APPENDIX A

DRAFT PROPOSED REGULATION ORDER

HEAVY-DUTY VEHICLE INSPECTION AND MAINTENANCE PROGRAM

Section Number	Section Name
Section 2195	Applicability
Section 2195.1	Definitions
Section 2196	Owner and Vehicle Requirements
Section 2196.1	Compliance Certificate
Section 2196.2	HD I/M Inspection Frequencies
Section 2196.3	HD I/M Inspection Methods
Section 2196.4	Requirements for Vehicles Detected by a Roadside Emissions Monitoring System
Section 2196.5	Requirements for Vehicles Referred to Referee Testing
Section 2197	Freight Contractor Requirements
Section 2197.1	HD I/M-Approved Tester Requirements
Section 2197.2	Device Requirements
Section 2197.3	Requirements for Device Vendors
Section 2197.4	Reporting Requirements
Section 2198	Vehicle Emissions Control Equipment Inspection
Section 2198.1	Driver and Inspector Responsibilities
Section 2198.2	Enforcement
Section 2199	Severability of Provisions
Section 2199.1	Sunset of HDVIP and PSIP (placeholder section title and text)

PROPOSED REGULATION ORDER

Title 13, California Code of Regulations

Adopt Sections 2195, 2195.1, 2196, 2196.1, 2196.2, 2196.3, 2196.4, 2196.5, 2197, 2197.1, 2197.2, 2197.3, 2197.4, 2198, 2198.1, 2198.2, 2199, and 2199.1 of title 13, California Code of Regulations, to read as follows:

§ 2195. Applicability.

- (a) This chapter applies to:
 - (1) All non-gasoline heavy-duty vehicles operating on California roadways, including those registered for use in other states and countries, and the owners and operators of such vehicles.
 - (2) Any freight contractor or applicable facility owner involved in transactions with applicable vehicles.
 - (3) Vendors of devices used to test vehicles in accordance with the requirements of this chapter.
 - (4) Individuals performing vehicle testing in accordance with the requirements of this chapter.
- (b) This chapter does not apply to:
 - (1) Zero-emission heavy-duty vehicles;
 - (2) Authorized emergency vehicles;
 - (3) Tactical vehicles operated by the military:
 - (4) For four (4) years from the time inspections begin under this chapter, when a new vehicle with a heavy-duty engine has been certified to meet the most stringent optional reduced NOx standard as defined in title 13, CCR, section 1956.8; and
 - (5) Motor homes registered outside of California and used only for personal use;
 - (6) Vehicles operating under a CARB authorized emergency decree.

NOTE: Authority cited: sections,	and, Health and Safety Code.
Reference: sections, and	, Health and Safety Code.
§ 2195.1. Definitions.	

- (a) For the purposes of this chapter, the following definitions shall apply:
 - "Aftermarket Part" means performance and/or add-on parts requiring a CARB exemption (EO) from California Vehicle Code section 27156
 - "Aftermarket Parts Label" means a product information label that is affixed to an aftermarket part that contains, at a minimum, the product name as exempted,

CARB Executive Order number, instruction for proper installation, the manufacturer's name and manufacturer's address.

"Agricultural vehicle" means a vehicle, or truck-tractor and trailer combination, owned by a farming business and used exclusively in one or more of the following ways:

- (A) In agricultural operations as defined below:
 - 1. The growing or harvesting of crops from soil (including forest operations), and the raising of plants at wholesale nurseries, but not retail nurseries, or the raising of fowl or animals for the primary purpose of making a profit, providing a livelihood, or conducting agricultural research or instruction by an educational institution; or 2. Agricultural crop preparation services such as packinghouses, cotton gins, nut hullers and processers, dehydrators, and feed and grain mills. Agricultural crop preparation services include only the first processing after harvest, not subsequent processing, canning, or other similar activities. For forest operations, agricultural crop preparation services include milling, peeling, producing particleboard and medium density fiberboard, and producing woody landscape materials.
- (B) To transport harvested farm products to the first point of processing; or (C) To directly support farming or forestry operations, which may include supply trucks, cattle trucks, trucks owned by bee keeping businesses and used exclusively to transport their own bees or honey to the first point of processing, and other vehicles but does not include vehicles that do not directly support farming operations such as personal use vehicles, vehicles rented or leased to others for non-agricultural uses that do not qualify, or vehicles used in a transportation business other than to transport harvested farm products to the first point of processing.

"Alternative fuel" means natural gas, propane, ethanol, methanol, or other technologies that do not rely on diesel fuel with the exception of hydrogen, electricity, or fuel cells. "Alternative fuel" also means any of these fuels used in combination with each other or in combination with other non-diesel fuels.

"Alternative fuel retrofit system" or "retrofit system" is a package of fuel storage and delivery, ignition, emission control, on board diagnostic (OBD), and engine components that are modified, removed, or added during the process of modifying a motor vehicle or engine to operate on an alternative fuel.

"Applicable Freight Facility" is any of the following facilities if one or more Heavy Duty vehicles operate within the legal property boundary of the facility:

- (A) A Port, as defined in this section; or
- (B) An Intermodal Railyard, as defined in this section

"Authorized dealer" means a group of independent service and repair facilities that are recognized by the motor vehicle or engine manufacturer as being capable of performing repairs to factory specifications; including warranty repair work.

"Authorized emergency vehicle" means vehicles meeting one of the following requirements:

- (A) Authorized emergency vehicles as specified in Section 165 of the Vehicle Code.
- (B) A publicly owned authorized emergency vehicle used by an emergency medical technician-paramedic, as defined in Section 1797.84 of the Health and Safety Code, only as necessary to ensure the ability to respond to emergencies.

"Authorized representative" means a person who takes responsibility for all the information submitted for OBD test device certification and who signs the device certification application.

"Calendar year" means January 1 to December 31 for a given year.

"CARB" means the California Air Resources Board.

"CARB post-repair inspection" means a repeat emission control system inspection, conducted by the California Air Resources Board inspector or referee.

"Certification" means relating to the process of obtaining an Executive Order with respect to an OBD test device, complying with the device certification requirements specified section 2197.3 of this chapter.

"Citation" means a notice issued by the California Air Resources Board alleging a violation of the requirements outlined in section 2198.2(b) which requires submission of documentation and payment of a penalty.

"Compliance certificate" means a certificate issued to a vehicle owner by the Executive Officer, obtained after demonstrating compliance with this chapter, confirming the vehicle can legally operate in the state.

"Compliance year" refers to the annual period of a vehicle's periodic testing schedule.

(A) For vehicles that register with DMV on an annual basis, the compliance year is defined as the full year that a vehicle's DMV registration is valid as specified on a vehicle's annual DMV registration card.

- (B) For vehicles that register with DMV on a non-annual basis, the beginning of a compliance year is defined as starting on the day and month that a vehicle was initially registered with DMV for a given year and ending on the previous day and month the following year. For example, if a vehicle was initially registered with DMV on February 22 of a given year, the vehicle's compliance year for the purposes of this chapter would follow the pattern of 02/22/2025 through 02/21/2026 for each given year.
- (C) Vehicles exempt from DMV registration shall be subject to a compliance year beginning on July 1st and ending on June 30th of the following year.
- (D) For vehicles registered outside of California, the compliance year is defined as specified above in subsections (A) through (C), however, based on the DMV jurisdiction where the vehicle is registered.

"Consumable fuel" means any solid, liquid, or gaseous matter that releases energy when consumed by an auxiliary power unit.

"Data link connector" is a multi-pin diagnostic connection port for vehicles, used to interface a testing device with the control modules of a given vehicle and access on-board diagnostics and live data streams.

"Day" means calendar day.

"Declared DMV operation months" means a vehicle's specific months of operation as specified to DMV during the registration process.

"Defective" means a condition in which an emissions control system or an emissions control system component is malfunctioning due to age, wear, malmaintenance, or design defects.

"Demonstration of correction" means the documents identified in section 2198.2(c).

"Designee" means a person authorized by a vehicle or fleet owner to electronically register for an account within an electronic reporting system approved by the Executive Officer and to update and maintain the account information as necessary.

"Device model" means a grouping of similar ROBD devices made by one manufacturer, vendor, and/or service provider (e.g. CC-ROBD), that are applicable to the same vehicle(s) makes and models, and applicable to the same OBD protocol(s).

"Driver" has the same meaning as defined in California Vehicle Code Section 305.

"Emergency event" means any situation arising from sudden and reasonably unforeseen natural disaster such as earthquake, flood, fire, or other unforeseen events that threatens public health and safety.

"Emergency decree" means a determination by the Executive Officer that an emergency event, as defined in this chapter has occurred that requires the immediate temporary operation of heavy-duty vehicles in the state of California.

"Emission control label (ECL)" means the label required by the "California Motor Vehicle Emission Control Label Specifications", incorporated by reference in title 13, CCR, section 1965, or Title 40, Code of Federal Regulations (CFR), Part 86, Subpart A.

"Emissions control system" means the pollution control components on an engine at the time its engine family is certified, including, but not limited to, the emission control label.

"Engine change" means the installation of an engine in a vehicle that is different from the vehicle manufacturer original configuration as certified by the United States Environmental Protection Agency or California Air Resources Board.

"Engine start" is defined as the point when the engine reaches a speed 150 rpm below the normal, warmed-up idle speed (as determined in the drive position for vehicles equipped with an automatic transmission). For hybrid vehicles or for engines employing alternate engine start hardware or strategies (e.g., integrated starter and generators), the manufacturer may request Executive Officer approval to use an alternate definition for engine start (e.g., ignition key "on"). Executive Officer approval of the alternate definition shall be based on equivalence to an engine start for a conventional vehicle.

"Executive Officer" means the Executive Officer of the California Air Resources Board or his or her designee.

"Executive Order (EO)" means an order issued by the Executive Officer certifying devices for sale in California and for use in the Heavy-duty Inspection and Maintenance Program.

"First-party tester" means a tester who has received a first-party tester credential provided by CARB and performs tests subject to this chapter on only those vehicles belonging to the company by which they are employed, as permitted by the first-party tester credential.

"First-party tester credential" means a tester credential provided by CARB that authorizes the recipient to perform tests and inspections subject to this chapter, within the conditions stipulated by CARB upon issuance, for only the vehicles that the tester, or tester's employer, owns.

"Five-day pass" means a once-a-year temporary permit, obtained online from the Executive Officer, to operate a vehicle in California for five consecutive days without obtaining a compliance certificate.

"Fleet" means one (1) or more heavy-duty vehicles owned by the same person or company.

"Fleet facility" means an area where a vehicle primarily performs shipping and/or receiving operations, vehicle troubleshooting, repair, testing, and/or vehicle storage.

"Fraudulent" means any false statement or representation in any application, report, statement, or other document filed, maintained, or used for the purposes of compliance with this regulation.

"Freight contractor" means any Person involved in a transaction that requires the operation of a heavy-duty vehicle in the State of California. This includes but is not limited to a shipper, receiver, carrier, broker, driver, applicable freight facility as defined in this section, or any other intermediary party.

"Gross vehicle weight rating (GVWR)" is as defined in Vehicle Code Section 350.

"HD I/M approved tester" means a person trained in accordance with the requirements of section 2197.1 to conduct vehicle compliance testing such as OBD inspections, smoke opacity inspections, and vehicle emissions control equipment inspections required by this chapter.

"Heavy-duty vehicle" means any motor vehicle having a manufacturer's GVWR greater than 14,000 pounds.

"Hybrid vehicle" means a vehicle (including a plug-in hybrid electric vehicle) that can draw propulsion energy from either or both of the following on-vehicle sources of stored energy: 1) a consumable fuel; and 2) an energy storage device such as a battery, capacitor, or flywheel.

"Hypertext Transfer Protocol Secure (HTTPS)" is the protocol where encrypted HTTP data is transferred over a secure connection.

"Inspection site" means an area including, but not limited to, a random roadside location, a weigh station, or a fleet facility used for conducting the heavy-duty vehicle test procedure, emission control system inspection, or both.

"Inspector" means a California Air Resources Board employee with the duty of enforcing Health and Safety Code Section 44152.

"In-person field inspection" means any inspection conducted by a CARB inspector/CARB staff and/or a peace officer at an inspection site.

"Intermodal Railyard" means any transportation facility owned or operated by a Class I Railroad that conducts intermodal rail operations where cargo is transferred to or from a train and any other form of conveyance, such as train to ship, ship to train, train to truck, or truck to train.

"Issuance" means the act of mailing, providing digitally, or personally delivering a Compliance Certificate, Citation or Notice to Correct to the owner.

"In-use device" means a device currently in the field that is already installed in a vehicle or used by a fleet owner.

"Low-use vehicle" means a vehicle that will be operated fewer than 1,000 miles in a compliance year.

"Malfunction indicator light (MIL)" means the light displaying the International Standards Organization (ISO) 2575 engine symbol F01, consistent with subdivision (d) of section 1971.1, title 13, CCR.

"Manufacturer" means any person who manufactures or assembles an engine, vehicle, or piece of equipment for sale in the California. It also means the person who is granted certification for a certified engine, vehicle, or equipment.

