet owners more flexibility to deploy ZEVs in their fleet. To use this option, fleet owners must acknowledge they knowingly and voluntarily waive provisions of Health and Safety Code 43021(a) that would otherwise apply to any commercial motor vehicles as defined in the CVC section 34601 in the California fleet except for ICE vehicles purchased pursuant to the exemptions of sections 2015.3(b), 2015.3(e), and 2015.3(f)(2). It also sets forth the requirement that fleet owners must meet all the subsequent requirements of the section.

#### **Rationale**

Unlike the Model Year Schedule, this compliance option is based on the total number of ZEVs in the fleet regardless of the vehicle age and mileage. This section is necessary to provide an alternative compliance option for fleet owners that may find it difficult or impossible to comply with the Model Year Schedule. For example, fleet owners who replace their vehicles in less than 5 or 10 year, fleets that have many vehicles past their useful life, or mostly have vehicle types that may be more challenging to electrify would find this option advantageous when compared to complying with the Model Year Schedule. This compliance option provides flexibility for some fleets to manage their composition more consistently with their normal purchase patterns. This

## Appendix H-2

compliance option better aligns the ZEVs requirement for vehicles that are have applications, routes, or assignments that are more suitable for electrification and flexibility for the fleet owner to make vehicle purchase decisions that are most suitable for electrification or are more cost-effective for their operation. It also allows fleets owners to determine their own strategies in how they add and remove ICE vehicles from their fleets provided the fleet milestones are met.

This option requires fleets to acknowledge they are waiving protections under HSC 43021(a) in exchange for flexibility in how they manage their fleet. The fleet owner would select this option if it presents a more cost-effective compliance strategy. This waiver concept is consistent with California Civil Code Section 3513: "Anyone may waive the advantage of a law intended solely for his benefit..."

ICE vehicles purchased pursuant to exemptions or extensions are necessary to exclude from this waiver, as fleets would have purchased those ICE vehicles after meeting specific qualifying criteria where ZEVs may not be suitable at the time of purchase and the ICE vehicles will be allowed to be used in the fleet their full useful life period.

### Section 2015.2(a). ZEV Fleet Milestones

#### Purpose

The purpose of this section is to set forth the ZEV Milestone requirements that begin January 1, 2025 and each year afterwards by January 1, fleet owners must continuously meet or exceed the ZEV milestone for the California fleet as calculated in 2015.2(b) based on the milestone percentage requirements set forth in Table A. At minimum, ZEV milestone percentages must be maintained each year until the next compliance milestone. The section also gives an example of how milestones should be applied during the interim years.

**Table A: ZEV Fleet Milestones by Milestone Group and Year**

Percentage of vehicles that must be ZEVs	10%	25%	50%	75%	100%
Milestone Group 1: Box trucks, vans, buses with two axles, yard tractors, light-duty package delivery vehicles	2025	2028	2031	2033	2035 and beyond
Milestone Group 2: Work trucks, day cab tractors, buses with three axles	2027	2030	2033	2036	2039 and beyond

## Appendix H-2

Milestone Group 3: Sleeper cab tractors and specialty vehicles	2030	2033	2036	2039	2042 and beyond
--	------	------	------	------	--------------------

### Rationale

This section is necessary to establish how to calculate a fleet's ZEV milestone. This calculation takes into account how many vehicles the fleet has and how suitable they are for electrification to determine how ZEVs the fleet needs to be in compliance.

The January 1, 2025 start date and future January 1 compliance dates are necessary to establish the start date and compliance checkpoints for the ZEV Milestones option for fleet owners to know when compliance will be determined. 2025 was selected as the first milestone date for ZEVs to be in the fleet as shown in Table A of the proposed regulation.

It is necessary to require fleet owners continuously meet or exceed Milestones and that at minimum, ZEV milestones must be maintained each year until next compliance milestone. This prevents backsliding by setting a floor on the number of ZEVs that must be maintained in the fleet.

The ZEV Milestone schedule is outlined in Table A. This table sets requirements based on three groups of vehicles in the fleet.

Group 1 vehicles are the most well-suited for electrification as these vehicles have low daily mileage requirements, frequently return-to-base, have little or no PTO usage, and these vehicles are widely commercially available as ZEVs today. Due to these positive characteristics, Group 1 has the most aggressive ZEV timeline starting at 10 percent of the fleet in 2025 ramping up to 100 percent in 2035. The 2035 end date was selected to meet the goal outlined in CARB Resolution 20-19 to achieve a 100 percent ZE last mile delivery fleet by 2035. The values in the intermediate years were selected ensure fleets were making incremental progress while giving fleets time to build infrastructure, build their maintenance networks, and make the necessary capital investments

Group 2 vehicles consist of work trucks, day cab tractors, and three axle buses i.e., motorcoaches. These Group 2 vehicles, while promising for electrification, have more operational challenges than those in Group 1. These challenges include operations which do not return to a centralized home base on a daily basis which will necessitate some form of publicly accessible retail charging to address periodic needs to charge or fuel away from the home base. The requirements for these vehicles begin at 10 percent in 2027 and ramp up until 2039. The 2039 end date was selected to meet the goal outlined in CARB Resolution 20-19 to achieve a 100 percent refuse, utility, and bus fleet by 2040. The values in the intermediate years were selected ensure fleets were making incremental progress while giving fleets time to build infrastructure, build

their maintenance networks, allow development of a publicly accessible retail infrastructure network, and make the necessary capital investments.

Group 3 vehicles consist of sleeper cab tractors and specialty vehicles. These vehicles present the most challenges for electrification and are expected to be dependent on retail charging and hydrogen fueling network. Sleeper cab tractors can travel 300 miles or more every day, which necessitates significant ZE range and access to publicly accessible refueling including in locations outside of California. Specialty vehicles are produced in small volumes, often on custom chassis, and may have significant power needs while stationary which can significantly increase the need for energy storage. Recognizing these issues, the proposed regulation delays the phase-in start date for these vehicles to 2030. The 2042 end date was selected to meet the goals outlined in CARB Resolution 20-19 and Executive Order N-79-20. The values in the intermediate years were selected ensure fleets were making incremental progress while giving fleets time to build infrastructure, build their maintenance networks, allow development of a publicly accessible retail infrastructure network, and make the necessary capital investments

## **Section 2015.2(b). ZEV Milestone Calculation**

### **Purpose**

The purpose of this section is to set forth the calculations by which ZEV Milestone compliance may be achieved. The annual ZEV milestone is calculated by counting the vehicles in the California fleet for each of the three Milestone Groups listed in Table A, then multiplying the number of vehicles in each Milestone Group by the ZEV percentage requirement for that year as shown in the calculation below. If the sum of the ZEV milestones is not a whole number, the value must be rounded using standard rounding convention. Designated backup vehicles may be excluded from the vehicle count for each milestone group.

### **Rationale**

This section is necessary to establish the method by which CARB will calculate and determine compliance with section 2015.2. The calculation was selected to allow fleets to determine a number of ZEVs they must have in their fleet based on the suitability of vehicles they already have. The calculation results in a ZEV Milestone the fleet owner must reach, which can be met by any ZEV placed in the fleet. This provides fleet owners flexibility to meet requirements while identifying the best suited application for their individual circumstances.

It is necessary to include rounding instructions because compliance is based on whole integer counts of vehicles. It is necessary to indicate backup vehicles are excluded to prevent fleet owners from including them in the compliance calculations. The example provided is necessary to illustrate how the calculations might work for fleets using a simplified fleet example.

The example is necessary to illustrate how ZEV milestone calculation works and additionally the concept of maintaining milestones would work for interim years between milestone dates in the table.

## **Section 2015.2(c). Any ZEVs Count for Compliance**

### **Purpose**

The purpose of this section is to allow that any ZEV from any Milestone Group may be used to count toward the fleet's ZEV Milestone requirement. For example, a fleet with box trucks and day cab tractors can meet the initial ZEV fleet milestone with ZEV tractors instead of ZEV box trucks if they elect to do so.

### **Rationale**

This section is necessary to establish that any ZEV added to the California fleet counts toward compliance with the ZEV Milestone option, regardless of Milestone Group. This provision ensures that fleets have maximum flexibility to electrify their vehicles in whichever order is best for the fleet and removes ambiguity.

## **Section 2015.2(d). Rental Vehicle Provision**

### **Purpose**

The purpose of this section is to establish flexibility that in lieu of counting all rental vehicles that operate in California, interstate rental fleet owners may choose to report the average number of rental vehicles that are operated in California. To use this option, four quarterly snapshots of the number of rental vehicles operated in California must be taken on the first Monday after January 1, April 1, July 1, and October 1. Rental vehicles operated in California are those that are under contract to leave California, to be picked up and dropped off in California, and those that are not under contract while in California on the date of the snapshot. In lieu of counting rental vehicles under contract, rental fleet owners must supply telemetry data showing each rental vehicle that is in California on the snapshot dates. Each vehicle should only be counted once for purposes of each snapshot. Fleet owners utilizing this provision must report the average number of rental vehicles per section 2015.4(h) and keep records of snapshots taken and supporting documents per section 2015.5(h).

### **Rationale**

This section is necessary because rental fleets with interstate rental vehicles do not direct nor control the routing of a given rental vehicle. Without this provision, a rental fleet would have to report and comply with all rental vehicles in the nation that could possibly come to California on any given day which would present impossible compliance requirements, or the fleet may be forced to bar any non-California trucks from entering the state, significantly raising costs and implementation challenges. It is



## Appendix H-2

necessary to provide an alternative option for these rental fleets to report the average number of vehicles that operate in California instead of every vehicle that could possibly come to California.

Four quarterly snapshots are necessary to have a streamlined approach which balances CARB's need for accurate data to estimate the average number of such vehicles in California while limiting the amount of data that would need to be tracked, reported, and audited. Four quarterly snapshots provide sufficient information to identify the average number of vehicles in the State during the year and would minimize the impacts of seasonal spikes in the number of rentals.

