Order to Adopt

Title 13, Division 1, Chapter 1

Article 3.7. Testing of Autonomous Vehicles

§ 227.00. Purpose.

(a) The regulations in this article implement, interpret and make specific Division 16.6 (commencing with section 38750) of the Vehicle Code, originally added by Statutes of 2012, Chapter 570 (SB 1298), providing for the regulation of autonomous vehicles operated on public roads in California.

(b) A motor vehicle shall not be operated in autonomous mode on public roads in California except as permitted under Vehicle Code section 38750 and the regulations in this article and Article 3.8.

Note: Authority cited: Sections 1651 and 38750, Vehicle Code. Reference: Section 38750, Vehicle Code.

§ 227.02. Definitions.

As used in ~~this~~ articles 3.7 and 3.8, the following definitions apply:

(a) "Alternate route" is a temporary routing initiated due to an emergent situation and at the discretion of the California Highway Patrol, California Department of Transportation (CalTrans), or applicable local authorities, which may result in routing not otherwise legal for certain size combination vehicles, and which exists only for the duration of the incident or closure of the regular legal route.

(b) "Automated driving system" is the combination of both hardware and software which collectively form autonomous technology and when equipped to a vehicle are capable of making, or are designed to make the vehicle perform the entire dynamic driving task on a sustained basis, with or without a driver located in the driver's seat of the vehicle, regardless of whether it is limited to a specific operational design domain, and limited to systems that meet the description of Levels 3, 4, and/or 5 in the Society of Automotive Engineers (SAE) International's Taxonomy and Definitions for Terms Related to Driving Automation Systems for On-Road Motor Vehicles, standard J3016 (APR2021).

(c) "Automated driving system feature" is a feature of the automated driving system that operates at a specific driving automation level 3, 4, and/or 5 in the Society of Automotive Engineers (SAE) International's Taxonomy and Definitions for Terms Related to Driving Automation Systems for On-Road Motor Vehicles, standard J3016 (APR2021) and within a prescribed operational design domain.

(d) "Automated driving system service" is a product that uses a service model, whereby the manufacturer provides an end user, who is not the manufacturer of the product, with an automated driving system, that, when equipped to a vehicle and activated, makes the vehicle operate in a manner consistent with the definition of an autonomous vehicle as found in Vehicle Code section 38750.

(e) "Autonomous heavy-duty commercial motor vehicle," is a motor vehicle required to be registered under the Vehicle Code, has a gross vehicle weight rating of 10,001 pounds or more, is equipped with an automated driving system, and primarily used or maintained to transport property.

~~(a)~~(f) "Autonomous mode" is the status of ~~vehicle~~ operation ~~where technology that is a combination of hardware and software, remote and/or on-board, performs the dynamic driving task, with or without a natural person actively supervising the autonomous technology's performance of the dynamic driving task. An~~ of an autonomous vehicle ~~is operating or driving in autonomous mode~~ when ~~it is operated or driven with~~ the ~~autonomous technology engaged~~ automated driving system is performing the dynamic driving task.

(g) "Autonomous test vehicle" is an autonomous vehicle that is operated for testing purposes. The presence in the vehicle of a person that monitors an autonomous vehicle's performance and performs the dynamic driving task fallback shall not affect whether a vehicle meets the definition of an autonomous test vehicle.

~~(b)~~(h) "Autonomous ~~test~~ vehicle" is a vehicle that ~~has been~~ is equipped with an automated driving system ~~technology that is a combination of both hardware and software that, when engaged, performs the dynamic driving task, but requires~~ and is capable of operating without the active physical control or monitoring by a natural person ~~a human test driver or a remote operator to continuously supervise~~ of the autonomous vehicle's performance of the dynamic driving task within the prescribed operational design domain.

~~(1) An autonomous test vehicle does not include vehicles equipped with one or more systems that provide driver assistance and/or enhance safety benefits but are not capable of, singularly or in combination, performing the dynamic driving task on a sustained basis without the constant control or active monitoring of a natural person.~~

~~(2) For the purposes of this article, an~~ An "autonomous ~~test~~ vehicle" is ~~equipped with technology that makes it capable of operation~~ capable or

designed with the goal of operating in a manner that meets the definition of Levels 3, 4, or 5 of the Society of Automotive Engineers (SAE) International's Taxonomy and Definitions for Terms Related to Driving Automation Systems for On-Road Motor Vehicles, standard J3016 (APR2021)~~, as may be revised, which is hereby incorporated by reference~~. To determine whether a vehicle is equipped with feature(s), that, when engaged, meet the definition of Levels 3, 4, or 5 of the SAE International's J3016 (APR2021), and is thus subject to the Vehicle Code section 38750 and the regulations in Articles 3.7 and 3.8, the department may rely on any relevant information available to the department. Examples of relevant information include, but are not limited to, demonstrations of the autonomous technology provided by the manufacturer, reports from other regulatory agencies, and media sources.