"Manufacturer configuration" means an engine configuration in which all parts and components are properly installed and in place, in accordance with the requirements outlined in the certification application and the applicable engine family Executive Order.

"Motor home" means a single vehicular unit designed for human habitation to provide temporary living quarters for recreational or emergency occupancy and built on, or permanently attached to, a self-propelled motor vehicle chassis, chassis cab, or van, which becomes an integral part of the completed vehicle or a vehicle that exclusively tows a trailer that was originally designed for human habitation for recreational or emergency occupancy.

(A) A converted vehicle shall be considered a motor home if the vehicle contains permanently-installed independent life support systems which meet the criteria of the American National Standard Institute (ANSI) and provide at least four of the following facilities: cooking, refrigeration or ice box, self-contained toilet, heating and/or air conditioning, a portable water supply system including a faucet and sink, a separate 110- to 125-volt electrical power supply and/or liquid petroleum gas supply.

"Notice to Correct (NTC)" means a notice alleging a violation of the requirements outlined in Section 2198.2(a), requiring demonstration of correction of the violation.

"On Board Diagnostics (OBD)" means any system certified to meet the requirements of title 13, CCR, sections 1968.1, 1968.2, 1971.1, or future OBD requirements adopted by the California Air Resources Board.

"OBD data test vehicle" means a vehicle that is used for purposes of testing a potential OBD test device during the certification process.

"OBD-equipped vehicle" means a vehicle equipped with a certified heavy-duty engine that meets the requirements of title 13, CCR, section 1971.1 for the following model years and fuel types:

- (A) Model year 2013 and newer diesel engines;
- (B) Model year 2013 and newer diesel hybrid engines;
- (C) Model year 2018 and newer alternative fuel engines; and
- (D) Model year 2018 and newer alternative fuel hybrid engines.

"OBD protocol group" means the vehicle's OBD communication protocol such as SAE J1939, SAE J1979, and/or SAE J1979-2.

"Officer" means a uniformed member of the Department of the California Highway Patrol.

"Opacity" means the percentage of light obstructed from passage through an exhaust smoke plume.

"Owner" of a vehicle means the person or persons registered as the owner of a vehicle by the California Department of Motor Vehicles (DMV), or its equivalent in another state, province, or country (presumed at the time of any citation to be the person or persons identified as the owner on the registration document or title

carried on the vehicle), except the following circumstances for vehicles that are rented:

- (A) If the rental agreement is for a period of less than one year, the owner of the vehicle shall be responsible for compliance.
- (B) If the rental agreement is for a period of one year or longer, responsibility for compliance may be transferred to the renter of the vehicle, only if there is a written notice signed by both owner of the rented vehicle and renter. The written notice shall be included in the existing rental agreement or provided in a separate document with the following statement: "The renter of this vehicle understands that when operating this vehicle in California, the vehicle must be compliant with sections 2195 2199, title 13, CCR, and that it is the responsibility of the renter to ensure this vehicle is compliant." This written notice shall be electronically submitted to CARB by the owner of the rented vehicle following a method approved by the Executive Officer.
- (C) For purposes of enforcement, if the rented vehicle is cited for noncompliance, the owner of the vehicle shall be considered the responsible entity unless CARB has a written notice meeting the requirements specified above in (B) on file from the owner in the electronic reporting system approved by the Executive Officer that specifies otherwise.
- (D) For purposes of this chapter, the terms "rental company," "rental agreement," "rented," "owner of the rented vehicle," and "renter," mean the same as "leasing company," "lease agreement," "leased," "lessor," and "lessee" respectively.
- (E) For the purposes of this chapter, 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 be the owner of the vehicle.

"Owner's manual" means a document or collection of documents prepared by the manufacturer of a product for the owners or operators to describe appropriate maintenance, applicable warranties, and any other information related to operating or keeping the product. The owner's manual is typically provided to the ultimate purchaser at the time of sale. The owner's manual may be in paper or electronic format.

"Partial year registration" refers to a commercial vehicle registered with the CA DMV partial year registration program and can be valid for any amount of time between 1-12 months.

"Payment" means a financial transaction intended as a recompense or restitution by bank check, money order, electronic bank transfer or credit card. "Port" means any port or independent marine terminal in California that receives an ocean-going vessel including:

- (A) Landlord ports where the port owns the wharves which it rents or leases to a terminal operator;
- (B) Operational ports where the port functions as a terminal operator; and
- (C) Independent marine terminals.

"POST method" is a HTTPS method that is designed to send loads of data to a server from a specified resource.

"Referee (contractor)" means a facility under contract with CARB to provide independent evaluations of vehicles and services to accommodate vehicles with inspection incompatibilities or compliance issues.

"Remote OBD (ROBD) device" means a device used for collecting and submitting OBD data through CARB's electronic system approved by the Executive Officer.

- (A) "Certified continuously connected remote OBD (CC-ROBD) device" means a certified OBD data collection and submission device certified to meet the standards in section 2197.2 of this chapter and installed exclusively on one vehicle that is connected to the vehicle at all times.
- (B) "Certified non-continuously connected remote OBD (NCC-ROBD) device" means a certified OBD data collection and submission device certified to meet the standards in section 2197.2 of this chapter and designed for use on multiple vehicles.

"Removal from service" means the towing and storage of a vehicle under California Vehicle Code section 27159 and under the auspices of the California Highway Patrol.

"Rental or leasing company" means a business that rents or leases vehicles.

"Renter" means a person who rents and or operates vehicles, engines, or equipment units not owned by that person.

"Repair facility" means any place where heavy-duty vehicles are repaired, rebuilt, reconditioned, or in any way maintained for the public at a fee, and fleet maintenance facilities.

"Roadside emissions monitoring system" means a CARB-authorized emissions monitoring instrument that may include, but is not limited to, an emissions sampling system that remotely measures tailpipe emissions, downloads OBD

data, and/or captures other information to identify a specific vehicle from passthrough vehicles.

"SAE J1667" means Society of Automotive Engineers (SAE) Recommended Practice SAE J1667 "Snap-Acceleration Smoke Test Procedure for Heavy-Duty Diesel Powered Vehicles," as issued February 1996 ("1996-02"), which is incorporated herein by reference.

"Smoke meter" means a detection device used to measure the opacity of smoke in percent opacity.

"Smoke test" or "smoke opacity test" means a test of a vehicle's emissions for smoke opacity level conducted using the procedures specified in Society of Automotive Engineers (SAE) J1667 Recommended Practice: Snap Acceleration Smoke Test Procedure for Heavy-Duty Powered Vehicles document incorporated herein by reference.

"Standard inspection frequency" means:

- (A) For OBD-equipped vehicles: the quarterly schedule at which a passing OBD test shall be submitted during each vehicle's compliance year. Quarters shall be defined as ending on a vehicle's compliance year expiration day in months three, six, nine, and twelve of a given compliance year. For example, if a vehicle's compliance year is 02/22/2025 through 02/21/2026, quarters shall end on 05/21/2025, 08/21/2025, 11/21/2025, and 02/21/2026.
- (B) For non-OBD vehicles: the twice per year (biannual; every six months) schedule at which a passing opacity test and a passing visual inspection shall be submitted during each vehicle's compliance year. Submission deadlines shall be defined as ending on a vehicle's compliance year expiration day in months six and twelve of a given compliance year. For example, if a vehicle's compliance year is 02/22/2025 through 02/21/2026, OBD data submission deadlines shall end on 08/21/2025 and 02/21/2026.

"Tactical military vehicle" means a motor vehicle as defined in section 1905, title 13. CCR.

"Tampered" means missing, modified, disconnected, or improperly installed, or, as it applies to emission control labels, permanently obscured in accordance with Vehicle Code 27156 and Health and Safety Code 33008.

"Temporary operating permit" means a permit issued by the DMV, which allows a motorist to operate a vehicle for a limited time when all registration fees have been paid, but license plates and/or registration stickers have not been issued.

"Test procedures" are any methods or actions required to complete the tests specified by this chapter, for the purposes of compliance verification.

"Third-party tester" means a tester who has received a third party tester credential provided by CARB and is contracted or engaged by the vehicle owner for the sole purpose of performing tests subject to this chapter, as permitted by the third-party tester credential.

"Third-party tester credential" means a tester credential provided by CARB that authorizes the recipient to perform tests and inspections subject to this chapter, within the conditions stipulated by CARB upon issuance, for any vehicle that is subject to the requirements of this chapter.

"Ultimate purchaser" means the first person who purchases a new ROBD device.

"Unresolved citation" means a Citation for which acceptable proof of correction has not been provided and, if required, payment of all required penalties has not been received.

"Vehicle identification number (VIN)" means an alpha numeric code which has been permanently assigned by the manufacturer to a vehicle. The VIN is unique to each vehicle and may contain information deemed necessary by governing agencies. If a manufacturer cannot obtain a federal VIN from the National Highway Traffic Safety Administration for their vehicles, an alternative VIN approved by the Executive Officer of the California Air Resources Board may be used. Unless otherwise noted, the VIN and alternate VIN will follow formats specified in the Code of Federal Regulations 49, Chapter V, Parts 565, 566, and 571, which are incorporated herein by reference.

"Vendor" means any person who manufactures, applies for certification, or sells a ROBD device. It also means the person to whom CARB grants certification for a certified ROBD device.

"Verified diesel emissions control strategy (VDECS)" means a diesel emission control strategy or system that has received approval (i.e., verified) from the Executive Officer according to the "Verification Procedure for In-Use Strategies to Control Emissions from Diesel Engines" in title 13, CCR, commencing with section 2700. Level 2 VDECS means the strategy reduces engine diesel particulate matter emissions by between 50 and 84 percent. Level 3 VDECS means the strategy reduces engine particulate matter emissions by 85 percent or greater, or reduces engine emissions to less than or equal to 0.01 grams diesel particulate matter per brake horsepower-hour.

"Zero-emission heavy-duty vehicle" means a vehicle with a manufacturer's GVWR greater than 14,000 lbs. with a drivetrain that produces zero exhaust emissions of any criteria pollutant (or precursor pollutant) or greenhouse gas under any possible operational modes or conditions.

NOTE: Authority cited: sections_	,	and, Health and Safety Code
Reference: sections,	and _	, Health and Safety Code.

§ 2196. Owner and Vehicle Requirements.

- (a) By July 1, 2023, the vehicle owner shall possess a valid compliance certificate as specified in section 2196.1 for each vehicle operating in California that is subject to the requirements of this chapter.
- (b) Prior to being eligible to obtain a compliance certificate, the vehicle owner or designee shall meet the following requirements:
 - (1) Owner Registration. The owner or designee shall electronically register for an account within a reporting system approved by the Executive Officer and shall electronically report the owner information in section 2197.4(a) to the reporting system and shall be responsible for ensuring any entered information remains current and accurate.
 - (2) Vehicle Reporting. For vehicles subject to the requirements of this chapter, the owner or designee shall electronically report the vehicle information in section 2197.4(b) to the reporting system approved by the Executive Officer and shall be responsible for ensuring any entered information remains current and accurate.
 - (3) Starting on January 1, 2024, the owner shall demonstrate compliance with the periodic vehicle testing requirements specified in section 2196.2.
 - (4) The owner shall ensure there are no outstanding enforcement actions as specified in section 2198.2(a)(2) for a given vehicle.
 - (5) The owner shall ensure a vehicle has no outstanding emissions or OBD-related recalls that are past due.

§ 2196.1. Compliance Certificate.

- (a) A compliance certificate shall be issued to the registered owner of the vehicle if the compliance fee specified in (d) below has been paid and the vehicle has demonstrated compliance in accordance with the requirements of this chapter.
- (b) A valid compliance certificate must be kept inside the vehicle at all times in a location that is accessible to be able to present during inspections.
 - (1) Upon request from a peace officer or inspector, the vehicle operator shall present a valid compliance certificate for the vehicle(s) under inspection.

- (c) A fleet wide compliance certificate shall be issued to the registered owner of a fleet of vehicles if the compliance fee specified in (e) below has been paid for and all of the vehicles within the fleet have demonstrated compliance with the requirements of this chapter.
- (d) A compliance certificate shall be valid for the length of the periodic test interval except for any compliance certificate obtained prior to July 1, 2023, which shall be valid through a vehicle's first periodic data submission deadline of calendar year 2024 as specified in section 2196.
- (e) A compliance fee of \$XX shall be assessed with the issuance of a compliance certificate.
 - (1) Full payment is required at the time the compliance certificate is ordered.
 - (2) Sales tax shall not be assessed on the cost of compliance certificates.
 - (3) The compliance fee shall be annually adjusted and published on CARB's website to reflect changes in the California Consumer Price Index (CCPI) as published by the Department of Industrial Relations. Each annual fee adjustment shall be made based on the change in the CCPI ending in June of a given year.
- (f) A compliance certificate may be revoked if the vehicle is determined to possess tampered emissions control components. Such a vehicle shall not be allowed to operate in California until the vehicle successfully passes a referee inspection, clears any citations, and obtains a new compliance certificate.