It is necessary to identify which vehicles should be included in the snapshots, and the selected criteria are necessary because those vehicles have a physical presence in California on the snapshot date. The alternative to counting trucks under contract provides fleet owners that already collect telemetry data to supply that instead in determining the number of rentals in California on the snapshot dates. This provides flexibility to fleets that have invested in tracking and telemetry systems to simplify their reporting for this provision.

It is necessary to indicate that each vehicle should be counted once in each snapshot to avoid double counting of rental vehicles. Reporting and recordkeeping requirements are necessary to include because there are special requirements for fleets utilizing this provision.

### **Section 2015.2(e), 2015.2(e)(1-6). Exemptions and Extensions**

#### **Purpose**

The purpose of this section is to establish which exemptions and extensions for which a fleet owner may apply or utilize, and how each would impact fleet owner compliance calculations when complying with section 2015.2.

#### **Rationale**

This section is necessary to establish how each exemption and extension provision would interact with the compliance requirements for the ZEV Milestones option. Each section also provides a short summary of the provision requirements and points the reader to the section in the regulation with the detailed criteria, which is necessary to provide regulated entities additional contextual information about each provision for ease of readability.

The Backup Vehicle exemption section is necessary to establish that fleet owners may exclude an ICE vehicle from the ZEV Milestone calculations if the vehicle is designated as a backup vehicle. Backup vehicles have a limited impact on emissions. Fleet owners must be made aware of how the exemption would impact their compliance choice. The fleet would be allowed to purchase a vehicle to designate as backup which is an important distinction from the allowance for fleets complying with section 2015.1,

## Appendix H-2

where fleet owners may only add ZEVs to the fleet and are not allowed to purchase an ICE vehicle.

For the Daily Usage exemption, it is necessary to establish that fleet owners shall receive a one-year exemption to purchase an ICE vehicle and exclude it from the ZEV Milestone calculation provided the exemption criteria are met. The one-year period is adequate to make ICE vehicle purchases under the exemption. It is necessary to limit the exemption to one year after which a fleet must apply again, because new vehicles and capabilities are likely to become available each year. It is necessary to include a limitation that all commercially available ZEVs cannot meet the needs of any existing ICE vehicle in the fleet to ensure that fleets focus their efforts on transitioning the vehicles that can be replaced first before focusing on vehicles that cannot, as improvements in ZEV technology and infrastructure availability may address duty-cycle concerns over time. It is necessary to specify the replacement ICE vehicle is a new vehicle to ensure the ICE vehicle has lower emissions than the one being replaced.

It is necessary to establish that the Infrastructure Construction Delay extension would allow fleet owners to temporarily keep an existing ICE vehicle they would have otherwise had to remove from the fleet and count it as a ZEV for the Milestone calculations. Additionally, the section is necessary to establish that the extension would allow fleet owners to delay taking delivery of ZEVs they already ordered. These are necessary for fleet owners to understand how the exemption would impact their compliance.

It is necessary to establish that the vehicle delivery delay extension would allow fleet owners to count an existing ICE vehicle they would have otherwise replaced with an ordered ZEV toward compliance with the ZEV Milestone calculation. This is necessary for fleet owners to understand how the exemption would impact their compliance.

It is necessary to establish that the ZEV Unavailability exemption would allow fleet owners to purchase an ICE vehicle and exclude it from the ZEV Milestone calculations if the fleet owner can demonstrate that all remaining ICE vehicles in the fleet cannot be replaced by ZEVs. This is necessary to ensure that fleets make progress toward the Milestone goals by purchasing all commercially available ZEVs before using the exemption. This is necessary for fleet owners to understand how the exemption would impact their compliance. It is necessary to specify the replacement ICE vehicle is a new vehicle to ensure the vehicle has lower emission than the one being replaced.

It is necessary to establish that the Mutual Aid assistance provision would allow fleet owners to purchase an ICE vehicle instead of a ZEV and exclude it from the ZEV Milestone calculations for a portion of the fleet. This is necessary for fleet owners to understand how the exemption would impact their compliance. It is necessary to specify the replacement ICE vehicle is a new vehicle to ensure the vehicle has lower emission than the one being replaced.

## **Section 2015.3. High Priority and Federal Fleets Exemptions and Extensions**

### **Purpose**

The purpose of this section is to inform fleet owners that they may claim or apply for the exemptions or extensions in the section if the California fleet complies with the requirements that are in effect and it would otherwise be impossible to comply with the next ZEV compliance deadline. Fleet owners requesting or utilizing any exemptions or extensions must meet applicable reporting and recordkeeping requirements for each exemption or extension as specified in sections 2015.4 and 2015.5. Any exemptions or extensions approved for a fleet owner are not transferrable to another fleet owner. The Executive Officer will respond to exemption requests as described in section 2015.4(k).

### **Rationale**

This section is necessary to set forth the requirements and criteria to qualify for exemption and extensions. The requirement that fleets comply before requesting any exemption or extension is necessary to ensure fleet owners are planning ahead and are not simply seeking unjustified exceptions for when the fleet has not taken the appropriate steps and are out of compliance. Limiting exemption or extension applications to fleets that need them to comply with their next upcoming requirements helps reduce administrative burden by reducing the amount of time spent on invalid applications due to a lack of planning. This is also necessary to reduce time spent on extraneous or unnecessary applications where the fleet does not qualify or does not need the exemption or extension to comply.

It is also necessary to set forth requirements that fleet owners follow any reporting or recordkeeping requirement to support and document which exemption or extension they are utilizing. Additionally, it is necessary to inform fleets where they can look in the proposed regulation for information about Executive Officer responses to exemption or extension requests. Finally, the clause preventing fleet owners from transferring exemptions or extensions to other fleet owners is necessary to ensure the exemption is applied based on the specific situation for the fleet that was granted the extension.

## **Sections 2015.3(a), 2015.3(a)(1-3). Backup Vehicle Exemption**

### **Purpose**

The purpose of this section is to set forth the requirements for the backup vehicle extension. Fleet owners may designate vehicles as backup vehicles during the reporting period and renew the designation annually if the fleet owner meets each of the following requirements:

## Appendix H-2

- The vehicle is operated less than 1,000 miles per year excluding any mileage travelled while performing emergency operations under contract in support of a declared emergency event;
- The fleet owner must report the vehicle as a backup vehicle and must submit odometer readings per section 2015.4(f); and
- Backup vehicles must immediately stop being operated and must be removed from the California fleet if the vehicle exceeds the allowed number of annual miles travelled and the vehicle is out of compliance with section 2015.1, or the fleet is out of compliance with section 2015.2.

### **Rationale**

This section is necessary to set forth the requirements for fleet owners to utilize the backup vehicle exemption.

It is necessary that the exemption is claimed during the reporting period and renewed annually because fleet owners are required to report at the beginning of the year, and this minimizes reporting burdens while enabling CARB to track a vehicle's annual mileage to determine compliance with the exemption criteria.

The 1,000 mile per year limit is necessary to provide flexibility for limited operation of vehicles with low annual mileage to be a substitute for fleet redundancy when other vehicles are out of service for repairs or maintenance are rarely used. Additionally, this provides flexibility for operation of a vehicle used almost exclusively in emergency support operations. These vehicles have minimal emissions impacts and are not expected to be cost effective to replace. The 1,000 mile per year limit was selected as an appropriate threshold to allow for adequate use of a backup vehicle and to maintain consistency with the threshold used in the Truck and Bus regulation. Raising the threshold would reduce the effectiveness of the proposed regulation.

Allowing vehicle miles travelled under contract during emergency service to be excluded from the 1,000 mile per year limit is necessary to ensure backup vehicles as needed to address an immediate threat to safety. This provision helps ensure emergency responsiveness is maintained. Operations to serve infrequent emergencies have minimal emissions impacts and the immediate threat to safety outweighs the temporary air quality impact. Requiring emergency miles to be travelled under contract is necessary because the duration of each declared emergency is unique and cannot be predicted in advance, the period of time vehicles need to be used to respond to emergencies is established in the declaration or in supporting contracts in response to the declaration.

The reporting and odometer reading requirements are necessary because CARB needs to track and verify the mileage of vehicles using the provision to effectively implement and enforce the provision.

The requirement that backup vehicles exceeding their annual mileage limit be removed from the California fleet is necessary to prevent fleets from retaining vehicles that no longer comply with the provision requirements. It is necessary to specify that

the mileage exceedance for a vehicle designated as a back-up vehicle is irrelevant if the fleet continues to comply when the vehicle is not designated as a backup vehicle so that a fleet owner is not penalized when the fleet is otherwise compliant.

## **Sections 2015.3(b), 2015.3(b)(1-6), 2015.3(b)(4)(A). Daily Usage Exemption**

### **Purpose**

The purpose of this section is to set forth the requirements for the Daily Usage Exemption. Fleet owners may apply for an exemption to replace vehicles with a GVWR greater than 14,000 lbs. if at least 10 percent of their California fleet is comprised of ZEVs or NZEVs. Fleet owners may not apply for a vehicle configuration that is commercially available as: an NZEV; a hydrogen fuel cell ZEV; a ZEV tractor or ZEV three-axle bus with a rated energy capacity of at least 1,000 kWh; a Class 4 through 6 ZEV with a rated energy capacity of at least 325 kWh; or a Class 7 through 8 ZEV with a rated energy capacity of at least 450 kWh. The Executive Officer will approve the exemption based on their good engineering judgement in determining that the criteria specified in section 2015.3(b) have been met.

The fleet owner must submit the following by email to TRUCRS@arb.ca.gov to apply:

- Submit the make, model, weight class, configuration, and photograph of the ICE vehicle to be replaced
- Identify the commercially available ZEV with the highest rated energy capacity available in the same weight class and configuration. Submit the make, model, weight class, configuration, and rated energy capacity of the ZEV
- Calculate the range of the vehicle in miles by dividing the rated energy capacity of the identified ZEV by the following factors: for Class 4 through 6 vehicles, 1.3 kWhs per mile; for Class 7 and 8 non-tractors, 1.8 kWhs per mile; for Class 7 and 8 tractors, 2.1 kWhs per mile. For vehicles that operate truck mounted or integrated equipment while stationary, in lieu of calculating the needed rated energy capacity based on vehicle miles travelled, the needed rated energy capacity is the same as the optionally submitted measured ZEV energy use of section 2015.3(b)(6). Submit the calculation and results.
- Submit a daily usage report for a period of at least 30 consecutive workdays from within the last 12 months using telemetry data or other industry accepted data collection method for all ICE vehicles of the same weight class and configuration of the vehicle to be replaced. The report must include the daily miles traveled for each vehicle. Identify the lowest mileage reading for each day and exclude the three highest readings. For the exemption to be granted, the highest remaining mileage number must be greater than the range calculated in 2015.3(b)(3).
  - o For vehicles that operate truck mounted or integrated equipment while stationary, the daily usage report must include daily equipment usage information such as hours of operation

## Appendix H-2

- Submit a description of the daily assignments or routes used by existing vehicle types with an explanation of why all commercially available ZEVs of the same weight class and configuration cannot be charged or fueled during the workday at the depot, within one mile of the routes, or where ZEV charging or fueling is available. The explanation must include a description of why charging or fueling could not be managed during driver rest periods or breaks during the workday.
- Optionally substantiate the exemption request by submitting measured ZEV energy use data from ZEVs of the same configuration already operated on similar daily assignments in the fleet's service. Optional information must include vehicle loading and weight data, route grade, average ambient daily temperature, and state of charge at the beginning and end of the daily shift to show typical daily energy usage over one month of regular service.

### Rationale

This section is necessary to set forth the requirements for fleet owners to utilize the daily mileage exemption. This provision is necessary to address situations where replacement ZEVs are commercially available, but no available ZEV can meet the daily mileage or operation needs of the fleet. Fleets operate on different business models and have different operational needs, so not every commercially available ZEV will meet the need of every fleet in the early market. Staff expect the need for this exemption to reduce over time as infrastructure is placed and ZEV technology improves.

This provision is limited to vehicle replacements only to limit applications for streamlined implementation and because the provision is not meant to expand the fleet's ICE vehicles.

The exemption's GVWR limitation is necessary because vehicles with a lower GVWR can use light-duty vehicle refueling networks, and such infrastructure is more widespread and publicly available. This exemption is not needed for vehicles that have the access to refuel at publicly available stations.

The requirement that the fleet already be comprised of 10 percent ZEVs is necessary to ensure progress is being made by every fleet in the transition to ZEs before exemptions based on duty-cycle are granted. Fleet owners will have to consider where ZEVs will fit best into their operations and take the initial steps to transition their fleet. This requirement will help fleets gain experience with the vehicles and technology and ensures they have a vested interest in moving the market forward. Fleets subject to this proposed regulation are expected to have the operational and financial flexibility to modify the way they operate to start making improvements in fleet efficiency, gain experience with ZEVs, and help accelerate the early market by increasing vehicle demand so manufacturers will serve more of the market and infrastructure providers will make investments to serve demand where needed. ZEVs will fit most applications but ultimately the way fleets operate trucks might change from what they do now because of differences in the technology. Staff expect fleet owners to place ZEVs in routes where they would fit best in their own operation.

## Appendix H-2

The exemption limitation for when NZEVs and fuel cell vehicles of the same configuration and weight class are commercially available is necessary because these vehicles have more flexible range and operational hours than ZEVs due to their extended range and quick refueling, and the ability for NZEVs to use conventional fuels which are widely available. NZEVs are compliant through the 2035 model year and fleets should transition to those vehicles where ZEVs cannot meet fleet needs.

It is necessary to apply limitations to the exemption for when ZEVs are commercially available with rated energy capacities that would meet most fleet needs. Tractors or three-axle buses with 1,000 kWhs represent about 475 miles of range assuming fuel efficiency of 2.1 kWhs per mile. This represents over 8 hours of drive time at highway speeds, after which most drivers would be required to stop the vehicle due to mandates that limit the number of hours drivers can safely operate a vehicle without a break. During the rest period, the vehicle could be refueled at a ZEV fueling station. Class 4 through 6 vehicles with rated energy capacity of 325 kilowatt-hours and Class 7 and 8 non-tractors with 450 kilowatt-hours represent 250 miles of range at 1.3 kilowatt-hours per mile and 1.8 kilowatt-hours per mile efficiency, respectively. 250 miles is more than enough range for most fleet needs according to the one-time reporting data collect from affected fleets. When ZEVs are available with these ranges, the exemption would no longer be needed.

It is necessary to allow the Executive Officer and their good engineering judgement to assess applications because CARB needs to analyze submitted information and data to determine whether the provision criteria have been met and that the data provided is applicable to the vehicle configuration and weight class for which the exemption is being sought.

It is necessary to specify fleet owners submit applications through the TRUCRS@arb.ca.gov email because that is the email staff will monitor for applications. Email submissions simplify implementation, and fleets subject to this proposed regulation are expected to have internet access to submit applications.

The ICE vehicle information required is necessary to be able to identify the type of vehicle that needs to be replaced so staff can assess whether the same configuration of vehicle is commercially available as a ZEV, NZEV, or hydrogen fuel cell vehicle. Make, model, weight class, and configuration are needed for CARB to correctly identify the vehicle being replaced. The photograph is necessary to enhance enforceability of the requirement by preventing misrepresentation of the vehicle configuration.

The ZEV information required for a commercially available ZEV with the highest rated energy capacity is needed to ensure the vehicle is a suitable replacement for the ICE vehicle. Make, model, weight class, configuration, and rated energy capacity are all necessary to identify the proposed replacement vehicle and its potential to be a suitable replacement.

The range calculations are necessary to identify which ZEVs would have enough rated energy capacity to meet the fleet's range needs. The rated energy capacity must be

## Appendix H-2

converted to miles of range and can be done with the provided conversion factors. The factors were established from in-use and dynamometer data across a wide range of vehicle types and classes in the report “Battery Electric Truck and Bus Energy Efficiency Compared to Conventional Diesel Vehicles”.<sup>11</sup> These factors rely on the same source data as the factors used in CARB’s cost analysis for this staff report but are slightly different due to simplification needed for the cost analysis. The calculations and results are necessary to submit so CARB can assess them and ensure calculations were performed correctly.

For vehicles that operate truck mounted or integrated equipment while stationary, in lieu of calculating the needed rated energy capacity based on vehicle miles travelled, the needed rated energy capacity is the same as the optionally submitted measured ZEV energy use of section 2015.3(b)(6).

The daily usage report is necessary to show how the ICE vehicles of the type needed are typically operated by the fleet and must be for all ICE vehicles of the same type to determine whether there are any routes in which available ZEVs can be placed.

It is necessary to establish for how long, from what period, and the method by which fleet owners must track daily vehicle usage. It is necessary to receive data from within the last 12 months and for a period of 30 work days to have a representative, recent sample to analyze that does not include days the vehicle is not operated to prevent skewing in the data. It would provide a reasonable snapshot of a vehicle’s operational profile while minimizing tracking burden from a longer period.

Specifying that telemetry data or other industry accepted method of data collection may be used is necessary to allow fleet owners to supply data they already collect to satisfy this requirement. Telemetry data is accurate, verifiable, and auditable; other daily mileage tracking methods are also acceptable and necessary because not every fleet will have telemetry data available, and the data collected must be auditable for implementation of the provision and enforcement purposes.

Including daily miles travelled, or equipment usage information when appropriate for vehicles specified in section 2015.3(b)(4)(A), is necessary to establish the needed range or energy capacity of the ICE vehicles. Identifying the lowest mileage reading from the vehicles and days reported and removing the top three values establishes the needed range or energy capacity that meets at least 90 percent of the fleet’s daily usage needs over a 30-day period without changing the way vehicles are assigned. Staff expect fleets subject to the proposed regulation to have enough flexibility in their route and fleet management to adjust where 90 percent of the fleet’s daily needs could be met by an available ZEV, and thus would only grant the exemption if the calculated ZEV range is less than 90 percent of the fleet’s daily needs. This provision ensures fleets are adjusting their operations where feasible to accommodate the

---

<sup>11</sup> CARB, [Battery Electric Truck and Bus Energy Efficiency Compared to Conventional Diesel Vehicles](https://ww2.arb.ca.gov/sites/default/files/2018-11/180124hdbevefficiency.pdf), May 2018 (web link: <https://ww2.arb.ca.gov/sites/default/files/2018-11/180124hdbevefficiency.pdf>, last accessed June 2022)



## Appendix H-2

newer technology and gaining experience with ZEVs. As technology improves over time, staff expect available ZEVs will meet most fleets' operational needs.

The allowance for fleets to submit documentation from ZEV manufacturers or in-service ZEV data to substantiate their exemption request is necessary because they provide additional information to enhance the fleet's exemption claim.

The criteria requiring a description of daily routes, assignments, and explanations of why ZEVs cannot be fueled within one mile of normal routes, at the home bases, or during the workday is necessary to gather a full picture of the fleet's operational profile and makes it clear that fleet owners are expected to make some reasonable adjustments to their normal operation to utilize ZEVs effectively in their operations. Understanding the fleet's operations will also help staff and fleet owners identify practical options where available ZEVs may fit into the fleet's routes. Information gathered from this criterion will also help identify barriers and solutions for future vehicle deployments.