NOTE: Authority cited: sections_	,	and, Health and Safety Code
Reference: sections,	and	, Health and Safety Code.

- § 2196.2. HD I/M Inspection Frequencies. Starting January 1, 2024, vehicles subject to the requirements of this chapter shall periodically submit inspection data to a reporting system approved by the Executive Officer through one of the submission methods specified in section 2196.3 at the following standard inspection frequency.
- (a) OBD-equipped vehicles.
 - (1) An owner of a vehicle or a designee shall be required to submit a passing OBD data inspection to a reporting system approved by the Executive Officer via a submission method specified in section 2196.3(a).
 - (A) The passing OBD test shall be submitted within the 45 days prior to a vehicle's quarterly deadline within each compliance year.
 - (2) Alternatively, an owner may choose to meet the periodic testing requirements through the submission method described below.
 - (A) An owner or designee shall submit a passing vehicle inspection to a reporting system approved by the Executive Officer.
 - (B) Upon a successful passing submission, the vehicle shall be determined to have met the periodic testing requirements for 90 days and, assuming the vehicle meets all other requirements specified in section

- 2196(b), be allowed to receive a compliance certificate expiring 90 days from the date of the successful OBD submission.
- (C) An owner opting to meet the periodic testing requirements through this submission method shall designate such via the reporting system approved by the Executive Officer.
 - 1. An owner shall only be allowed to switch periodic testing compliance options prior to the start of a vehicle's compliance year.

(b) Non-OBD vehicles.

- (1) An owner of a vehicle or a designee shall submit a passing inspection as specified in section 2196.3 to the reporting system approved by the Executive Officer via a HD I/M approved tester.
 - (A) A passing inspection shall be submitted within 45 days prior to a vehicle's biannual (every six month months) deadline within each compliance year.
- (2) Alternatively, an owner may choose to meet the periodic testing requirements through the submission method described below.
 - (A) An owner or designee shall submit a passing vehicle inspection to a reporting system approved by the Executive Officer.
 - (B) Upon a successful passing submission, the vehicle shall be determined to have met the periodic testing requirements for 180 days and, assuming the vehicle meets all other requirements specified in section 2196(b), be allowed to purchase and receive a compliance certificate expiring 180 days from the date of the successful OBD submission.
 - (C) An owner opting to meet the periodic testing requirements through this submission method shall designate such via the reporting system approved by the Executive Officer.
 - 1. An owner shall only be allowed to switch periodic testing compliance options prior to the start of a vehicle's compliance year.
- (c) Periodic testing flexibilities. Vehicles meeting the following criteria shall be subject to the alternative periodic data submission intervals as specified:
 - (1) Low-use vehicles: Vehicles designated as low-use vehicles shall be required to submit periodic emissions test data annually and must demonstrate compliance by submitting a passing applicable periodic test within 90 days of the end of a vehicle's compliance year.
 - (A) A vehicle owner or designee may choose to designate a vehicle for the low-use provision no later than the 90th day of a given compliance year.
 - (B) Vehicle odometer readings submitted via a vehicle's applicable inspection method specified in section 2196.3 shall be used to verify compliance with the low-use mileage provision.

- (C) The total mileage for a vehicle in a given compliance year shall be determined by the difference between the vehicle's final data submission in the previous compliance year and the final data submission in the given compliance year.
- (D) A vehicle designated as low-use that exceeds the low-use mileage limit thresholds in a given compliance year is not eligible to use the testing flexibility provision in the next compliance year. The vehicle owner shall demonstrate that the vehicle meets the low-use provision requirements in the preceding compliance year prior to being eligible to qualify to use the provision again.
- (2) California partial year registration vehicles: Vehicles registered in California through DMV's Partial Registration Year program that operate no more than six months out of a given compliance year may be designated as Partial Registration Vehicles and submit periodic emissions test data annually.
- (A) Such vehicles shall demonstrate compliance by submitting a passing applicable periodic test within 90 days of the end of a vehicle's compliance year.
 - (B) If a partial registration vehicle is determined to operate outside their declared DMV operation months, the vehicle shall be cited for non-compliance and be removed from the partial year registration designation for purposes of this chapter. Such vehicles shall be subject to the standard periodic inspection frequencies specified in sections2196(a) and 2196(b) and shall not be eligible to be designated as a partial registration vehicle again until the vehicle demonstrates they meet the provision requirements in a preceding compliance year.
- (3) California registered motor homes: Such vehicles shall be required to submit annual periodic emissions testing data and must demonstrate compliance by submitting a passing applicable periodic test within 90 days of the end of a vehicle's compliance year.
- (d) Five-Day Pass Temporary Permit. Vehicles operating on a five-day pass are exempt from submitting the periodic test data specified in section 2196.2 and from the requirements of holding a valid compliance certificate specified in section 2196.1 for the approved five-day period of the permit.
 - (1) Vehicles are eligible to apply for a HD I/M five-day pass prior to travelling to California once per calendar year.
 - (2) Prior to operating in California, the owner must obtain written approval from the Executive Officer, which must be carried within the vehicle at all times while operating in California during the specified time frame and presented to a peace officer or inspector upon request.
- (e) Emergency Decree.

- (1) Vehicles are cleared to operate in the state of California for the duration of a Governor declared emergency decree and are precluded from the requirements of this chapter, provided that:
 - (A) The vehicle has a current compliance certificate at the beginning of the emergency decree; or
 - (B) The vehicle is not reported at the start of the emergency decree and has submitted a formal request to operate as an emergency vehicle and obtained prior approval from CARB.
- (2) If the Executive Officer declares an end to the emergency decree, all vehicles operating under a CARB authorized emergency decree, that do not have a valid compliance certificate must comply with the requirements outlined in this chapter or cease operation within 30 calendar days, upon notification by the Executive Officer.

NOTE: Authority cited: sections_	,	and, Health and Safety Code
Reference: sections,	and	, Health and Safety Code.

§ 2196.3. HD I/M Inspection Methods.

- (a) Inspection Methods for OBD-Equipped Vehicles: Inspections shall be performed and submitted to CARB using one of the OBD data collection and submission methods below.
 - (1) A certified CC-ROBD device that meets the requirements of section 2197.2 and is exclusively registered to a unique VIN.
 - (2) A certified non-continuously connected remote OBD (NCC-ROBD) device that is registered and operated by a HD I/M approved tester.
 - (3) A certified NCC-ROBD device assigned by the Executive Officer or a designee for operation at designated locations in California.
- (b) Criteria for Failing an OBD Inspection. Vehicles shall fail an OBD inspection if one or more of the following conditions occur:
 - (1) The vehicle's OBD system reports the malfunction indicator light (MIL) as commanded on;
 - (2) The vehicle's OBD system reports an active and/or permanent diagnostic trouble code (DTC);
 - (3) The vehicle's OBD data indicates the OBD system has not yet operated sufficiently to determine the presence or absence of a DTC;
 - (4) The vehicle's OBD system reports incomplete readiness monitor(s) as specified below:
 - (A) Diesel-powered vehicles with more than XXX incomplete monitors;
 - (B) Alternative fuel powered vehicles with more than XXX incomplete monitors.
 - (5) The vehicle's OBD data collected during an inspection is inconsistent with the OBD data profile from vehicles with the same manufacturer, make, and/or model

year. The similar OBD data profile will be generated using all valid inspection records in the reporting system approved by the Executive Officer; or

- (6) The OBD system data does not match the original equipment manufacturer (OEM) or a CARB-exempted OBD software configuration. The OBD software configuration shall include the specific OBD standard to which the vehicle has been certified, the Calibration Verification Number(s) (CVN), and the Calibration Identification Number(s) (Cal ID).
- (c) Inspection Methods for Vehicles not Equipped with OBD. Vehicle owners shall demonstrate compliance for a given vehicle by successfully passing a smoke opacity inspection performed in accordance with the SAE J1667 test procedure and passing an inspection of the vehicle's emissions control equipment as specified in section 2198.
 - (1) Non-OBD alternative fuel vehicles shall only be subject to the vehicle emissions control equipment inspection specified in section 2198.
 - (2) Other than testing required to be completed by an authorized referee, non-OBD vehicle inspections specified in this chapter shall be performed by a HD I/M approved tester.
 - (3) Criteria for Passing a Smoke Opacity Inspection. Smoke opacity inspection results shall not exceed the applicable opacity limits as specified below.
 - (A) 5% for any heavy-duty vehicle powered by a 2007 or subsequent model-year diesel engine.
 - (B) 5% for any heavy-duty vehicle required to be equipped or retrofitted with a Level 3 VDECS, regardless of its diesel engine model-year.
 - (C) 20% for any heavy-duty vehicle equipped or retrofitted with a Level 2 VDECS, regardless of its diesel engine model-year.
 - (D) 20% for any heavy-duty vehicle powered by a 1997 to 2006 model-year diesel engine.
 - (E) 30% for any heavy-duty vehicle powered by a 1991 to 1996 modelyear diesel engine.
 - (F) 40% for any heavy-duty vehicle powered by a pre-1991 model-year diesel engine.
 - (G) Vehicles equipped with off-road engines that use those engines for motive power on the roadway must meet the opacity standards specified below:
 - 1. 40% for Tier 1 engines
 - 2. 30% for Tier 2 and 3 Engines
 - 3. 10% for Tier 4 interim and Tier 4 final Engines
 - 4. 5% for Tier 5 or higher and off-road engines equipped with Level 3 VDECS regardless of their Tier level
 - (4) Smoke Opacity Inspection Submissions
 - (A) Electronic submission: Opacity test data may be electronically submitted to the reporting system via a file format approved by the Executive Officer.
 - (B) Manual submission: Opacity test data may be entered manually to the reporting system via a method approved by the Executive Officer.

- 1. A legible copy of the SAE J1667 opacity test strip generated per the requirements of this section and signed by the tester shall also be uploaded to the reporting system via a method approved by the Executive Officer.
- (C) Smoke opacity inspection submissions shall include the data fields specified in section 2197.4(c).
- (5) The vehicle emissions control equipment inspection shall be performed following the requirements of section 2198 and verify that all engine and emissions control components are in the certified original manufacturer configuration for the applicable engine family.
 - (A) The vehicle emissions control equipment inspection shall be electronically submitted to the reporting system via a file template format approved by the Executive Officer.

NOTE: Authority cited: sections, and, Health and Safety Code. Reference: sections, and, Health and Safety Code.
§ 2196.4. Requirements for Vehicles Detected by a Roadside Emissions Monitoring System. All heavy-duty vehicles operating in California are subject to ontoad emissions monitoring through a network of CARB-authorized roadside emissions monitoring systems.
(a) For a vehicle passing through a roadside emissions monitoring system, the Executive Officer may issue a Notice to Correct if one of the following criteria is met: (1) An OBD-equipped vehicle records a tailpipe PM emissions measurement that would correspond to exceeding the equivalent OBD trigger threshold for illuminating the MIL, as described in 13 CCR section 1971.1 (e)(8.2.1); (2) An OBD-equipped vehicle records a tailpipe NOx emissions measurement that would correspond to exceeding the equivalent OBD trigger threshold for illuminating the MIL, as described in 13 CCR section 1971.1 (e)(6.2.1); (3) A non-OBD vehicle records a tailpipe PM emissions measurement that would correspond to exceeding the equivalent smoke opacity limits, as described in section 2196.3(c).
NOTE: Authority cited: sections, and, Health and Safety Code. Reference: sections, and, Health and Safety Code.

§ 2196.5. Requirements for Vehicles Referred to Referee Testing

(a) A vehicle owner that has a vehicle that is subject to a referee inspection shall complete and pass the test within 45 days.

- (b) A CARB appointed referee is authorized to conduct referee vehicle inspections. Referee services shall be required for the inspection of a vehicle in one or more of the following circumstances:
 - (1) The vehicle owner disputes the results of a test resulting in a compliance determination and is seeking an independent evaluation
 - (2) A law enforcement agency requests a referee inspection for the vehicle
 - (3) The Executive Officer may direct a vehicle to a referee station for one of the following reasons:
 - (A) Vehicle has submitted OBD data collected during an inspection that is inconsistent with the OBD data profile from vehicles with the same manufacturer, make, and/or model year;
 - (B) Vehicle meets the criteria outlined in section 2196.4(a);
 - (C) Vehicle is suspected of operating with tampered emission control components;
 - (D) Vehicle has failed to submit required testing data;
 - (E) Vehicle has unresolved citations related to this chapter;
 - (F) Vehicle test is required for auditing, program validation purposes and/or demonstration of correction as outlined in section 2198.2(c); or
 - (G) Vehicle condition makes a typical inspection difficult due to design, malfunctioning condition, or inspection incompatibility.
 - (4) The vehicle has an engine or emission control configuration that does not meet the original certified configuration required by U. S. Environmental Protection Agency or CARB upon initial sale of the vehicle. Such vehicles include, but are not limited to, the following:
 - (A) Vehicles equipped with an engine change
 - (B) Vehicles equipped with an alternative fuel retrofit system
 - (5) A vehicle has been converted to a motor home for non-commercial use.
- (c) Referee testing and inspection requirements. The referee tester shall inspect the vehicle to determine if its emissions control system has been tampered with, and/or is defective. The inspection shall include the following:
 - (1) Vehicle Emissions Control Equipment Inspection as specified in section 2198.
 - (2) OBD data inspection as specified in section 2196.3(a) on applicable vehicles through the use of a certified OBD testing device registered to an authorized referee.
 - (A) In addition to the conditions specified in section 2196.3(a)(2), the following inspection conditions shall also result in a failed inspection if one or more occur:
 - 1. The vehicle's MIL does not illuminate when the ignition is on and the engine is off;
 - 2. The vehicle's MIL illuminates continuously or flashes with the engine running.