It is necessary to allow fleet owners to optionally submit measured ZEV energy use data from other ZEVs in the fleet to help substantiate exemption claims. While not every fleet may have ZEVs, those that do may have specific data comparing ZEV capabilities to ICE vehicle capabilities on similar assignments. This data can expedite the review process for the exemption and provide a more direct comparison for staff to evaluate. It is necessary to require specific optional information because loading and weight data, route grades, ambient temperatures, and state of charge if applicable at the beginning and end of the shift all affect ZEV operational characteristics and helps staff contextualize the data when evaluating the daily usage reports.

### **Sections 2015.3(c), 2015.3(c)(1-4). Infrastructure Construction Delay Extension**

#### **Purpose**

The purpose of this section is to set forth the requirements for the Infrastructure Construction Delay Extension. A fleet owner may apply for this extension if they experience construction delays beyond their control on a project to purchase ZEVs and install ZEV charging or fueling stations. The Executive Officer will grant a single extension per project to delay the vehicle delivery for one year if they determine the fleet owner satisfies the criteria for the delay, based on the information submitted below and the exercise of good engineering judgment. The fleet owner must submit the following by email to TRUCRS@arb.ca.gov to apply:

- Submit documentation showing the executed contract for the infrastructure installation with a construction project start date at least one year prior to the next immediately applicable compliance date for the purchased vehicle;
- Submit documentation showing the delay is a result of any of the following circumstances beyond the fleet owner's control after obtaining construction

## Appendix H-2

permits: change of a general contractor; delays obtaining power from a utility; delays due to unexpected safety issues; discovery of archeological, historical, or tribal cultural resources described in the California Environmental Quality Act Public Resources Code Division 13, Section 21000 et. seq; or natural disasters.

- Submit a letter to CARB from the responsible official explaining the reason for the delay, why retail infrastructure cannot be used, the estimated completion date of the project, and documentation supporting the reason for the delay from the licensed contractor performing the work, related utility, building department, or other organization involved in the project.
- Documentation showing the executed ZEV purchase agreement.

### **Rationale**

This section is necessary to address situations where fleet owners have begun construction on a ZEV infrastructure project and run into construction delays outside the control of the fleet owner. The provision prevents ordered ZEVs from being delivered and being unable to operate because of delays in installing the infrastructure.

It is necessary to limit the allowed infrastructure projects to BEV charging stations and hydrogen stations because these are the only currently known types of ZEV infrastructure installations.

Granting a single one-year exemption per project allows fleets flexibility to apply for the exemption for each infrastructure project they engage in, while preventing multiple extensions for the same project. Staff expect most infrastructure projects to complete within two years, and because the project was started at least a year in advance of applying for the extension, the year extension provides sufficient time to complete construction while addressing the unforeseen delay.

It is necessary to allow the Executive Officer and their good engineering judgement to assess applications because CARB needs to analyze submitted information and data to determine whether the provision criteria have been met.

It is necessary to specify fleet owners submit applications through the TRUCRS@arb.ca.gov email because that is the email staff will monitor for applications. Email submissions simplify implementation, and fleets subject to this proposed regulation are expected to have internet access to submit applications.

The delay must be for reasons beyond a fleet owners' control so as not to create a loophole. Fleet owners must obtain construction permits before construction can begin, necessitating the requirement that permits have already been obtained. The listed criteria are necessary as general contractors can pull out of projects, utilities can experience unforeseen delays getting power to a facility, and unexpected conflicts with safety requirements are possible. CEQA requires additional time when artifacts are discovered during construction to assess cultural significance and uniqueness, and if they are significant or unique, time to excavate and analyze the artifacts.

## Appendix H-2

Signed letters from responsible officials and contractors are necessary to ensure the reasons for the delay are consistent and explained to CARB to assess the need for the exemption. Retail infrastructure, if available, should be used because the exemption would not be needed if there is sufficient public fueling available. The explanation must include a description of why retail infrastructure could not be used because fleets may have ordered vehicles that cannot use the infrastructure; however, smaller vehicles can typically charge at public stations and should do so where available. The completion date of the project is needed to determine whether the year extension is sufficient.

The executed ZEV purchase agreement is needed to ensure the fleet met the requirement that ZEVs were ordered at least one year in advance of the next applicable compliance deadline.

### **Sections 2015.3(d), 2015.3(d)(1-4), 2015.3(d)(2)(A-B). Vehicle Delivery Delay Extension**

#### **Purpose**

The purpose of this section is to set forth the requirements to use the Vehicle Delivery Delay extension. If ZEVs or NZEVs are ordered at least one year prior to the next compliance date, fleet owners may submit the information below to receive an extension and continue to remain in compliance.

- Fleet owners may claim this extension by emailing the following information to TRUCRS@arb.ca.gov during the annual reporting period:
- Identify the VIN of the vehicle that is to be replaced by the forthcoming ZEV or NZEV
- Submit the purchase agreement showing the new ZEV or NZEV was ordered at least one year prior to the next compliance date to remain in compliance due to delays beyond the fleet owner's control. The purchase agreement must meet the following criteria:
  - o It is a written and legally binding contract signed at least one year before the upcoming fleet milestone or vehicle compliance date for the vehicle being replaced. The extension cannot be claimed if the purchase agreement is modified by the fleet owner within one year of the compliance deadline. Letters of intent or other agreements that are not binding or are contingent upon other decisions that remain unresolved within one year of the upcoming deadline are not sufficient to qualify for the extension
  - o The purchase agreement must identify that a specific vehicle or agreement with a ZEs powertrain conversion installer was purchased, the date of the purchase, and that the purchase is for immediate delivery to the ultimate purchaser in California
- If a manufacturer cancels a purchase agreement used to qualify for the extension for reasons beyond the control of the fleet owner, the fleet owner

## Appendix H-2

must secure another purchase agreement within 90 calendar days to maintain the provision.

- If a fleet owner cancels a purchase agreement used to qualify for the extension, the claim for the extension will be treated as invalid and the agreement will be treated as if it were never executed.

### **Rationale**

This section is necessary to address situations where a ZEV ordered in advanced of the entity's compliance deadline has its delivery delayed for reasons beyond the entity's control. Fleets need flexibility to deal with manufacturer delivery times affected by supply chain constraints and other variables.

It is necessary to specify fleet owners submit applications through the TRUCRS@arb.ca.gov email because that is the email staff will monitor for applications. Email submissions simplify implementation, and fleets subject to this proposed regulation are expected to have internet access to submit applications.

The VIN of the vehicle to be replaced is needed to identify which vehicle will be granted the extension.

Purchase agreements are legally binding contracts and are sufficient to ensure the fleet has a ZEV or NZEV forthcoming. The vehicle must have been ordered one year in advance of the next compliance date because staff expect most vehicle delivery timelines to be complete within two years of the order, and because the vehicle was ordered at least a year in advance, the extension provides sufficient time to take delivery while addressing the unforeseen delay. Fleet owners cannot modify purchase agreements because this would result in a foreseeable delay in expected vehicle delivery. Non-binding agreements may be contingent on other decisions in situations where fleet owners have standing vehicle orders, but have not specified the needed specifications to the manufacturer. If a lack of action results in a delay, this would not be considered unforeseeable or beyond the fleet owner's control. Specific vehicles or powertrains must be listed on the purchase agreement to ensure the forthcoming vehicle or powertrain are indeed ZEV or NZEV. The date of the purchase agreement is necessary to determine whether the one-year in advance criterion is met. The purchase must be for immediate delivery to the ultimate purchaser in California to avoid extension requests based on deliveries planned for later points in time. The extension would not be needed until an unforeseen delay occurs.

Manufacturer cancellations do occur, and fleet owners should have reasonable flexibility of 90 calendar days to enter into another agreement if this happens to maintain the exemption. 90 calendar days is necessary to provide sufficient time to re-issue bids or place additional orders from other manufacturers. The exemption would not make sense to continue if the fleet owner delays purchasing ZEVs after such a cancellation, because the period of time of the delay is under the fleet owner's control. If a fleet owner cancels the order, this is clearly under the fleet owner's control and the extension would be voided because it no longer would meet the criteria.

## **Sections 2015.3(e), 2015.3(e)(1-5), 2015.3(e)(4)(A-B). ZEV Unavailability Exemption.**

### **Purpose**

The purpose of this section is to set forth the requirements for the ZEV Unavailability exemption. The Executive Officer will maintain a list of vehicle configurations that are eligible for this extension on CARB's ACF webpage. The list will include commercially unavailable vehicles with a GVWR greater than 14,000 lbs. and will not include pickup trucks, two-axle buses, box trucks, vans, or any tractors. Fleet owners may replace existing ICE vehicles with vehicles on the list without submitting an exemption request. To use the exemption, fleet owners must:

- Verify the vehicle in the weight class and configuration being replaced is listed on CARB's ACF webpage as commercially unavailable.
- Comply with the reporting and recordkeeping requirements of sections 2015.4(i) and 2015.5(j).

The following describes the criteria for adding or removing vehicles to the list. Fleet owners or vehicle manufacturers may request the Executive Officer to add or remove vehicles from the list if the conditions of this section have been met. The Executive Officer will rely on the information submitted below and their good engineering judgement in determining whether to add vehicles to the list. The vehicle will be added to the list unless the ZEV or NZEV is commercially available as a complete vehicle or is certified for sale in California. The applicant must submit the following by email to TRUCRS@arb.ca.gov to request a vehicle configuration be added to the list:

- Submit the make, model, weight class, configuration, a photograph, and a specifications sheet to show the vehicle is commercially available as an ICE vehicle
- For each commercially available ZEV or NZEV chassis in the same and next higher weight class that is certified for sale in California, show the chassis cannot be equipped in the applicable configuration. For example, if a Class 4 vehicle is needed, the following information must be submitted for Class 4 and Class 5 chassis. To do so, applicants must submit either of the following:
  - o A signed statement or email from the vehicle manufacturer stating the chassis is not compatible with the applicable configuration and for what reasons; or
  - o A signed statement or email from each authorized installer of the needed vehicle body stating that for each available ZEV or NZEV chassis, the installer attempted and failed to configure the body on the chassis without violating safety standards prescribed under title 8, CCR by the California Department of Industrial Relations, Division of Occupational Safety and Health, comparable federal or state health and safety laws where the vehicle operates, or federal highway safety laws. The

## Appendix H-2

statement must identify which of these safety laws or standards would be violated and for what reasons.

- If the Executive Officer determines the conditions specified in section 2015.3(e)(4) are no longer met the vehicle configuration will be removed from the list six months after the determination is made and the configuration is considered commercially available.

### **Rationale**

This exemption is necessary to address situations where ZEV or NZEVs are not commercially available for fleets to purchase in needed configurations. If ZEVs or NZEVs are not commercially available, fleets must have flexibility to replace existing vehicle with lower emitting commercially available vehicles to meet their operational needs.

To simplify implementation of this exemption, CARB will host a list of vehicle configurations considered commercially unavailable on the website. This will be an easily accessible location for fleets to check whether a vehicle they want to purchase is considered unavailable. A centralized list helps streamline the exemption request process compared to fleets individually submitting requests. This also helps CARB implement the provision by having a single location to aggregate availability information sent to CARB. The requirement for fleet owners to report and record keep is necessary because specific information is required to be reported and kept by fleets that use this exemption to document which vehicles were purchase under the exemption.

It is necessary to limit the provision to Class 4 and above vehicles because Class 2b and 3 vehicles are already commercially available as ZEVs in a range of vehicle configurations and would not be listed as unavailable. This approach is necessary to simplify implementation of the exemption by reducing the burden of assessing unwarranted requests for the exemption and the objective is to identify vehicle configurations that are not available while providing easy to understand categories that fleets can recognize.

It is necessary to limit the provision to vehicles that are not pickups, vans, box trucks, buses, or tractors because these vehicles are already commercially available to purchase from multiple manufacturers in multiple configurations, and more have been announced too soon be commercially available.

Providing the Executive Officer authority to add or remove vehicles from the list is needed because CARB is responsible for making the determination whether information submitted meets all criteria for being added to or removed from the list. It is necessary to allow the Executive Officer and their good engineering judgement to assess applications because CARB needs to analyze submitted information and data to determine whether the provision criteria have been met and assessed for the appropriate vehicle configuration.

## Appendix H-2

It is necessary to make it clear the list will not include ZEVs or NZEVs that are commercially available in a given configuration or certified for sale in California because the list is strictly for unavailable vehicles. This also makes it clear that when vehicles are available in a given configuration, it does not belong on the list and that list is strictly based on the vehicle configuration regardless of manufacturer.

Applications must be submitted by email through the TRUCRS@arb.ca.gov email because that is the email staff will monitor for applications. Email submissions simplify implementation, and fleets subject to this proposed regulation are expected to have internet access to submit applications.

Vehicles must be commercially available as ICE vehicles because the ICE vehicle must be purchased in the same needed configuration to ensure that a "higher standard" is not applied to ZEVs. It would not be reasonable nor necessary to expect ZEV manufacturers to bring such a configuration to market that does not already exist as an ICE vehicle. Additionally, fleets would not be able to buy an ICE vehicle of the needed configuration per the exemption criteria if it does not exist so issuing an exemption to purchase something that does not exist as an ICE vehicle is pointless. The make, model, weight class, and configuration are needed to identify the type of vehicle to clearly identify what vehicle is being considered and would receive an extension. The information is necessary to determine whether the vehicle is already being sold as a ZEV and is necessary to make clear to manufacturers and other interested parties what vehicles are equivalent. The photograph and specifications sheet are to ensure the configuration described match the ICE vehicle.

Applicants must show that each commercially available ZEV or NZEV chassis certified for sale in California are not able to be equipped in the needed configuration in both the original weight class of the needed vehicle and the next weight class up. This is necessary to ensure applicants' due diligence in seeking out all available chassis and to ensure reasonable options are considered in selecting a vehicle. CARB will not add a vehicle to the list if it is available. The weight class requirement is necessary because ZEV or NZEV powertrains today can weigh more than ICE vehicle drivetrains and the difference from one weight class to another is one lb. Though weight is generally not an issue for vehicles with less than 150 miles of range, it can be a consideration for higher mileage ZEVs. Staff expect weight for ZEVs to reduce over time for a given range, in the early market it is necessary to ensure applicants consider ZEVs that may be in the next weight category.

It is necessary to require a signed statement or email from vehicle manufacturers stating the chassis is not compatible with the configuration to inform CARB for what reasons the chassis cannot be configured. Vehicle manufacturers are the authority for what bodies their chassis are compatible with and whether they are certified for a given application. Such a statement from the manufacture directly confirms the configuration is not available from that ZEV manufacturer.

The authorized installer criteria are necessary to establish that no bodies can safely be installed on the available chassis. It is necessary to require specific safety codes be referenced to enhance enforcement. Because vocational body manufacturing is

typically not vertically integrated with the chassis design, staff cannot foresee every possible challenge with integrating truck bodies or equipment with available ZE chassis. To the extent they occur, this language would address a situation that is not feasible.

The date that vehicles will be removed from the list is established by the last criteria for the exemption. Six months of lead time is reasonable for fleets to become aware of vehicles being removed from the list and to allow time for bid processes that have already begun to place orders with manufacturers for ICE vehicles.

## **Sections 2015.3(f)(1). Exemptions Pursuant to Declared Emergency Event, Declared Emergency Response.**

### **Purpose**

The purpose of this section is to provide flexibility so that any vehicle dispatched by a local, state, federal, or other responsible emergency management entity or its contractors to support a declared emergency event shall be exempt from the requirements of section 2015.1 or 2015.2 for the duration of the emergency event. Fleet owners must keep and provide records per section 2015.5(a)(4) and 2015.5(g). Fleet owners must also provide proof of the contract with the emergency management entity to entities whose vehicles perform emergency operations under that contract that are otherwise not complying with the regulation.

### **Rationale**

This section is necessary to exempt vehicles meeting the provision requirements from the general requirements of the proposed regulation to prevent impeding emergency response by regulated vehicles during declared emergency events. Major historical disaster or emergency events have required bringing non-compliant vehicles into the state and operating them to help alleviate safety risks to the public. It is necessary to limit this exemption to only vehicles dispatched by public agencies or emergency management entities, which are the primary dispatching entities during such events, to ensure the vehicles are operating pursuant to a declared emergency. It is necessary to require fleet owners to provide needed emergency dispatch records to contracted entities operating non-compliant vehicles under the exemption to verify the conditions are being met.



## **Sections 2015.3(f)(2), 2015.3(f)(2)(A-D) Exemptions Pursuant to Declared Emergency Event, Mutual Aid Assistance.**

### **Purpose**

The purpose of this section is to establish the requirements to apply for the Mutual Aid Assistance exemption. Fleet owners may apply for this exemption if they have a mutual aid agreement to send vehicles to assist other entities during a declared emergency event and at least 75 percent of their California fleet is comprised of ZEVs. The exemption is limited to replacing vehicles with a GVWR greater than 14,000 lbs. and does not apply to pickup trucks, buses, box trucks, vans, any tractors, or any vehicle configurations commercially available as NZEVs. The Executive Officer will rely on the information submitted in sections 2015.3(f)(2)(A-D) and their good engineering judgment in determining whether to approve the exemption. The fleet owner must do and submit the following by email to TRUCRS@arb.ca.gov to apply:

- Submit the make, model, weight class, configuration, and photograph of the ICE vehicle to be replaced.
- For each commercially available ZEV or NZEV complete vehicle or incomplete chassis in the same and next higher weight class that is certified for sale in California, submit the following: documentation from the manufacturer and all mobile fueling providers with compatible mobile fueling options to show the vehicle or chassis cannot be refueled with compatible mobile fueling options that would fuel from 10 to 80 percent of the ZEV's rated energy capacity within 1 hour of fueling time; a signed statement or email from the vehicle manufacturer stating the chassis is not compatible with the applicable configuration and for what reasons; or a signed statement or email from each authorized installer of the needed vehicle body stating that for each available ZEV or NZEV chassis, the installer is unable to configure the body on the chassis without violating safety standards prescribed under title 8, CCR by the California Department of Industrial Relations, Division of Occupational Safety and Health, comparable federal or state health and safety laws where the vehicle operates, or federal highway safety laws. The statement must identify which of these safety laws or standards would be violated and for what reasons.
- Submit a copy of the mutual aid agreement in effect with other entities to assist with affected vehicles during declared emergency events.
- Submit a letter to the Executive Officer that has an explanation of the reason for the exemption request.

### **Rationale**

This provision is necessary to address situations where fleets need to assist in emergencies outside normal service areas, including assisting with disasters in other states where ZEV range and limited ZEV fueling infrastructure may present a risk to limit the ability to respond to emergency events timely.

## Appendix H-2

Mutual aid agreements are official documents that enable resource and asset sharing to combat emergency situations where a fleet with jurisdiction needs additional resources. It is necessary to require that fleets applying for this provision have one in place to ensure the exemption is not claimed for unjustified or unsupported reasons. This helps protect the expected emissions benefits of the regulation by limiting potential loopholes.

Staff expect ZEV range and fueling times to improve as technology advances and the need for an exemption will diminish as infrastructure is built out over time such that the exemption may not be needed. However, this provision is necessary to address these safety concerns if needed in the future. For most fleets, given the compliance options, it is likely that this provision would not be able to be used until the 2030 timeframe since most fleets wouldn't be at 50 percent ZEVs until then, when vehicles will be more ubiquitous, available, and infrastructure will be more widespread. The provision is limited to vehicles that are not apply to pickup trucks, buses, box trucks, vans, any tractors because they are ubiquitous and can readily be rented if needed and are not specialized equipment that would be difficult to access in a relatively short turnaround time. Additionally, fleets with lighter vehicles can already use light-duty vehicle stations and are likely to have access to public fueling anywhere by the time the exempt may be requested.