(3) Opacity test. Vehicles shall meet the allowable levels of smoke opacity as specified in section 2196.3(c).NOTE: Authority cited: sections_____, ____ and _____, Health and Safety Code.

Reference: sections , and , Health and Safety Code.

§ 2197. Freight Contractor Requirements.

- (a) Any in-state or out-of-state freight contractor, when conducting business in California, shall verify that any vehicle or fleet within California is in compliance with the regulation and comply with the record keeping requirements of section 2197(b).
- (b) Freight Contractors must retain the following records at the business location for a minimum of five years from the dispatch date and provide them to CARB within 72 hours of official written or oral request:
 - (1) Documentation demonstrating verification of compliance with the requirements described in 2197(a) in the form of:
 - (A) A copy of the HD I/M compliance certificate for the fleet or vehicle dispatched that has been obtained within last 12 months; and/or
 - (2) Records of transactions and agreements between shippers, brokers, and motor carriers requiring the operation of heavy-duty vehicles in California. Documentation must include, but is not limited to:
 - (A) The shipper or receiver initiating the transaction requiring transport
 - (B) The motor carrier or broker who hired or dispatched the vehicle
 - (C) The vehicle dispatched
- (c) Applicable Freight Facilities shall comply with one of the following:
 - (1) An Applicable Facility Owner may verify if a given vehicle is compliant by verifying that the vehicle has a valid CARB compliance certificate or by checking identifiable information through CARB's electronic reporting system. Freight facilities shall either:
 - (A) Attest that only compliant vehicles will enter and operate on their property; or
 - (B) Maintain records of all vehicles that enter their property for which compliance cannot be verified, as described in 2197(d).
- (d) Applicable Freight Facilities must retain the following records for each vehicle entering the facility subject to this regulation for which compliance cannot be verified, for a minimum of five year from date of entry and provide them to CARB within 72 hours of official written or oral request:
 - (1) Dispatching motor carrier:
 - (A) Business name of dispatching motor carrier;
 - (B) Contact name;
 - (C) Street address, city, state, zip code of the dispatching motor carrier;
 - (D) Phone number of the dispatching motor carrier;
 - (E) Bill of lading, load tender or any other tracking number linked to the specific load
 - (2) Heavy Duty Vehicle Information:

- (A) Entry date and time;
- (B) Registered owner's name;
- (C) Operator's name;
- (D) Operator's license number;
- (E) License plate number and state of issuance;
- (F) Vehicle identification number (VIN)
- (e) Drivers and/or vehicle owners of heavy-duty vehicles operating in the state of California must ensure that the following forms of documentation are available in the vehicle and provided to CARB staff immediately upon request:
 - (1) Documentation of the hiring entity, including:
 - (A) Business name;
 - (B) Contact name;
 - (C) Contact phone number and email address;
 - (D) Street address, city, state, zip code of the hiring entity;
 - (E) Copy of contract for the specific load carried by the driver.

NOTE: Authority cited: sections_	,	and, Health and	Safety Code
Reference: sections,	and	, Health and Safety Code	e.

§ 2197.1 HD I/M-Approved Tester Requirements.

- (a) In order to conduct tests and inspections, as outlined in sections 2196.3(a)(2) and 2196.3(c), and submit corresponding compliance verification results to the electronic reporting system approved by the Executive Officer, individuals shall obtain HD I/M approved tester accreditation.
- (b) HD I/M approved testing accreditation shall fall under one of the following classifications:
 - (1) First-party tester credential, as defined in this chapter.
 - (2) Third-party tester credential, as defined in this chapter.
- (c) HD I/M approved testers shall hold a valid tester credential and unique tester identification number stating they have met the requirements of this chapter to perform vehicle compliance testing.
 - (1) To obtain a valid tester credential and unique tester identification number an individual must complete the training course approved by the Executive Officer and must pass a subsequent exam.
 - (A) Individuals wishing to obtain a tester credential without completing the training course may request a one-time challenge exam. A passing score on the challenge exam will exempt the individual from the training course requirements and provide immediate eligibility to receive a tester credential as outlined in 2197.1(b).
 - (2) In addition to (c)(1) above, an individual attempting to obtain credentials for a third-party tester may be required to complete the following:

- (A) Submit additional proof of competency, which may include, but is not limited to:
 - 1. Copies of supplemental course certification(s); or
 - 2. Other forms of documentation, as specified by the training course.
- (3) A tester credential shall be valid for 2 years following the successful completion of the CARB-approved training course.
- (d) HD I/M approved testers shall obtain a tester account through the electronic reporting system approved by the Executive Officer.
 - (1) Prior to submitting vehicle compliance test data via their tester account, a tester shall report all required data fields specified in section 2197.4(d).
 - (2) Except for test results submitted via a certified OBD testing device, a HD I/M approved tester shall report all vehicle compliance testing via their HD I/M approved tester account.
- (e) Data Submission and Accuracy Requirements for Vehicle Owners and Approved Testers.
 - (1) The accuracy of any data submitted to CARB is the responsibility of:
 - (A) The owner of vehicle for which tests are being conducted; and
 - (B) The approved tester conducting tests and inspections.
 - (2) Failure to report data accurately may result in:
 - (A) Penalties as outlined in section 2198.2(b); and/or
 - (B) Revocation of tester credentials
 - 1. In the event that an individual has their tester credentials revoked, CARB may place a restriction on applying for tester credentials for up to two years following discovery of a violation.

NOTE: Authority cited: sections	,	and, He	ealth and Safety Code
Reference: sections,	and	, Health and Sa	afety Code.

§ 2197.2. Device Requirements.

(a) Reference Documents.

The following Society of Automotive Engineers (SAE) and International Organization of Standards (ISO) documents are incorporated by reference into this regulation:

- (1) Section 1971.1, title 13, CCR, "On-Board Diagnostic System Requirements 2010 and Subsequent Model-Year Heavy-Duty Engines", 2019;
- (2) ISO 15031-4 "Road vehicles Communication between vehicle and external equipment for emissions-related diagnostics Part 4: External test equipment", 2014:

- (3) SAE J1699-2 "Test Cases for OBD-II Scan Tools and I/M Test Equipment", 2017;
- (4) SAE J1962 "Diagnostic Connector", July 2016 (SAE J1962);
- (5) SAE J1978 "OBD II Scan Tool Equivalent to ISO/DIS 15031-4, April 2002 (SAE J1978);
- (6) SAE J1979 "E/E Diagnostic Test Modes", February 2017 (SAE J1979);
- (7) SAE J1979-DA "Digital Annex of E/E Diagnostic Test Modes", May 2019;
- (8) ISO 15765-4 "Road Vehicles-Diagnostics Communication over Controller Area Network (DoCAN) Part 4: Requirements for emission-related systems", April 2016 (ISO 15765-4);
- (9) SAE J1939 Recommended Practice for a Serial Control and Communications
- (10) Heavy Duty Vehicle Network Top Level Document, August 2013;
- (11) SAE J1939-DA "Digital Annex of Serial Control and Communication Heavy Duty Vehicle Network Data," April 2019;
- (12) SAE J1939-3 "On Board Diagnostics Implementation Guide", 2015;
- (13) SAE J1939-13 "Off-Board Diagnostic Connector", October 2016;
- (14) SAE J1939-21 "Data Link Layer", October 2018(15) SAE J1939-73 "Application Layer—Diagnostics", May 2017;
- (16) SAE J1939-81 "Network Management", March 2017;
- (17) SAE J1939-84 "OBD Communications Compliance Test Cases for Heavy Duty Components and Vehicles", October 2017; and
- (18) SAE J3005-1 "Permanently or Semi-Permanently Installed Diagnostic Communication Devices", February 2019.
- (19) SAE J3005-2 "Permanently or Semi-Permanently Installed Diagnostic Communication Devices, Security Guidelines", March 2020;
- (20) SAE J1979-2 "E/E Diagnostic Test Modes: OBDonUDS," May 2017 WIP (SAE J1979-2).

(b) General Device Requirements.

- (1) The ROBD device shall not interfere with the normal operation of the vehicle and/or any manufacturer- or third-party-installed tool in communication with vehicle's OBD system.
- (2) Any ROBD device used for compliance purposes shall be capable of performing the following tasks as specified in the requirements provided in section 2197.2(c):
 - (A) Establishing connection with the vehicle and verifying vehicle's support of HD OBD or OBD II at the individual ECU level;
 - (B) Collecting the OBD data required to be submitted as part of the program; and
 - (C) Submitting data securely via the standardized data submission format to an electronic reporting database approved by the Executive Officer.
- (3) The ROBD device shall request data from the ECUs indicating HD OBD or OBD II support, as specified in section 2197.2(c)(2).

- (4) The ROBD device shall timestamp each sent request and received response from the Controller Area Network (CAN Bus) in the submitted data file, as specified in section 2197.2(c)(5).
- (5) The ROBD device shall be capable of receiving multiple responses when requesting information (either multiple controllers responding to a request or a controller responding multiple times to a request).
- (6) The CC-ROBD device shall not send a code clear command.
 - (A) The heavy-duty OBD scan tools certified as NCC-ROBD device may send a code clear command if required, as part of vehicle's maintenance service.
- (7) The ROBD device shall support at least one OBD protocol, however may support multiple OBD protocols¹.
- (8) The ROBD device shall ensure that the vehicle's OBD data link Bus is not disturbed and placed in a Bus-passive, Bus-off, or other similar error condition during the protocol detection process.
- (c) Specific Device Requirements. This section provides detailed specifications of ROBD devices that meet CARB HD I/M requirements. The specifications apply to both CC-ROBD and NCC-ROBD devices, unless indicated otherwise.
 - (1) Diagnostics Connector.
 - (A) The CC-ROBD devices may be installed permanently (hard-wired into the vehicle wire harness) or semi-permanently (plugged into an available OBD port in vehicle)
 - (B) The CC-ROBD device shall be compliant with SAE J3005-1, J3005-2, and ISO 15765-4.
 - (C) Plug-in ROBD devices (i.e., NCC-ROBD and semipermanently CC-ROBD device) developed to meet both SAE J1939 and SAE J1979 OBD protocols, shall be capable of mating to both the connectors defined in SAE J1962/ISO 15031-3 and SAE J1939-13.
 - (D) The J1979 ROBD device shall meet the specified requirements in ISO 15765-4 for CAN where one or more controllers comply with OBD regulations.
 - (E) The ROBD device shall meet the same requirements for baud rate, as specified for the standard OBD connector, in section (h)(2) of CARB HD OBD regulation (section 1971.1, title 13, CCR).
 - (F) The J1939 ROBD device shall meet the requirements and guidelines in SAE J1939-3 for the implementation of OBD on heavy duty vehicles.

26

¹ Upon adoption of the SAE J1979-2 protocol, ROBD tools meeting the SAE J1979 requirements shall also meet the requirements of the SAE J1979-2.

- (2) Communication with the Vehicle.
 - (A) SAE J1939 device.
 - 1. The ROBD device shall meet the standardized communication requirements as illustrated in SAE J1939-84.
 - 2. The ROBD device shall comply with SAE J1939-21 and SAE J1939-71 when connected to a SAE J1939 vehicle.
 - 3. The ROBD device shall meet all the requirements in SAE J1939-3. Section 4.
 - 4. The ROBD device shall act as a client for diagnostics services provided by vehicle network, as specified in Table 1, SAE J1939-73.
 - 5. The ROBD device shall follow the requirements in section 7, SAE J1939-3 to ensure the proper initialization as a client for diagnostic services on a vehicle using SAE J1939 for OBD communications.
 - a. Address claim: The ROBD device shall meet address claim and dynamic addressing requirements in SAE J1939-81 to avoid address conflicts in cases where multiple devices communicate on the CAN Bus at the same time.
 - b. Verifying HD OBD compliance: The ROBD device shall send a global DM5 request as outlined in SAE J1939-3.
 - c. The ROBD device shall confirm HD OBD compliance (i.e., at least one of the vehicle's onboard ECUs supports CARB's HD OBD requirements) after successful completion of the address claim process and receiving DM5 support response(s) from one or more onboard ECUs.
 - 6. The ROBD device initialization shall be performed prior to requesting diagnostic services from any ECU.
 - 7. Identifying the available data: The ROBD device shall send destination-specific requests for DM24 message to all HD OBD compliant ECUs identified, as described in section 2197.2(c)(2)(A)(5)(c), and record all the received responses.
 - a. As described in SAE J1939-71, the ROBD device shall refrain from requesting data that is routinely broadcast on the network.
 - (B) SAE J1979 device.
 - 1. The ROBD device shall be compliant with SAE J1979.

- 2. The ROBD device shall communicate with the vehicle OBD system using the signaling standard, and meeting the timing requirements, of ISO 15765-4.
- 3. The ROBD device shall meet the standardized communication requirements for scan devices as illustrated in SAE J1699-2.
- 4. The ROBD device shall meet the requirements in SAE J1978/ISO 15031-4 and SAE 1699/2 to avoid disturbing the invehicle communication.
- 5. The ROBD device shall meet the requirements in SAE J3005-1 and J3005-2 for permanently or semi-permanently installed diagnostic communication devices.
- 6. The ROBD device shall utilize the initialization sequence of ISO 15765-4 in order to establish communication before sending diagnostic requests.
- 7. Identifying the available data: The ROBD device shall record all responses, including CAN source (i.e. specific ECU), to a Mode \$01 PID \$00, \$20, \$40, etc. requests sent during initialization.
- 8. The ROBD device shall conduct an analogous scan for available Monitor IDs (MIDs) in Mode \$06 (MID \$00, \$20, etc.)
- 9. The ROBD device shall conduct an analogous scan for available InfoTypes in Mode \$09.
- (C) In the case of failed initialization (i.e., vehicle not responding to the ROBD device within the required duration), the ROBD device shall repeat the initialization sequence, up to three times.
 - 1. The ROBD device shall meet the response time requirements as outlined in SAE J1939-21 and SAE J1979.
 - 2. After the third failed initialization attempt, the vendor shall notify the vehicle owner of the failed communication between the ROBD device and the vehicle.
 - 3. The ROBD device shall submit a "Failed Communication" message to the electronic reporting system approved by the Executive Officer, in the format specified in section 2197.2(d)(7).
- (D) In the case of a vehicle not supporting the relevant OBD requirement (HD OBD or OBD II) following an initialization sequence, the ROBD device shall repeat the initialization sequence, up to three times.
 - 1. If all initialization attempts confirm the initial results, the vendor shall notify the vehicle owner, as specified in section 2197.2(c)(2)(C)(2).

- 2. The ROBD device shall submit a "Vehicle not HD OBD/OBD II compliant" message to the CARB electronic reporting system approved by the Executive Officer, in the format specified in section 2197.2(d)(7).
- (3) Collecting the Required OBD Data from the Vehicle.
 - (A) The ROBD device shall be capable of collecting all the data, as specified in sections (h)(4) and (h)(5) of the CARB heavy-duty OBD regulation (section 1971.1, title 13, CCR) (see Table 4 in section 2197.2(d) for more detail)².
 - (B) The ROBD device shall submit the data specified in this section, in the data format specification, as detailed in section 2197.2(c)(4).
 - (C) The CC-ROBD device shall collect data, as specified in section 2197.2(c)(3)(A), once every 7 days or at the first engine key ON past the 7th day, as separate data logs and store them.
 - 1. The CC-ROBD device shall transmit all unsubmitted collected data logs when submitting to the CARB HD I/M reporting system.
- (4) Formatting the Collected OBD Data. The ROBD device shall meet the following data format specification for submitting the collected data.
 - (A) File Extension: The file shall be a standard ASCII text file with a ".csv" extension, that is compatible with Notepad, Microsoft Excel/Word 2019 or newer version.
 - (B) File Name: The ROBD device software shall generate a 16-character GUID for the file name. All characters shall be ASCII 48-57 and 97-122 and have the text "hdim" at the beginning of the GUID.

Examples:

hdim_b8ac348cd69d6d10_.csv Hdim 81a150dtbd5d56n2.csv

- (C) File Structure. The file shall consist of two sections: the data header, and the CAN Bus data in hexadecimal format.
- (D) Data Header.
 - 1. The data header shall have two rows: The first row shall contain the data field names for the header data, and the second row shall contain the values for the header data fields.

² The J1939 ROBD tool vendors can refer to Table 1 in SAE J1939-73 and SAE J1939 Digital Annex spreadsheet for more detailed information on requesting the data including the Parameter Grouping Number (PGN) and Suspect Parameter Number (SPN) of the parameters. The J1979 ROBD tool vendors can refer to Tables A1-A4 in SAE J3005-1 and SAE J1979 Digital Annex spreadsheet for more detailed information on requesting the data including the service modes, PIDs, MIDs, and InfoType data

- 2. A comma (,) shall separate each data field name or value.
- 3. The data header shall be in ASCII text format and contain the fields listed in Table 1.

Table 1. Contents of the header section of the submission file

Data Field Name	Description of Data	Data Type (length)
VIN	Vehicle identification number located on the tested vehicle in CARB-specified format	String (17)
SAE Protocol	Vehicle's OBD communication protocol (SAE J1939/J1979)	String (5)
Odometer*	Odometer reading of the vehicle at the time the OBD data is downloaded from the vehicle OBD system	Integer (7)
Device Name	The manufacturer (make) of the ROBD device	String (50)
Device Unique Identification Number	The unique identification number of the ROBD device in CARB-specified format	String (20)
Device Firmware Number	The firmware/version number of the software in the ROBD device	String (20)
Firmware Verification Number	A number derived from the ROBD device Firmware that verifies the firmware has not been altered	String (20)
Record ID	A unique value from an ascending numerical sequence assigned by the ROBD device to each submission	Integer (7)
Data Collection Date and Time	The timestamp at the time the ROBD device starts downloading OBD data from the vehicle OBD system. The timestamp is in coordinated universal time (UTC) and in the format of YYYY-MM-DD HH:MI:SS	datetime

^{*} For pre-2024 MY engines that are not required by the HD OBD regulation to provide odometer reading, the ROBD device shall obtain this parameter through other means.

(E) CAN Bus Data.

- 1. The first row in the CAN Bus data section (the third row from the beginning of the file) shall be the data field names of the OBD data.
- 2. The CAN Bus data as collected from the vehicle shall start from the fourth row of the submission file.
- 3. A comma (,) shall separate data field names and values.
- 4. Each message shall have its own individual row.

- 5. The J1979 ROBD device shall follow the formatting specification in Table 2 for the CAN Bus data section of the submission file (see section 2197.2(d) for an example submission file format).
- 6. The J1939 ROBD device shall follow the formatting specification in Table 3 for the CAN Bus data section of the submission file (see section 2197.2(d) for an example submission file format).

Table 2. CAN Bus data formatting requirements for the J1979 ROBD device

Data Field Name	Description of Data	Data Type (length)
Timestamp	The time that a message is sent from the ROBD device to the vehicle or received from the vehicle. The timestamp is in coordinated universal time (UTC) and has millisecond precision. The timestamp is in the format of YYYY-MI-DD HH:MM:SSSS.	Datetime
Message Type	The message type of the data line indicates if the message was sent from the OBD device to the vehicle or received from the vehicle. "REQ" is the request messages sending to the vehicle, and "RSP" is the response messages received from the vehicle.	String (3)
ECU Address	The hexadecimal address of the ECUs that respond to the request. The REQ messages will not have an ECU address. The RSP messages will have the hexadecimal address of the responding ECUs.	String (2)
Message Data	The data portion of the CAN message sent to or received from the vehicle's OBD system. The data shall be ASCII text that represents the hexadecimal values.	String (50)

Table 3. CAN Bus data formatting requirements for the J1939 ROBD tool

Data Field Name	Description of Data	Data Type (length)
Timestamp	The time that a message is sent from the ROBD tool to the vehicle or received from the vehicle. The timestamp is in coordinated universal time (UTC) and has millisecond precision. The timestamp is in the format of YYYY-MI-DD HH:MM:SSSS.	Datetime

Message Type	The message type of the data line indicates if the message was sent from the ROBD device to the vehicle or received from the vehicle. "REQ" is the request messages sending to the vehicle, and "RSP" is the response messages received from the vehicle.	String (3)
CAN ID	CAN ID	String (10)
Message Data	The data portion of the CAN message sent to or received from the vehicle's OBD system. The data shall be ASCII text that represents the hexadecimal values.	String (50)

- (5) Transmitting the Collected Data to the CARB Electronic Reporting System Approved by the Executive Officer.
 - (A) Connection and Authentication: The ROBD device shall be registered in the electronic reporting system approved by the Executive Officer as a valid testing device in order to receive authentication to submit data to the electronic reporting system approved by the Executive Officer.
 - (B) Data Transfer Protocol: The data files shall be submitted to the CARB electronic reporting system approved by the Executive Officer from the ROBD system via HTTPS with the POST method.
 - (C) Data Integrity.
 - 1. Subsequent to formatting the collected data, as specified here within this section, the ROBD device shall encrypt the data file.
 - 2. The data shall not be altered or tampered with during or prior to electronically submitting to the CARB electronic reporting system approved by the Executive Officer.
 - 3. The data file shall be transmitted securely from the ROBD device to the CARB electronic reporting system approved by the Executive Officer.
 - (D) Once an internet connection is available, the ROBD device shall submit the encrypted data files to the CARB electronic reporting system approved by the Executive Officer.
 - (E) Data Storage.
 - 1. The ROBD device shall have enough internal storage capacity to store the retrieved data that have not been submitted due to unavailable internet connection.
 - 2. The encrypted collected OBD data shall be retained for at least seven days following a successful submission to the CARB electronic reporting system approved by the Executive Officer.
- (d) Data Fields and Submission Examples.
 - (1) Table 4 specifies the OBD data required to be collected by a ROBD device.

Table 4. Specifications of the OBD data required to be collected by a ROBD device

Item	Data Type	Corresponding Section in CARB HD OBD Regulation (CCR Title 13, Section 1971.1)	Relevant Diagnostic Message(s) in Each OBD Protocol			
			J1939	J1979	J1979-2	Comments
1	Readiness status of all OBD monitors listed in sections (e) and (g) of the heavy- duty OBD Regulation	(h)(4.1)	DM5, DM21, DM26	Mode \$01 PID \$01	Service \$22 DID \$F501	
2	All data stream parameters	(h)(4.2.2) and (h)(4.2.3)	See SAE J1939DA for PGNs and SPNs	Mode \$01, see SAE J1979D A for PIDs	Service \$22, see SAE J1979D A for \$F400 - \$F5FF DIDs	
3	Freeze frame data	(h)(4.3)	DM25	Mode \$02	Service \$19 \$04 DTCMR EC DTC Snapsho t Record Number = \$00 (first occurren ce) or \$F0 (latest occurren ce)	

4	Fault codes including active, pending, and permanent	(h)(4.4)	DM1, DM6, DM12, DM23, DM28, DM29	Modes \$03, \$07, \$0A	Service \$19 \$42 \$33 \$08 \$02, Service \$19 \$42 \$33 \$04 \$02, Service \$19 \$55 \$33	The J1939 ROBD device shall also be capable of collecting the previously active fault codes
5	Monitoring support status and test results	(h)(4.5)	DM24, DM30	Mode \$06	Service \$19 \$06 DTCMR EC \$92	
6	Software calibration ID (Cal-ID)	(h)(4.6), (h)(4.7)	DM19	Mode \$09 InfoType \$04	Service \$22 InfoType \$F804	
7	Calibration Verification Number (CVN)			Mode \$09 InfoType \$06	Service \$22 InfoType \$F806	
8	VIN	(h)(4.8)	PGN: 65260 SPN: 237	Mode \$09 InfoType \$02	Service \$22 InfoType \$F802	
9	Engine serial number	(h)(4.8)	PGN: 65269 SPN: 588	Mode \$09 InfoType \$0D	Service \$22 InfoType \$F80D	
10	ECU name	(h)(4.9)	PGN: 60928 SPN:284 8	Mode \$09 InfoType \$0A	Service \$22 InfoType \$F80A	
11	Monitor in- use performance ratio	(h)(5.1)	DM20	Mode \$09 InfoType \$0B	Service \$19 \$06 DTCMR EC \$91	
12	Engine run time tracking data	(h)(5.2)	See SAE J1939DA for PGNs	Mode \$01, see SAE	Service \$22, see SAE	

			and SPNs	J1979D A for PIDs	J1979D A for DIDs	
13	NOx emissions tracking data	(h)(5.3)	PGNs: 64258 thru 64279	Mode \$09 InfoType s \$61 - \$76	Service \$22 InfoType s \$F861 - \$F876	For all 2022 and subsequent model year diesel engines
14	GHG tracking data	(h)(5.4) - (h)(5.6)	PGNs: 64252 thru 64257	Mode \$09 InfoType s \$41 - \$49, \$50 - \$5B	Service \$22 InfoType s \$F841 - \$F849, \$F850 - \$F85B	For all 2022 and subsequent model year engines
15	PM filter regeneration event data	(h)(5.8)	See SAE J1939DA for PGNs and SPNs	Mode \$01 PID \$8B	Service \$22 DID \$F48B	
16	Readiness status of each monitor within a readiness group	(h)(4.12) (proposed)	N/A	N/A	Service \$19 \$56 \$33 RGID	Data available for every OBD tied to a readiness group

(2) Example of a Submission File Format (CC-ROBD J1979 tool).