The 75 percent criterion is necessary to ensure the exemption is not claimed when a high proportion of the fleet are still ICE vehicles. In meeting with stakeholders that have mutual aid agreements, several utility fleets have indicated they historically have deployed a maximum of 20 percent of the fleet at any one time to serve mutual aid needs, as the majority are still needed to serve their normal service areas. Allowing the fleet to purchase up to 25 percent ICE vehicles pursuant to this provision is necessary and adequate to provide flexibility to serve future mutual aid needs. Most fleets are expected to have more the 50 percent ICE vehicles in their fleet by 2030 and would still have ICE vehicles after 2035.

It is necessary to limit the provision to Class 4 and above vehicles because Class 2b and 3 vehicles are already commercially available as ZEVs in a range of categories. The vehicles are not specialized and can easily be rented if needed, and Class 2b and 3 vehicles can typically use light-duty ZE refueling infrastructure because of the smaller vehicle footprint. Additionally, declared emergency events tend to be multiple week or month events, and responding entities could transport lighter ZEVs to the location to operate locally if infrastructure is available. This approach simplifies implementation by reducing the burden of assessing exemption requests for vehicles that are readily available as rentals and are able to utilize existing light-duty ZE infrastructure. The provision is intended for more specialized vehicles that cannot be easily rented.

This provision is not available for any vehicle type commercially available as an NZEV because NZEVs are not limited by range or infrastructure constraints, as they can refuel at combustion fuel sources which are widely available nationwide. It is necessary to show no NZEVs of the needed configuration are available to limit the exemption to

## Appendix H-2

situations where ZEV range and fueling are the primary limitations to mutual aid response.

It is necessary to allow the Executive Officer and their good engineering judgement to assess applications because CARB needs to analyze submitted information and data to determine whether the fleet composition and other provision criteria have been met.

Applications must be submitted by email through the TRUCRS@arb.ca.gov email because that is the email staff will monitor for applications. Email submissions simplify implementation, and fleets subject to this proposed regulation are expected to have internet access to submit applications.

The make, model, weight class, configuration, and a photo are needed to identify the type of vehicle and for CARB to ensure the ICE vehicle is the correct type to receive the exemption. The photograph and specifications sheet are to ensure the configuration described match the ICE vehicle.

Fleet owners must submit information for all available ZEVs or NZEVs of the needed type to ensure due diligence in seeking out ZEVs capable of serving these emergency events. Additionally, this streamlines implementation and reduces the staff needs to assess these requests. Mobile fueling options are a potential solution to the lack of readily available permanent ZEV infrastructure in emergency areas. Mobile ZEV fueling options for both electric and hydrogen fuels are being developed and commercialized. If mobile fueling is available that can reach 80 percent of the rated energy capacity in one hour, there would not be a need for this flexibility option because the ZEVs would not have any range or infrastructure limitations.

A copy of the mutual aid agreement is necessary to ensure the provision criteria are met, and the explanatory letter is necessary to help CARB to understand the fleet's exemption request and to provide the needed information to implement and enforce the provision's criteria.

### **Section 2015.4. High Priority and Federal Fleets Reporting**

#### **Purpose**

The purpose of this section is to inform fleet owners of the reporting requirements of the proposed regulation, including reporting deadlines, acceptable methods, and required information.

#### **Rationale**

This section is necessary to set forth the reporting requirements for entities subject to the proposed regulation. Regulated entities need to have a standardized method to report information and data to CARB so the proposed regulation is enforceable. Reported data and information can also help CARB track compliance and determine if the proposed regulation is meeting its stated objectives.

## **Section 2015.4(a). Method of Reporting.**

### **Purpose**

The purpose of this section is to require that report submitted to comply must be submitted online to the Executive Officer through CARB's ACF webpage.

### **Rationale**

This section is necessary to establish the requirement that fleets report information required by the proposed regulation online through CARB's reporting webpage. This approach is necessary because online reporting allows for validation of data entered in the system.

## **Section 2015.4(b). Reporting Deadline and End Date.**

### **Purpose**

The purpose of this section is to establish the reporting deadlines, annual reporting period, and the end date of the reporting requirements. No later than February 1 of each year until February 1, 2045, fleet owners must annually submit a compliance report showing the California fleet composition as of January 1 of each year. The initial report must be submitted by February 1, 2024. The annual reporting period is during the month of January.

### **Rationale**

This section is necessary to establish the annual reporting start date, annual deadline, and end date for the reporting period. February 1, 2024 as a start date is necessary because the proposed regulation begins January 1, 2024, and CARB would need information about the composition of the fleet reported to determine compliance. Staff selected February as the reporting time frame because other regulations already require reporting during other months of the year, and stakeholders requested staff spread out reporting dates to help mitigate impacts of concurrent reporting due dates. February 1, 2045 was selected as the end date of reporting because the regulation implementation timeline would end in 2045, and no further reports would be needed to continue complying with the regulation. It is necessary to have reports show the fleet composition each year as of January 1 because the compliance deadlines are based on the fleet composition as of January 1, and CARB needs that information to be able to determine compliance.

## **Sections 2015.4(c)(1), 2015.4(c)(1)(A-O), 2015.4(c)(1)(A)1., 2015.4(c)(1)(K)1-3. Fleet Reporting, Entity Information.**

### **Purpose**

The purpose of this section is to inform a fleet owner they need to report the following entity information: the name of the entity or fictitious business name; the entity owner's name; the entity's physical and mailing address; the name, phone number, and email of the person designated as the contact; the Federal Taxpayer Identification number; applicable operating authority numbers; whether the fleet is a federal fleet; whether the fleet owner owns an interstate rental fleet; which applicability criteria the entity falls under, or whether the entity is being voluntarily reported for recognition as a "ZEV Fleet"; the date fleets were either newly formed, newly became subject to the proposed regulation, or became no longer subject to the regulation if applicable; whether the fleet owner elects to comply with the ZEV Milestones path of section 2015.2; and the name of the responsible official.

### **Rationale**

This section is necessary because the entity identification and contact information is needed for CARB to identify the regulated entity for implementation, audit, or enforcement of the proposed regulation. This section is also necessary because this information provides CARB staff with the name, mailing address, phone number, email of the contact person(s) for notification purposes, or to direct questions to. The responsible official is necessary to identify because it is the person who is responsible for the accuracy and legitimacy of reported information. The taxpayer ID and operating authority numbers are necessary as they are unique identifiers for each regulated entity. It is necessary to identify whether fleets are federal or rental because specific treatment or flexibility provisions apply to those fleet types. Identifying the applicability category or whether a fleet is complying voluntarily is necessary to implement and provide recognition for "ZEV Fleets" and to help guide potential enforcement based on applicability criteria. It is necessary to know the dates a fleet became subject to or no longer subject to the proposed regulation to be able to implement and enforce the specific provisions that set time frames for when fleets must comply or no longer are required to comply due to changes in applicability. The section requiring fleet owners to identify whether the fleet owner will follow the compliance path of section 2015.2 is necessary to establish which compliance path the fleet plans on following for CARB to be able to enforce the proposed regulation.

## **Sections 2015.4(c)(2), 2015.4(c)(2)(A-P). Vehicle Information.**

### **Purpose**

The purpose of this section is to inform fleet owners and controlling parties they need to report the following information for each vehicle in the California fleet, including

## Appendix H-2

those operated under common ownership or control for controlling parties: VIN; vehicle make and model; vehicle model year; vehicle license plate number and state or jurisdiction of issuance; vehicle GVWR (Greater than 8,500 lbs. and equal to or less than 14,000 lbs., greater than 14,000 lbs. and equal to or less than 26,000 lbs., or greater than 26,000 lbs.); vehicle body type; vehicle fuel and powertrain type; date vehicle was purchased; date vehicle was added to or removed from the California fleet; whether the vehicle will be designated under or was purchased pursuant to any exemption or extension provision; odometer readings or hubodometer readings; engine family and model year for tractors 12 years old or older; whether the vehicle being reported by a controlling party is owned by another entity; funding contract start and end date for vehicles purchased with California State-funding if the vehicle is to be excluded during the funding contract period as specified by the funding program; and identify whether the vehicle has a heavy front axle.

### **Rationale**

This section is necessary because identifying information for vehicles that comprise the fleet owner's California fleet are essential for tracking compliance with the proposed regulation or for providing information on any enforcement actions.

VIN, make and model, model year, and license plate number all are necessary identifying information for enforcement purposes. GVWR, vehicle body type, fuel and powertrain type, purchase date, added or removed date; and whether the vehicle is using any exemption or extension all are necessary for staff to determine compliance with the ZEV requirements and to verify proposed provisions and criteria are met.

Staff also needs the contract start and end date for vehicles purchased with California State-funding if the vehicle is to be excluded during the funding contract period as specified by the funding program to determine compliance with the ZEV purchase requirements.

Odometer or hubodometer readings are necessary to determine compliance with the backup vehicle exemption and Model Year Schedule compliance option.

It is necessary to require reporting of the engine model year and family for tractors that are 12 years or older because according to the Large Entity Reporting data, almost no vehicles besides tractors travel over 50,000 miles annually and would not reach the minimum useful life mileage threshold before 18 years. Tractors would need to start being tracked at 12 years to minimize reporting burden for fleets prior to the vehicles' 12<sup>th</sup> year while ensuring staff can implement and enforce the Model Year Schedule compliance option. The engine year is necessary to determine how old the engine is to compared to the year the engine and emissions control systems were first certified for use by CARB or U.S. EPA, and the engine family will enable staff to verify the reported engine year because the engine year is coded into the family name.

It is necessary to require controlling parties to report whether a reported vehicle is owned by another entity because staff must be able to differentiate owned vehicles from those under common ownership or control relationships to calculate compliance.