VIN,SAE Protocol,Odometer,Device Name,Device Unique Identification Number,Device Firmware Number,Firmware Verification Number,Record ID, Data Collection Date and Time

1234567890ABCDEFG,J1979,23000, ABC Company,

ABC0000001,1.20.1005,1234567890,23, 2024-06-25 12:23:4567

Timestamp, Message Type, ECU Address, Data Message

2024-06-25 12:23:4570,REQ,,07DF 01 00

2024-06-25 12:23:4588,RSP,E8,07E8 41 00 BF BE A8 93

2024-06-25 12:23:4592,RSP,EC,07EC 41 00 98 18 80 11

2024-06-25 12:23:4623,REQ,,07DF 01 01

2024-06-25 12:23:4712,RSP,E8,07E8 41 01 00 07 65 00

2024-06-25 12:23:4800,REQ,,07DF 01 20

2024-06-25 12:23:4811,RSP,EC,07EC 41 20 80 01 80 01 2024-06-25 12:23:4823,RSP,E8,07E8 41 20 A0 07 B1 19

(3) Example of a submission file format (CC-ROBD J1979-2 system)

VIN,SAE Protocol,Odometer,Device Name,Device Unique Identification Number,Device Firmware Number, Firmware Verification Number ,Record ID,Data Collection Date and Time 1234567890ABCDEFG,J1979-2,23000, ABC Company,12345ABCDE,1.20.1005,1234567890,23, 2024-06-25 12:23:4567 Timestamp, Message Type, ECU Address, Data Message 2024-06-25 12:23:4570,REQ,,07DF 22 F4 00 F4 20 F4 40 2024-06-25 12:23:4588,RSP,E8,07E8 62 F4 00 BF BF A8 91 F4 20 80 00 00 2024-06-25 12:23:4592,RSP,EC,07EC 62 F4 00 80 08 00 00

(4) Example of a Submission File Format (CC-ROBD J1939 system).

VIN,SAE Protocol,Odometer,Device Name,Device Unique Identification Number,Device Firmware Number, Firmware Verification Number,Record ID,Data Collection Date and Time ABCDEFG1234567890,J1939,51000,XYZ Company, XYZ0000001,1.21.1005,1234567890,123,2024-06-25 12:23:4567 Timestamp,Message Type,CAN ID,Data 2024-06-25 12:23:4567,REQ,18EA2117,EA FE 00 2024-06-25 12:23:4570,RSP,0CF00C03,00 FB 00 00 FF FF FF FF 2024-06-25 12:23:4588,RSP,18FEDF00,7D A0 28 7D 7D FF FF F0 2024-06-25 12:23:4592,REQ,18EA0017,CE FE 00 2024-06-25 12:23:4623,RSP,0CF00203,C0 00 00 FF F7 00 00 03 2024-06-25 12:23:4712,RSP,18FECE00,00 04 13 07 A0 1E 00 04 2024-06-25 12:23:4811,RSP,18FEF200,00 00 00 73 07 01 FF 2024-06-25 12:23:4823,RSP,18F00E00,FF FF FF FF FF FF FF

(5) Example of a Submission File Format (NCC-ROBD system-J1939).

VIN,SAE Protocol,Odometer,Device Name,Device Unique Identification Number,Device Firmware Number, Firmware Verification Number,Record ID, Data Collection Date and Time ABCDEFG7878123412,J1939,85000,XYZ Company, XYZ0000003,1.21.1005,1234567890,33,2024-06-25 12:23:4567 Timestamp,Message Type,CAN ID,Data Message 2024-06-25 12:23:4567,REQ,18EA2117,EA FE 00 2024-06-25 12:23:4570,RSP,0CF00C03,00 FB 00 00 FF FF FF FF

2024-06-25 12:23:4588,RSP,18FEDF00,7D A0 28 7D 7D FF FF F0 2024-06-25 12:23:4592,REQ,18EA0017,CE FE 00 2024-06-25 12:23:4623,RSP,0CF00203,C0 00 00 FF F7 00 00 03 2024-06-25 12:23:4712,RSP,18FECE00,00 04 13 07 A0 1E 00 04 2024-06-25 12:23:4800,RSP,0CF00300,D1 00 00 FF FF 0F 72 7D 2024-06-25 12:23:4811,RSP,18FEF200,00 00 00 73 07 01 FF 2024-06-25 12:23:4823,RSP,18F00E00,FF FF FF FF FF FF FF

(6) Example of a Submission File Format (NCC-ROBD system-J1979).

VIN,SAE Protocol,Odometer,Device Name,Device Unique Identification Number,Device Firmware Number,Firmware Verification Number,Record ID, Data Collection Date and Time ABCDEFG7878123412,J1979,85000,XYZ Company, XYZ0000004,1.21.1005,1234567890,33,2024-06-25 12:23:4567 Timestamp, Message Type, ECU Address, Data Message

2024-06-25 12:23:4570,REQ,,07DF 01 00 2024-06-25 12:23:4588,RSP,E8,07E8 41 00 BF BE A8 93 2024-06-25 12:23:4592,RSP,EC,07EC 41 00 98 18 80 11 2024-06-25 12:23:4623,REQ,,07DF 01 01 2024-06-25 12:23:4712,RSP,E8,07E8 41 01 00 07 65 00 2024-06-25 12:23:4800,REQ,,07DF 01 20 2024-06-25 12:23:4811,RSP,EC,07EC 41 20 80 01 80 01 2024-06-25 12:23:4823,RSP,E8,07E8 41 20 A0 07 B1 19

(7) Example of a submission file format (NCC-ROBD system-J1979-2)

VIN,SAE Protocol,Odometer,Device Name,Device Unique Identification Number,Device Firmware Number,Firmware Verification Number, Record ID,Data Collection Date and Time 1234567890ABCDEFG,J1979-2,23000, ABC Company,12345ABCDE,1.20.1005,1234567890,23,2024-06-25 12:23:4567 Timestamp, Message Type, ECU Address, Data Message 2024-06-25 12:23:4570,REQ,,07DF 22 F4 00 F4 20 F4 40 2024-06-25 12:23:4588,RSP,E8,07E8 62 F4 00 BF BF A8 91 F4 20 80 00 00 2024-06-25 12:23:4592,RSP,EC,07EC 62 F4 00 80 08 00 00

(8) Example of a Submission File Format (Failed OBD device-vehicle communication or vehicle not HD OBD/OBD II compliant).

VIN,SAE Protocol,Odometer,Device Name,Device Unique Identification Number,Device Firmware Number,Firmware Verification Number,Record ID, Data Collection Date and Time

ABCDEFG1234123412,J1939,125000,XYZ Company, XYZ0000005,1.21.1005,1234567890,53, 2024-06-25 12:23:4567

"Failed Communication" or "Vehicle Not HD OBD/OBD II Compliant"

NOTE: Authority cited: sections_	,	and, Health and Safety Code
Reference: sections,	and _	, Health and Safety Code.

§ 2197.3. Requirements for Device Vendors.

- (a) Overview and Applicability.
 - (1) The Executive Officer or designee shall certify devices and provide an Executive Order for the device to the vendor if the vendors meet the requirements specified in this chapter. A vendor submitting a device for certification shall submit the full, complete, and current configuration proposed for sale and consumer use.
- (b) Submitting a Certification Application.
 - (1) Prior to submitting a certification application, a vendor shall submit a test plan detailing the vendor initial validation testing methodology. Prior to conducting testing, the vendor shall ensure the test plan is approved by the Executive Officer or designee.
 - (2) A vendor shall complete and submit device certification application forms approved by the Executive Officer and other required information for evaluation of the application.
 - (A) The application shall contain all information required of the vendor and shall be true, accurate, and include complete statements and information.
 - (B) An authorized representative of the company shall approve and sign the application.
 - (C) The application shall include the following information and shall be approved by the Executive Officer prior to CARB staff performing any verification testing specified in section 2197.3(c)(2):
 - 1. A detailed description of the design of the device and how the device is consistent with and meets the requirements specified in section 2197.2 of this chapter
 - 2. Device manufacturer if vendor is not the manufacturer of the device
 - 3. Device Model
 - 4. Method used for vendor initial validation testing (e.g. OBD data test vehicles that include model year, make, model, etc.)
 - 5. Engine(s) OEM, vehicle(s) makes and models that the device can be used on
 - 6. Applicable OBD protocol(s) of the device

- 7. Vendor shall identify if they plan to update devices already in use in existing vehicle(s).
- 8. Vendor initial validation testing meeting the requirements specified in section 2197.3(c)(1)
- 9. A detailed proposal for finding applicable fleets/vehicles to test devices in the field to meet the vendor field testing requirements specified in section 2197.3(c)(3), including expected testing locations and the estimated number of vehicles broken down by fleet, engine OEM, engine model year, vehicle make and model, fuel type, and OBD protocol. After CARB approves the detailed proposal, any changes or deviations from the plan shall be reviewed and approved by CARB.
- 10. A proposed timeline for completing the field-testing requirements specified in section 2197.3(c)(3)
- 11. Any additional information that may be necessary to help verify that the device meets the requirements of this section.
- (3) Vendor shall assign each device a unique identification number following the required format ABCNNNNNN.
 - (A) Where "ABC" is a CARB-assigned three alpha-numeric characters that uniquely identify the vendor, followed by seven numbers that start with 0000001 and increase sequentially with each additional device.
 - (B) Vendor shall obtain their assigned unique three alpha-numeric vendor identifier from the Executive Officer and include as part of their application package.
- (4) Vendor shall provide a copy of a manual for the installation, operation, and maintenance procedures, and a warranty statement that will be provided to the ultimate purchaser of the device.
- (5) Vendor shall provide a sample device label meeting the requirements specified in section 2197.3(d).
- (6) Vendor shall unconditionally certify that all the devices are designed with tamper-resistant components, built as described in the certification application, and comply with the requirements of this chapter.
- (c) Testing Requirements for Certification. The following certification testing shall be performed to demonstrate that the device meets the program requirements and shall be completed in the following phases:
 - (1) Vendor Initial Validation Testing. Testing shall be completed by the vendor following the required specifications and specific test conditions described below prior to submitting their application package and shall be consistent with the requirements of section 2197.2.
 - (A) Vendor shall test their device(s) using the specified test conditions below.
 - 1. Test at least one vehicle from every OBD protocol group applicable to the device and provide three consecutive ROBD submission files from each vehicle. Make note of the ignition ON time and verify that the test time is within five minutes of the ignition ON time.

- 2. Test at least one vehicle from every OBD protocol group applicable to the device and provide three consecutive ROBD submission files from each vehicle where the MIL is commanded OFF, there are no pending, active, or permanent trouble codes, and all vehicle supported readiness monitors are in a ready state.
- 3. Test at least one vehicle from every OBD protocol group applicable to the device and provide three consecutive ROBD submission files from each vehicle where the MIL is commanded ON, there is at least one stored active diagnostic trouble code AND at least one pending diagnostic trouble code.
- 4. Test at least one vehicle from every OBD protocol group applicable to the device and provide three consecutive ROBD submission files from each vehicle where the MIL is commanded ON and there is at least one permanent diagnostic trouble code.
- 5. Test at least one vehicle from every OBD protocol group applicable to the device and provide three consecutive ROBD submission files from each vehicle where the MIL is commanded OFF, there are no diagnostic trouble codes, and at least one monitor is not ready.
- 6. Test at least three different vehicles and provide three consecutive ROBD submission files from each vehicle showing that the electronic VIN is received from the vehicle and is not a user inputted VIN.
- 7. Test at least one hybrid vehicle from every OBD protocol group applicable to the device and provide at least three consecutive ROBD submission files where the MIL is commanded OFF, there are no pending, current, or permanent diagnostic trouble codes, and all vehicle supported readiness monitors are in a ready state.
- 8. Test at least one alternative fuel vehicle from every OBD protocol group applicable to the device and provide at least three consecutive ROBD submission files from each vehicle where the MIL is commanded OFF, there are no pending current, or permanent diagnostic trouble codes, and all vehicle supported readiness monitors are in a ready state.
- 9. Test at least one vehicle from every OBD protocol group applicable to the device and provide at least three consecutive ROBD submission files from the different communication baud rates (i.e. 250/500 kbps) supported by the protocols.
- 10. Specifically for CC-ROBD devices, test at least one vehicle from every OBD protocol group applicable to the device and provide a submission file that contains multiple data logs that were collected and stored every seven days as specified in section 2197.2(c)(3)(C).
- (B) In addition to the ROBD submission file that is submitted with the initial validation testing, the vendor shall submit, at a minimum, the following additional information in an organized format:

- 1. OBD data test vehicle(s): Year, Make, Model, VIN# (or OBD simulator)
- 2. The OBD protocol of the vehicle(s)
- 3. Engine and engine family of test vehicles
- 4. CARB may ask for additional test data or engineering evaluations if deemed necessary to validate the testing accuracy of the device.
- (2) CARB Device Verification Testing. The Executive Officer may perform device verification testing or review testing results to ensure the device meets all specifications, to verify if the device successfully communicates with and collects the requested data, and/or to validate the device's ability to meet the required testing specifications.
 - (A) Vendor shall submit at least two (2) production ready devices that have valid unique identification numbers, as well as any equipment that would be packaged with the devices including but not limited to, extension cables, splitting cables, or installation kits, to the Executive Officer for verification and certification.
 - (B) The devices provided shall be in a configuration that is suitable for testing. It shall have all the necessary equipment, instrumentation, and set up information that was used for vendor initial validation testing.
 - (C) The device shall be functional in standard working and vehicle environments and thus be resistant to shock, vibration, and environmental exposure.
 - (D) The device shall be tamper resistant to make sure no alteration or erasure can be made on the data collected.
 - (E) The Executive Officer or designee shall issue results to the vendor. If the device passes all of CARB's verification testing, the device shall be allowed to advance to the certification requirements specified in Vendor Field Testing.
 - (F) If the device fails any portion of CARB's verification testing, the devices may be returned to the vendor. After addressing the device deficiencies, if the vendor testing results show remediation, the vendor may resubmit a new certification package to the Executive Officer.
- (3) Vendor Field Testing. Testing shall be completed by the vendor using devices in the exact same configuration as those that completed the CARB device verification testing.
 - (A) Vendor shall perform real-world testing by collecting data from an applicable heavy-duty vehicle population (non-gasoline with GVWR > 14,000 lbs.) within 180 days from the start of field testing.
 - 1. Vendor shall include a representative sample of vehicle makes and fuel types within the tested vehicle population that the device may be used on once certified.
 - 2. For NCC-ROBD devices, OBD data submissions shall be obtained from a minimum of 100 vehicles per OBD protocol that a device is certifying to.

- 3. For CC-ROBD devices, a minimum of 100 data submissions shall be obtained from a minimum of 30 vehicles per OBD protocol that device is certifying to.
- (B) Vendor shall electronically submit required testing data through an electronic reporting system approved by the Executive Officer.
- (C) Vendor shall ensure successful communication between the device and the vehicle.
- (D) Vendor shall obtain a successful connectivity rate of 99.9% for priority data listed in the following table.

Table 5: Priority Data for Vehicle Field Testing

Description	J1939 Protocol	J1979 Protocol	J1979-2 Protocol
Available parameters (SPNs or PIDs)	DM24	Mode \$01 PID \$00 Mode \$09 InfoType \$00	Service \$22 DID \$F501
MIL Status and readiness	DM1, DM5, DM21, DM26	Mode \$01 PID \$01	Service \$22 DID \$F501
OBD Compliance	DM5	Mode \$01 PID \$1C	Service \$22 DID \$F501
DTCs	DM1, DM5, DM12	Mode \$03	Service \$19 \$42 \$33 \$08 \$02
VIN	PGN: 65260/ SPN: 237	Mode \$09 InfoType \$02	Service \$22 Info Type \$F802
Permanent DTCs	DM28	Mode \$0A	Service \$22 Info Type \$F80A
CAL ID/CVN	DM19	Mode \$09 InfoType \$04 Mode \$09 InfoType \$06	Service \$22 Info Type \$F804 Service \$22 Info Type \$F806
Diagnostic readiness	DM5, DM21, DM26	Mode \$01 PID \$01	Service \$22 DID \$F501

- (E) Vendor shall obtain a successful connectivity rate of 90.0% for all other required data parameters.
- (F) The Executive Officer may adjust the two connectivity rates independently in 0.10% increments for the following reasons:
 - 1. If it is determined through an engineering evaluation that the stringency of the required connectivity rates need to be tightened
 - 2. If it is determined that a technical or engineering issue inhibits the ability to meet the required connectivity rates

- (G) Vendor shall ensure that the device is continuously in compliance with the configuration that completed CARB verification testing.
- (H) If the vendor would like to exempt a vehicle(s), a request shall be made to CARB requiring the approval of the Executive Officer before submitting the test results. The request shall contain the technical reasons and supporting data that explains why the vehicle should be exempted from the calculation.
- (I) If vendor shall not complete the field testing at the end of 180 days, vendor shall contact CARB by the 150th day and provide the reason(s) why it may not be completed on time.
 - 1. The Executive Officer will evaluate whether the vendor shall be allowed to continue with the testing or shall be required to resubmit a new application and restart the certification process. The criteria used to make this determination shall include:
 - a. Vendor's reasoning as to why the field testing is not able to be completed on time;
 - b. Whether unavoidable and unexpected issues occurred during the allotted testing period that made meeting the required deadline infeasible;
 - c. Whether the current testing completed to this point is consistent with the requirements that devices must meet to obtain certification;
 - d. Additional test data may be requested by the Executive Officer to make this determination.
- (J) If the device fails to meet the requirements during field testing, the vendor shall determine the reason(s) for device failure.
 - 1. The Executive Officer shall evaluate whether the vendor shall be allowed to retest their device in this phase after addressing the deficiencies or shall be required to resubmit a new application and restart the certification process. The criteria to be used to make this determination shall include:
 - a. Vendor's provided explanation explaining for the cause(s) of their device failure, with supporting information, and modifications needed to fix the issue(s);
 - b. Whether unavoidable and unexpected issues occurred during the allotted testing period that made meeting the required deadline infeasible;
 - c. Whether the technical reasons the device failed and the recommended solution require further laboratory testing to confirm that the issue was remedied;
 - d. How close the testing device is from being approved for certification:
 - e. Additional test data may be requested by the Executive Officer to make this determination.
 - 2. If the device fails a second attempt of field testing, the vendor shall be determined to have failed the certification process. The

vendor may resubmit a new certification application after addressing any deficiencies.

(d) Labeling Requirements.

- (1) Vendor shall affix, engrave, or stamp the unique identification number on each certified device in a legible way as specified in section 2197.3(b)(3). This unique identification number displayed externally shall match the device's electronic unique identification number.
 - (A) Include the following statement, "THIS CARB CERTIFIED DEVICE COMPLIES WITH CARB HD I/M PROGRAM."
 - (B) Include production date [Month and Year]
- (2) Vendor shall make sure the label is durable and readable for at least five years.
- (3) The vendor shall attach the label so no one can remove it without destroying or defacing it.
- (4) The vendor may make a request of the Executive Officer to approve a modified label as necessary.

(e) Warranty Requirements.

- (1) Vendor shall warrant the ultimate device purchaser and each subsequent purchaser that the device is designed and built free of defects in materials and workmanship for a period of one (1) year from the date of delivery.
- (2) Vendor may deny warranty claims under this section if the operator caused the problem through improper maintenance or use.
- (3) Vendor shall provide an Owner's manual to the ultimate purchaser that includes, but not limited to, the following information:
 - (A) Vendor shall describe the device and applicability, and provide instructions on the initial setup, troubleshooting, and proper maintenance.
 - (B) Vendor shall provide a process to update the software of in-use devices used as part of this section, including providing a description of online user interface if it is required to be used to send data to CARB.
 - (C) Vendor shall provide a response to purchaser inquiries and technical support to purchasers of the device through a toll-free number within 24 hours of receipt of call.
 - (D) Other information useful to the purchaser may be included in the manual.
 - (E) No changes shall be made to CARB approved manuals without the Executive Officer's prior written approval.

(f) Post-Certification Requirements.

(1) Once the device meets the certification testing requirements, the vendor shall receive an Executive Order and the device may be sold and used for compliance purposes with this chapter. An Executive Order is valid from the indicated

- effective date until the end of the calendar year for which it is issued. Certification is to be renewed annually for any device for continued use in the program.
- (2) Only OBD data submitted from certified devices shall be used to demonstrate vehicle compliance.
- (3) Vendor shall register all certified devices and include device information as specified in section 2197.4(e)(4) through the electronic reporting system approved by the Executive Officer. Vendor shall keep the certified device list up to date.
- (4) Vendor shall inform the user that the certified device has been registered and activated in the electronic reporting system approved by the Executive Officer.
- (5) With CARB approval, the vendor shall update the hardware, firmware, and/or software as necessary provided the device continues to conform with the specifications required of devices.
 - (A) The updates shall be implemented on all certified devices within two weeks of approval from CARB.
 - (B) The normal scheduled updates shall be provided to CARB and user on a quarterly basis, at a minimum. The Executive Officer may waive the normal schedule update.
 - (C) If a problem is detected with the device that critically impacts the compliance with the certified configuration, the vendor shall provide an emergency update, on a schedule mandated by CARB.
- (6) Vendor shall resubmit a certification application for any changes that modify the device's certified configuration.
- (7) Vendor shall provide a copy of a Disclosure Agreement provided by CARB to the ultimate purchaser of the new device and/or existing user of the in-use device to inform that the device has been certified for use in the HD I/M program for a period of up to one year until the end of the calendar year, that it must be recertified annually, and may be decertified at any time if deviations are identified.
 - (A) The vendor shall obtain the signature or electronic signature of the ultimate purchaser of the new device and/or existing user of the in-use device acknowledging the provisions of the Disclosure agreement.

(g) Recordkeeping Requirements.

- (1) Organize and maintain the following records:
 - (A) A copy of all applications and any provided information to CARB.
 - (B) Keep a list of device unique identification numbers for all devices produced and sold including, but not limited to, company name, device model, production date under each Executive Order and identify the vehicle it is paired to (e.g. VIN for each CC-ROBD device), if applicable.
- (2) Keep required test data and all other information specified in this section for five years after CARB issues the Executive Order.

(3) Records shall be readily available and stored in the same format as the submitted certification application and on any media, as long as the vendor can promptly send organized, written records in English to the Executive Officer if requested within 30 days

(h) Recertifying Annually.

- (1) Prior to the conclusion of the certification period, the vendor shall submit a recertification application for a new Executive Order provided the device continues to meet the required specifications.
 - (A) If the Executive Officer determines that the device still meets the required specifications, the device shall be recertified for another one (1) year period.
 - (B) Devices determined not to continually fulfil the required specifications shall not be recertified and shall be removed from use for compliance determination for this section.
 - 1. After addressing the device deficiencies, the device vendor may resubmit a new certification application package to the Executive Officer for approval.

(i) Decertifying Devices.

(1) If CARB finds that a certified vendor fails to furnish or install required software updates to the device or continually meet the specifications and requirements as stated in this section, the Executive Officer shall decertify the device in writing or by electronic mail with a specified effective date of the decertification. After the device is decertified, the device is considered noncompliant and shall no longer be used in the program for compliance determination purposes.

(j) Other Provisions.

- (1) Any person who fails to comply with these requirements or fails to submit information, reports, or statements required by this section shall be subject to citation and/or decertification.
- (2) Any person 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 regulation shall be subject to citation and/or decertification.

NOTE: Authority cited: sections_	,	and,	Health and Safety Code.
Reference: sections,	and	, Health and	Safety Code.

§ 2197.4 Reporting Requirements. Various sections of this chapter require affected entities to report information to CARB. Such requirements are described in this section.

- (a) Required Owner information. As specified in section 2196(b)(1), vehicle owners or designees shall report the following information in a reporting system approved by the Executive Officer.
 - (1) Registered Owner Name
 - (2) Company Name
 - (3) Fleet/Secondary Name (if applicable)
 - (4) Designee (if applicable)
 - (5) Title of Designee (if applicable)
 - (6) Contact Email Address
 - (7) Contact Mailing Address
 - (8) Contact Phone Number
 - (9) Company Physical Address
 - (10) United States Department of Transportation (U.S. DOT) number (if applicable)
 - (11) CA Motor Carriers Permit (MCP) ID (if applicable)
 - (12) Public Utilities Commission (PUC) ID (if applicable)
- (b) Required Vehicle Information. As required by section 2196(b)(2) vehicle owners or designees are required to report the following information in a reporting system approved by the Executive Officer.
 - (1) VIN
 - (2) License plate number
 - (3) State in which the vehicle is registered with a DMV
 - (4) Vehicle make
 - (5) Vehicle model
 - (6) Vehicle model year
 - (7) Engine make
 - (8) Engine model
 - (9) Engine model year
 - (10) Engine family
 - (11) Engine fuel type
 - (12) GVWR
 - (13) Registered Owner name
 - (14) Registered Owner mailing address
 - (15) Physical address where vehicle is domiciled.
- (c) Required Smoke Opacity Testing Data. For each vehicle subject to the smoke opacity testing requirements, the following data and information are required to be submitted as part of the vehicle inspection in a reporting system approved by the Executive Officer.
 - (1) VIN;
 - (2) Odometer reading;

- (3) The initial smoke test opacity levels (for three successive test readings) and the SAE J1667 standards including the average of the three snap-acceleration test cycles and the range;
- (4) The name and tester identification number of the HD I/M approved tester who performed the smoke opacity inspection;
- (5) Smoke meter brand name, make, model;
- (6) The dates of the last calibration of the opacity meter; and
- (7) Test date.
- (d) HD I/M Approved Tester Reporting: Prior to submitting vehicle compliance tests through a tester account, HD I/M approved testers shall report the following information to a reporting system approved by the Executive Officer
 - (1) Tester name
 - (2) Tester ID
 - (3) Personal Identification Number (PIN)
 - (4) Date Accredited
 - (5) Tester Mailing Address
 - (6) Tester Phone Number
 - (7) Email Address
 - (8) Company Name
 - (9) Company Physical Address
 - (10) Company Phone Number
 - (11) Additional Proof of Competency (if applicable)
- (e) Device Vendor Reporting. The device vendor shall electronically report certified devices to the reporting system approved by the Executive Officer prior to activation and include the following information.
 - (1) Device unique identification number
 - (2) Company name;
 - (3) Device model;
 - (4) Production date:
 - (5) VIN for each CC-ROBD device;
 - (6) Purchaser's name;
 - (7) Purchaser's address; and
 - (8) Purchaser's phone number.