Identifying whether the vehicle has a heavy front axle is necessary to verify a vehicle qualifies as a specialty vehicle to calculate compliance with the ZEV Milestones option.

## **Sections 2015.4(d). Corporate Joint Compliance Reporting.**

### **Purpose**

The purpose of this section is to inform entities that choose to comply jointly per section 2015(h) they must report individually for each subsidiary or joint venture and include a CARB-issued ID number of the primary controlling corporate parent, joint venture business, or designated primary entity.

### **Rationale**

This section is necessary to set forth reporting requirements that enable staff to identify which fleets belong to which jointly complying group of entities. This enables proper calculation of compliance for the group while keeping entity reports separate so their individual compliance can be determined if the group fails to comply. A CARB-issued ID number is necessary to report as it is the unique identifying marker used in CARB's reporting systems. It is necessary for the reported ID number to be for the primary entity because this enables staff to track the primary controlling entity associated with individually reported entities and calculate group compliance.

## **Sections 2015.4(e), 2015.4(e)(1-4). Changes to an Existing Fleet.**

### **Purpose**

The purpose of this section is to inform fleet owners that changes to their fleet must be reported to CARB within 30 calendar days of when the change occurred. The changes that must be reported within that timeframe are when a vehicle is added or permanently removed from service; when a backup vehicle exceeds the allowable mileage; and when an ICE vehicle was repowered or converted to ZEV.

### **Rationale**

This section is necessary to ensure that compliance with the regulation can be verified or essential information is available for any enforcement action. The requirement that changes to the fleet must be reported within 30 calendar days provides a reasonable timeframe for a fleet owner to report any changes that might have an affect compliance.

## **Sections 2015.4(f), 2015.4(f)(1-3), 2015.4(f)(2)(A). Odometer Reading Reporting.**

### **Purpose**

The purpose of this section is to inform fleet owners that have: backup vehicles; vehicles utilizing an exemption due to a declared emergency event per section 2015.3(f)(1); day or sleeper cab ICE vehicle or NZEV tractors following the Model Year Schedule of section 2015.1; or day or sleeper cab ICE vehicle or NZEV tractors following the ZEV Milestones pathway of section 2015.2 that want to switch to the Model Year Schedule of section 2015.1.; that they are required to annually report the mileage reading and the date the reading was recorded from a properly functioning odometer; and for any backup vehicles used in emergency operations due to a declared emergency event, the fleet owner must report the number of miles travelled in support of the emergency if the vehicle would exceed the backup vehicle mileage limit for that year.

This section also includes a provision in the event that the odometer is replaced, the fleet owner must report the following within 30 calendar days of the original odometer failure: the original odometer's final reading, the new odometer's initial reading, and the date of replacement. If the vehicle's odometer is not functional, then the fleet owner can report the serial number from a hubodometer with a non-resettable odometer.

### **Rationale**

This provision is necessary for CARB to implement and enforce the backup vehicle exemption and the Model Year Schedule.

Backup vehicles are exempt from the regulation requirements. This reporting provision is needed to provide proof and ensure all fleet owners are reporting accurate mileage to qualify for this exemption. Backup vehicles can be deployed by fleet owners to provide emergency operations during a declared emergency event. This section is necessary to establish the requirement to report the vehicle miles accrued during a declared emergency event because those miles are excluded from the annual mileage calculation to determine whether a vehicle qualifies as a backup vehicle. Additionally, only requiring reporting of emergency miles travelled when the operations would exceed 1,000 miles annually helps reduce unnecessary reporting burden.

This section also establishes the type of measurement device (odometer) as well as an alternative measurement device (hubodometer) that can be used to measure the mileage. This section includes a 30 calendar day notification if the backup vehicle odometer fails and is replaced. The requirement that failed odometer be reported within 30 calendar days provides a reasonable timeframe for a fleet owner to report any changes that might have an affect compliance.



## Appendix H-2

It is necessary to require sleeper or day cab ICE vehicle or NZEV tractors that are more than 12 years old to report annual odometer readings because fleets complying with the Model Year Schedule will need to remove vehicles from their California fleet that have exceeded their minimum useful life. Tractors can exceed the 800,000 vehicle miles travelled mark, which is needed to determine compliance with the Model Year Schedule option. There is no need to ask for this information about non-tractors because the Large Entity Reporting data shows that most vehicles that are not tractors travel well below 50,000 miles per year and would very rarely exceed the 800,000-mile threshold. This helps reduce reporting burden.

### **Sections 2015.4(g). Vehicle Delivery Delay Reporting.**

#### **Purpose**

The purpose of this section is to inform fleet owners utilizing the vehicle delivery delay extension to report the delivery of the newly added ZEV or NZEVs and to either remove the ICE vehicle from the California fleet or to designate it as a backup vehicle within 30 calendar days of delivery.

#### **Rationale**

This section is necessary for staff to have the needed information to enforce and implement the vehicle delivery delay provision. The delivery and removal of vehicles are necessary for CARB to know to implement the requirements of the Model Year Schedule or the ZEV Milestones option. The 30-day reporting window is necessary to give fleets a reasonable amount of time to report the change to the fleet while ensuring the information is provided to CARB in a timely manner.

### **Section 2015.4(h). Rental Vehicle Provision Reporting.**

#### **Purpose**

The purpose of this section is to inform fleet owners utilizing the rental vehicle provision that individual rental vehicles rented fewer than 180 calendar days under contract with origins and destinations in California do not need to be reported if using the Rental Vehicle Provision specified in section 2015.2(d). Interstate rental fleet owners must report the average number of rental vehicles in California within each Milestone Group as determined by contracts or telemetry data as specified in section 2015.2(d).

#### **Rationale**

This section is necessary to reduce the burden of reporting all possible transitory rental vehicles that may enter California if using the provision. Because only the average number of rental vehicles in California is reported, staff do not need to know

the individual vehicle information to calculate compliance for this option. Six months is a reasonably limited rental time frame to represent short-term transient rental vehicles.

## **Sections 2015.4(i), 2015.4(i)(1-4). ZEV Unavailability Supporting Documentation Reporting.**

### **Purpose**

The purpose of this section is to inform fleet owners who purchase an ICE vehicle pursuant to the ZEV Unavailability exemption that they must submit an email to TRUCRS@arb.ca.gov with the purchase agreement and the following clear and legible digital photographs of: VIN/GVWR label (typically located on the driver side door or door jamb); license plate with side of the vehicle visible; entire left side of the vehicle with doors closed showing the vehicle's body configuration; and entire right side of the vehicle with doors closed showing the vehicle's body configuration.

### **Rationale**

This section is necessary to set forth documentation submission requirements to show that the ICE vehicle purchased pursuant to the exemption is the same weight class and configuration of the unavailable ZEV or NZEV. The photographs and angles are necessary to capture a complete picture of the vehicle for staff to audit and to ensure the vehicle is the same reported with the VIN and license plate visible. Digital photos are necessary to specify for the fleet owner acceptable photo formats for submission; print or physical copies cannot be emailed and must be converted into digital formats to submit. This additionally reduces administrative burden by preventing necessary keeping, tracking, and proper disposal of physical media.

## **Section 2015.4(j). Requirement for Signature.**

### **Purpose**

The purpose of this section is to inform fleet owners that all reports submitted to CARB electronically are considered signed by the responsible official, and that hard-copy documentation submitted must be signed by the responsible official.

### **Rationale**

This section is necessary to establish that CARB will consider electronic reporting as signed by the responsible official, which reduces administrative burden of dealing with hard copy forms. This section is also necessary to establish the requirement that hard copy forms submitted must be signed, which helps CARB ensure the reports submitted are considered by a fleet owner to be legitimate.

## **Section 2015.4(k). Method for Requesting and Approval of Exemptions or Extensions.**

### **Purpose**

The purpose of this section is to inform fleet owners that requests and required information for Executive Officer consideration of the exemptions or extensions of sections 2015.3(b), 2015.3(c), 2015.3(d), 2015.3(e), and 2015.3(f)(2) must be submitted via email to TRUCRS@arb.ca.gov. The Executive Officer will notify the fleet owner by email whether the exemption or extension request is approved within 30 calendar days from receipt of a complete submission.

### **Rationale**

This section is necessary to establish the method by which fleets must submit requests and required information for the proposed exemptions and extensions. Applications and information must be submitted by email through the TRUCRS@arb.ca.gov email because that is the email staff will monitor for applications. Email submissions simplify implementation, and fleets subject to this proposed regulation are expected to have internet access to submit applications. 30 calendar days is a necessary timeframe for staff to perform detailed analysis of submitted information and to allow for communication with applicants for clarification. Additionally, this allows for expanded capacity in processing applications, as it is feasible that multiple applications could be received and processed at the same time. 30 calendar days also provides a reasonably fast turnaround time for fleets that need a decision before moving forward with purchases. Limiting the 30-day timeframe to apply only when a complete application is submitted ensures staff have adequate time to assess the entirety of an applicant's complete submission.

## **Section 2015.5. High Priority and Federal Fleets Recordkeeping.**

### **Purpose**

The purpose of this section is to inform fleet owners of the requirements for keeping records or documentation related to compliance with this proposed regulation. The section also details that they must keep and provide documentation described in section 2015.5 in an electronic or paper format as upon request or make them available to the Executive Officer within 72 hours of a request.

### **Rationale**

This section is necessary to set forth the various recordkeeping and retention requirements of the proposed regulation. These ensure CARB can verify compliance with the proposed regulation by allowing CARB staff to perform an audit; this information may also be needed for enforcement and to assess penalties for not

providing records or for providing false information. Seventy-two hours provides a fleet owner with a reasonable amount of time to make records available to CARB staff while ensuring timely delivery and responsiveness to expedite enforcement activity. It is necessary to specify that records must be kept in either electronic or paper formats to provide flexibility for fleet owners to keep the necessary records in whatever manner they already have the records in to minimize recordkeeping burden.