NOTE: Authority cited: sections_	,	and, Health and Safety Code
Reference: sections,	and	, Health and Safety Code.

§ 2198. Vehicle Emissions Control Equipment Inspections

Inspectors, referees, and HD I/M approved testers are allowed by sections within this chapter to conduct vehicle emissions control equipment inspections.

- (a) The inspection of the applicable vehicle and engine components may include, but is not limited to, all of the following and shall ensure compliance with the requirements outlined below:
 - (1) The presence and legibility of the emission control label;
 - (2) Any emissions-related components for a particular vehicle/engine as specified on the ECL, and determined from the manufacturer's specifications found in certification data, published vehicle parts manual, or Executive Orders;
 - (A) All engine and emission control components must be in the certified original manufacturer configuration for the applicable engine family number, as specified by the applicable Executive Order.
 - (3) The proper installation and application of aftermarket parts as determined by the aftermarket parts label and Executive Order;
 - (4) The vehicle mileage as indicated by the odometer;
 - (5) The MIL bulb's operational status;
 - (B) The following inspection conditions shall result in a failed inspection if one or more occur:
 - 1. The vehicle's MIL does not illuminate when the ignition is on and the engine is off;
 - 2. The vehicle's MIL illuminates continuously or flashes with the engine running.

§ 2198.1. Driver and Inspector Responsibilities.

- (a) The driver of a heavy-duty vehicle selected to undergo the in-person field inspection shall do all of the following actions, as applicable:
 - (1) Drive the vehicle to the inspection site upon direction of an officer, if applicable.
 - (2) Show proof of driver's license, vehicle registration, and compliance certificate to the inspector or officer upon request.
 - (A) All vehicles operating in California will remain subject to inspection requirements regardless of the possession of a compliance certificate
 - (3) Permit the inspector to perform the inspections and test procedures as specified in this chapter.
 - (4) Open the vehicle door so that the inspector may:
 - (A) Observe the driver depress the accelerator pedal, upon request;
 - (B) Access data link connector to perform an OBD download;
 - (C) Observe the status of the malfunction indicator light (MIL); and
 - (D) Observe the vehicle odometer.

- (5) Permit an emissions control system inspection and open the engine compartment of the vehicle upon the request of the inspector.
- (6) As applicable, sign the Notice to Correct and/or the Citation to acknowledge its receipt and sign the smoke test report to acknowledge performance of the test procedure.
- (b) The inspector conducting the in-person field inspection shall do all of the following:
 - (1) Advise the driver that refusal to submit to the test procedure or inspection is an admission constituting proof of a violation.
 - (2) Request driver's license, vehicle registration, temporary operating permit if applicable, and compliance certificate
 - (3) Obtain all pertinent vehicle and engine identification information.
 - (4) Conduct any necessary and applicable tests and inspection procedures as specified in this chapter.
 - (5) As deemed necessary, issue a Notice to Correct or a Citation to the driver of a vehicle that fails to meet the requirements established by this regulation.

NOTE: Authority cited: sections_	,	and	, Health and Safety Code.
Reference: sections,	and	, Health and	l Safety Code.

§ 2198.2. Enforcement.

- (a) Violations.
 - (1) Notice to Correct. The following violations of the requirements outlined in this chapter shall result in the issuance of a Notice to Correct. Vehicle owners that receive a Notice to Correct will be provided 45 days, or 75 days for owners of agricultural vehicles, to submit the applicable proof of correction as outlined in section 2198.2(c). Failure to provide the applicable proof of correction by the provided due date may result in a citation and penalties.
 - (A) Operating or causing the operation of a vehicle on a California roadway without a valid compliance certificate, as outlined in section 2196.1, first offense.
 - (B) Submittal of inaccurate data to electronic reporting system approved by the Executive Officer as outlined in section 2196.2.
 - (C) Vehicle operating while MIL illuminated as outlined in 2198(a)(6)(B) and/or failure of the OBD inspection passing criteria specified in section 2196.3(a)(2).
 - (D) Missing, obscured, or illegible emission control label specified in section 2198(a)(1).
 - (E) Failure to meet passing criteria for OBD or opacity testing specified in 2196.3(b) or 2196.3(c), respectively following a successful submission.

- (F) Vehicle detected passing through a roadside emissions monitoring system that meets the criteria outlined in section 2196.4(a).
- (2) Citations. The following violations of the requirements outlined in this regulation may result in the direct issuance of citation and penalties. The registered owner, vehicle operator, freight contractor, or other entity that receives a citation will be provided 45 days, or 75 days for owners of agricultural vehicles, to submit the applicable proof of correction as outlined in section 2198.2(c) and applicable penalties. Evidence of fault on the part of the registered owner, vehicle operator, freight contractor, or other entity shall not be considered a mitigating circumstance for assessing the penalty. Violations can include, but are not limited to the following:
 - (A) Refusals. The refusal by an owner or driver of a vehicle to do the following items would constitute as a failure of the applicable test procedures conducted during an inspection, unless the driver is cited by the California Highway Patrol for a violation of California Vehicle Code section 2813, and shall result in applicable penalties.
 - 1. Refusal to submit to an inspection or any applicable tests during an in-person field inspection will be considered a failure of the applicable tests as outlined in section 2198.1(a).
 - 2. Refusal to submit to a referee inspection as outlined in section 2196.5.
 - (B) Failure to meet smoke opacity requirements as outlined in section 2196.3(c)(2) when a CARB representative performs a SAE J1667 smoke opacity test.
 - (C) Tampering of the emission control components as outlined in section 2198(a)(2), except for a missing, illegible, or obscured emission control label.
 - (D) Submittal of fraudulent data to the electronic reporting system approved by the Executive Officer.
 - (E) Failure to provide the applicable proof of correction requested from a Notice to Correct by the provided due date section 2198.2(a)(1).
 - (F) Failure to provide recordkeeping documentation required at the request of CARB, as outlined in 2197(f).
 - (G) Any actions that CARB deems to be in violation of the program requirements specified in section 2197.3
 - (H) Operating or causing the operation of a vehicle on a California roadway without a valid compliance certificate, as outlined in section 2196.1 when:
 - 1. A notice to correct has been issued for the same violation within the previous twelve months as outlined 2198.2(a)(1)(A); or
 - 2. A compliance certificate has been revoked due to an outstanding citation.

- (I) Vehicle mileage is found to be in exceedance of allotted miles for lowuse exemption outlined in section 2196.2(c)(1)
- (3) Revocation of Compliance Certificate.
 - (A) Upon issuance of a citation, CARB will revoke the compliance certificate for the cited vehicle, preventing operation in California and vehicle registration with the Department of Motor Vehicles until the outstanding citation is resolved.
 - (B) If a fleet fails to meet the compliance requirements detailed in 2196.1(b), CARB will revoke the compliance certificate for the fleet, preventing operation in California and vehicle registration for all vehicles in the fleet with the Department of Motor Vehicles until the compliance requirements are met.

(b) Penalties.

- (1) Any person who fails to comply with the requirements of this regulation, who fails to submit any information, report, or statement accurately and correctly as required by this regulation, or who 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 regulation may be subject to a civil penalty pursuant to Health and Safety 43016(a)(1) and 43016(a)(2).
- (2) When a heavy-duty vehicle is cited after a bona fide change of ownership between non-related persons or entities, the new owner shall not be subject to the penalties if the only Citations issued for the vehicle within the previous 12 months were issued prior to the change of ownership to the new owner.
- (c) Demonstration of Correction and Post-Repair Test or Inspection.
 - (1) Demonstration of Correction. In the event of a Notice to Correct or Citation, the owner must demonstrate correction by submitting documentation to the California Air Resources Board. The required documentation may include, but is not limited to, one or more of the following items:
 - (A) Complete a successful OBD test via a testing method specified in section 2196.2(a).
 - (B) Complete a successful SAE J1667 smoke test as outlined in section 2196.3(c) and the vehicle emission control equipment inspection section 2198.
 - (C) Where repairs are made at a repair facility, a repair invoice or a completed work order which contains the following information:
 - 1. Name, address, and phone number of the facility.
 - 2. Name of mechanic.
 - 3. Date of the repair.
 - 4. Description of component replacement(s), repair(s), and/or adjustment(s).
 - 5. Itemized list of replaced component(s), including description of part, part number, and cost.

- 6. Vehicle information including engine serial number, vehicle identification number, and/or license plate.
- (D) Where the owner makes his or her own repairs outside of a repair facility.
 - 1. An itemized receipt for the parts used in the repair.
 - 2. A statement identifying the date, nature of the repairs made and vehicle information including engine serial number, vehicle identification number, and license plate.
- (E) Proof of HD I/M reporting and compliance certificate.
- (2) Statement of Correction. Statement attesting that submission of data is true and correct.
- (3) The California Air Resources Board may require an inspection by the referee whenever:
 - (A) A submitted repair invoice or work order does not comply with (1) above.
 - (B) A repair invoice, work order or authorized dealer verification appears to be fraudulent.
 - (C) A second and subsequent failures of the test procedure or an emission control system inspection on the vehicle occur prior to the next required reporting date.
- (d) Vehicles Removed from Service.
 - (1) Vehicles found to be in violation of this chapter are subject to removal from service by the Department of the California Highway Patrol pursuant to California Vehicle Code section 27159 if requested by the California Air Resources Board inspector, and if one or more unresolved Citations issued under section 2198.2(a)(2) exist at the time of inspection.
 - (2) Upon payment of all unpaid penalties for a vehicle that has been removed from service, the California Air Resources Board shall provide the owner, or designee, a release form for presentation to the Department of the California Highway Patrol.
 - (3) The release of the vehicle shall be subject to the condition that it be repaired and post- repair tested or inspected within 15 days.
- (e) Administrative Remedies.
 - (1) The owner or operator of a vehicle subject to this regulation may request an administrative hearing if either:
 - (A) CARB has sent them a notice that the vehicle is in violation of this regulation such that the vehicle will be unable to be registered with the Department of Motor Vehicles; or
 - (B) CARB has cited their vehicle under this regulation. If the owner or operator requests an administrative hearing, CARB shall determine, based on the issues and the amount at issue, as applicable, whether the hearing shall be conducted pursuant to California Code of Regulations, title 17,

sections 60055.1 et seq, 60065.1 et seq., or 60075.1 et seq. The owner and operator shall follow the designated administrative process.

(f) Right of Entry.

- (1) CARB staff, inspectors, contractors, agents, peace officers and/or designees shall have the right of entry to facilities or sites deemed necessary to verify compliance with the requirements outlined in this chapter, including but not limited to facilities or sites where:
 - (A) OBD test devices subject to the requirements of this chapter are located and/or OBD test device records subject to the requirements of this chapter are located for the purpose of inspections of the OBD test devices themselves and/or their records.
 - (B) Vehicles subject to this regulation are operated, stored, tested, and/or repaired for the purpose of performing vehicle inspections.
 - (C) Maintenance or test records are kept for vehicles that are subject to the regulation for the purpose of performing audits and investigations.
 - (D) Freight Contractor records are kept, pursuant to 2197(C), for the purpose of verification of proper record keeping on behalf of the freight contractor.
 - (E) Applicable Freight Facility records are kept, pursuant to 2197(D), for the purpose of verification of proper record keeping on behalf of the Applicable Freight Facility.

NOTE: Authority cited: sections,	and, Health and Safety Code.			
Reference: sections, and	, Health and Safety Code.			
§ 2199. Severability of Provisions.				

If any subsection, paragraph, subparagraph, sentence, clause, phrase, or portion of this Chapter 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.

NOTE: Authority cited: sections_	,	and,	Health and Safety Code.
Reference: sections,	and	, Health and	l Safety Code.

§ 2199.1. Sunset HDVIP and PSIP

On January 1, 2024, the requirements established by title 13 Division 3 Chapter 3.5 Sections 2180 – 2194 will be superseded by the requirements outlined in title 13 Division 3 Chapter 3.5 Sections 2195 – 2199. Any enforcement actions resulting from a violation of the aforementioned sections prior to January 1, 2024, shall remain valid. If any portion of title 13 Division 3 Chapter 3.5 Sections 2195 – 2199 that supersedes

·	•	•	or unenforceable by any court of Division 3 Chapter 3.5 Sections 2	
NOTE: Authority cited: section	ns,		, Health and Safety Code.	