## **Sections 2015.5(a), 2015.5(a)(1-5), 2015.5(a)(3)(A-D). Entity and Vehicle Documentation.**

### **Purpose**

The purpose of this section is to inform a fleet owner they must keep for the duration in section 2015.5(k) and provide the following documentation as it pertains to any vehicles in their California fleet: records of all vehicle information reported per section 2015.3; vehicle purchase, rental, and leasing documents, such as purchase agreements, orders, notices to proceed, leasing agreements, or rental agreements for the vehicles. Additionally, for all vehicles that have been removed from the California fleet, the fleet owner must keep and provide the following: if the vehicle is sold, a transfer of liability form filed with DMV, including the date of sale and mileage reading at the time of sale; if the vehicle is transferred out-of-state, but not sold, a copy of the out-of-state registration; if the vehicle is registered with DMV as non-revivable junked or dismantled, a copy of the registration demonstrating it was filed as such with DMV; and if the vehicle is sold or consigned to an auction house, a copy of the contract and the transfer of liability form filed with DMV, if applicable.

The emergency operation dispatch documentation section's purpose is to inform a fleet owner with backup vehicles exceeding annual mileage limits due to emergency operations that they must keep and provide records to document dispatch by a local, state, or federal emergency management entity. Additionally, fleet owners must keep and provide records of any contracts with a company or agency that was dispatched by a government agency to support emergency operations.

The gross annual revenue section's purpose is to inform entities subject to the regulation based on gross annual revenues that they must keep and provide tax filing records that show the entity's gross annual revenues.

### **Rationale**

The section is necessary as staff needs records to verify reported vehicle information as they relate to the proposed regulation requirements. Vehicle purchase, rental, and leasing documents are necessary for staff to verify compliance with proposed regulation requirements which can be based on dates of purchase, rental agreement contract destinations, and leasing terms. Vehicle removal documentation is necessary for staff to verify the fleet's size to calculate compliance and to ensure that vehicles

## Appendix H-2

that have been claimed to be removed from the fleet are no longer operated in California.

The emergency operation dispatch documentation section is necessary for staff to verify that backup vehicles with emergency operations mileage were dispatched by the required official entities.

The gross annual revenue section is necessary for staff to verify and audit entity applicability based on gross annual revenue to ensure those that must comply with the proposed regulation are doing so.

### **Section 2015.5(b). Operator Documentation.**

#### **Purpose**

The purpose of this section is to inform a fleet owner that they must keep and provide documentation that identifies the entity that is responsible to pay the driver and any applicable shipping documentation or other documentation that identifies the origin and destination of the cargo and the pickup and termination destination of the cargo.

#### **Rationale**

The documentation is necessary for staff to verify the fleet owner or controlling party of a non-compliant vehicle for enforcement purposes in an audit.

### **Sections 2015.5(c). Odometer Reading Documentation.**

#### **Purpose**

The purpose of this section is to inform fleet owners required to report odometer readings that they must keep and provide records of the vehicle miles traveled. Acceptable records are those provided in smoke opacity test results, Biennial Inspection of Terminals inspection records, fuel tax records, maintenance records, unaltered photograph of the odometer or hubodometer, or an on-board diagnostics system information download that includes the vehicle miles travelled or odometer information. Fleet owners of backup vehicles used in emergency operations in support of a declared emergency event or for an exemption due to a declared emergency event per section 2015.3(f) must keep and provide records that document vehicle mileage accrued in support of an emergency event.

#### **Rationale**

This section is necessary for staff to verify and audit the annual miles travelled and emergency miles travelled by vehicles designated as backup vehicles. All the listed record types are necessary because they show a vehicle's odometer reading. Providing

multiple options gives flexibility to fleet owners to comply with documents they likely already collect.

### **Section 2015.5(d). Vehicle Delivery Delay Documentation.**

#### **Purpose**

The purpose of this section is to inform fleet owners utilizing the vehicle delivery delay extension to keep and provide records of the purchase agreement used to qualify for the extension and any records or documentation of order cancellations by the manufacturer outside the control of the fleet owner.

#### **Rationale**

This section is necessary for staff to verify and audit whether a fleet met the requirements for the vehicle delivery delay extension. Purchase orders are a contractual document with a date and specific VIN to show by whom and when the vehicle was purchased. Order cancellation documentation is necessary to show whether orders were cancelled for reasons beyond the control of the fleet owner.

### **Section 2015.5(e). Daily Usage Exemption Documentation.**

#### **Purpose**

The purpose of this section is to inform fleet owners utilizing the daily mileage exemption to keep and provide copies of all documents, data, letters, and analysis used to support their request and qualifications for the exemption.

#### **Rationale**

This documentation is needed for staff to verify and audit information supplied to support a fleet's request to use the exemption.

### **Section 2015.5(f). Infrastructure Delay Documentation.**

#### **Purpose**

The purpose of this section is to inform fleet owners utilizing the Infrastructure Construction Delay Extension to keep and provide copies of all documents, letters, contracts, and purchase agreements used to support their request for the exemption.

#### **Rationale**

This documentation is needed for staff to verify and audit information supplied to support a fleet's request to use the exemption.

## **Section 2015.5(g). Documentation for Exemptions Pursuant to Declared Emergency Events.**

### **Purpose**

The purpose of this section is to inform fleet owners utilizing exemptions pursuant to declared emergency events to keep and provide copies of all documents, mutual aid agreements, publicly issued bids and requests for information, and letters used to support their request and qualifications for the exemption.

### **Rationale**

This documentation is needed for staff to verify and audit information supplied to support a fleet's request to use the exemption.

## **Section 2015.5(h). Rental Vehicle Provision Records.**

### **Purpose**

The purpose of this section is to inform interstate rental fleet owners utilizing the rental vehicle provision to keep and provide all documents, records, contracts, global positioning system data, rental vehicle snapshots, or other data used to support their reported annual average number of rental vehicles in the California fleet.

### **Rationale**

This section is necessary for staff to verify and audit the data and methodology used to generate the reported average number of rental vehicles in the California fleet.

## **Section 2015.5(i). Hiring Entity Documentation.**

### **Purpose**

The purpose of this section is to inform hiring entities that are subject to the regulation per section 2015(a)(3) must keep and provide certificates of reported compliance or signed statements received from hired fleets used to verify that hired fleets are compliant with the applicable regulations. Additionally, hiring entities must keep and provide copies of contracts with hired entities that include the disclosure of regulation applicability required by section 2015(g)(2).

### **Rationale**

This section is necessary for staff to verify and audit any records used by the entity to verify their hired fleets' compliance with CARB regulations.

## **Section 2015.5(j). ZEV Unavailability Documentation.**

### **Purpose**

The purpose of this section is to inform fleet owners utilizing the ZEV Unavailability exemption to keep and provide documentation, purchase records, and other records used to qualify for the extension, records and photographs of the ICE vehicles purchased pursuant to the exemption, and any documentation to support adding or removing vehicles from the list.

### **Rationale**

This section is necessary for staff to verify and audit documentation the fleet uses to qualify for the exemption, the photos of the ICE vehicle reported, and any documents submitted to support adding or removing a vehicle from the list of unavailable ZEVs.

## **Section 2015.5(k). Retention of Records.**

### **Purpose**

The purpose of this section is to inform fleet owners that records of reported information and records required to be kept must be kept by the fleet owner and made available to staff for audit for a period of eight years from the date the information is used to demonstrate compliance.

### **Rationale**

This section is necessary to provide a sufficient historical record for staff to verify and audit compliance. The proposed regulation's implementation timeframe ranges over 20 years. For fleets to be considered in compliance, they must have remained in compliance with the regulation requirements. Having historical records allows staff to verify past compliance. Eight years is a reasonable timeframe to allow for auditing past compliance while balancing regulated party's burden of recordkeeping. Eight years also aligns with other CARB regulation record retention requirements, such as that required in the ACT or the Phase 2 Greenhouse Gas regulations.

## **Section 2015.6. High Priority and Federal Fleets Enforcement.**

### **Purpose**

The purpose of this section is to set forth the rights of CARB to audit records, enter facilities where vehicles or records are kept, establish penalties, and establish the proposed regulation's severability.



## **Rationale**

This section is necessary to establish certain provisions by which the rule will be enforced.

## **Section 2015.6(a). Severability.**

### **Purpose**

The purpose of this section is to inform a fleet owner that, if any section, paragraph, subparagraph, sentence, clause, phrase, or portion of this proposed regulation is, for any reason, held invalid, unconstitutional, or unenforceable by any court of competent jurisdiction, such portion shall be deemed as a separate, distinct, and independent provision, and such holding shall not affect the validity of the remaining portions of the regulation.

### **Rationale**

This section is necessary to protect the entire proposed regulation from being invalidated by small mistakes or errors in severable sections.

## **Section 2015.6(b). Penalties.**

### **Purpose**

The purpose of this section is to inform a fleet owner that, any person who fails to comply with the performance requirements of this regulation, who fails to submit any information, report, or statement required by this proposed regulation, or who knowingly submits any false statement or representation in any application, report, statement, or other document filed, maintained, or used for the purposes of compliance with this proposed regulation may be subject to civil or criminal penalties.

### **Rationale**

This section is necessary to establish that penalties may be imposed for failing to comply, report, or submitting false information for the purposes of compliance.

## **Section 2015.6(c). Right of Entry.**

### **Purpose**

The purpose of this section is to inform a fleet owner that, an agent or employee of CARB, upon presentation of proper credentials, has the right to enter any motor carrier, broker, or hiring entity facility (with any necessary safety clearances) where vehicles are located or vehicle records, including hiring and brokering records, are kept to verify compliance.

**Rationale**

The reason for this section is to ensure a CARB staff has access to vehicle records while conducting an audit.