~~(3) The presence of a natural person who is an employee, contractor, or designee of the manufacturer in the vehicle to monitor a vehicle's autonomous performance shall not affect whether a vehicle meets the definition of autonomous test vehicle.~~

~~(c)~~(i) "Autonomous vehicle test driver" is ~~means~~ a natural person physically located ~~seated~~ in the driver's seat of an autonomous test vehicle, whether the vehicle is in autonomous mode or conventional mode, who possesses the proper class of license for the type of vehicle being driven or operated, expected to monitor the driving environment, supervise the performance of the vehicle and the automated driving system, and is capable of taking over active physical control of the vehicle at any time and performing the dynamic driving task fallback immediately.

(j) "Avoidance area" is a defined location identified by emergency response officials through an emergency geofencing message, from which a manufacturer must issue direction to its fleet of autonomous vehicles to leave or avoid for the initial duration provided by the emergency response official or for an extended duration, when specified by the emergency response official.

~~(d)~~(k) "Conventional mode" means the status of operation of an autonomous ~~the~~ vehicle when it is under the active physical control of a ~~natural person~~ driver physically located ~~sitting~~ in the driver's seat operating or driving the vehicle with the ~~autonomous technology~~ automated driving system disengaged.

(l) "Cyber security" means the manner in which an autonomous vehicle and supporting infrastructure, including, but not limited to, communications,

backend logistics, and remote assistance systems, are protected from cyber threats to electrical or electronic components.

~~(e)~~(m) "Designee" means the natural person ~~identified by the manufacturer to the department as an autonomous vehicle test driver~~ authorized by the manufacturer to drive, ~~or~~ operate, or perform a remote operations support function for the manufacturer's autonomous ~~test~~ vehicles, autonomous vehicle on-road operations, or automated driving system on public roads.

(n) "Detour" is a designated route established by a local public agency or the California Department of Transportation for the express purpose of routing traffic around a temporary closure of a street, as defined by Vehicle Code section 590, for any purpose.

(o) "Direct route" means the most efficient path of travel between two designated locations—such as hubs, shipper or carrier facilities, distribution centers, fueling or charging stations, maintenance facilities, terminals, or other non-residential facilities. A route is considered direct if it follows a generally linear or geographically logical path between those locations and does not include detours or stops that are not required for regulatory compliance, safety, or vehicle servicing.

~~(f)~~(p) "Driver" means the natural person who ~~is operating~~ drives or is in actual physical control of the ~~an~~ autonomous vehicle when it is not operating in the autonomous mode.

(q) "Driver's seat" means a sitting or standing position inside the autonomous vehicle from which a natural person is able to perform the dynamic driving task.

(r) "Drivered Testing Permit" means an Autonomous Vehicle Testing (AVT) Program Manufacturer Permit, form OL 315 (Rev. 9/2024), which is hereby incorporated by reference, that is issued by the department to a manufacturer that operates an autonomous test vehicle, and which requires the presence of an autonomous vehicle test driver to operate on public roads.

(s) "Drivered Testing Permit Application" means an Autonomous Vehicle Tester (AVT) Program Application for Manufacturer's Testing Permit, form OL 311 (Rev. 2/2025), which is hereby incorporated by reference, that is submitted by the manufacturer and must be approved by the department in order to issue a Drivered Testing Permit form OL 315 (Rev. 9/2024), which is hereby incorporated by reference. The content of the form may be submitted electronically to the department via the department's web page or portal.

(t) "Driverless Testing Permit" means an Autonomous Vehicle Testing (AVDT) Program Manufacturer Permit – Driverless Vehicles, form OL 315A (Rev. 10/2023), which is hereby incorporated by reference, that is issued by the department to a manufacturer that operates an autonomous test vehicle, and which does not require the presence of an autonomous vehicle test driver in the driver's seat to operate on public roads.

(u) "Driverless Testing Permit Application" means an Autonomous Vehicle Tester (AVT) Program Application for Manufacturer's Testing Permit Driverless Vehicles, form OL 318 (Rev. 2/2025), which is hereby incorporated by reference, that is submitted by the manufacturer and must be approved by the department in order to issue a Driverless Testing Permit form OL 315A (Rev. 10/2023), which is hereby incorporated by reference. The content of the form may be submitted electronically to the department via the department's web page or portal.

(v) "Drivered Testing Permit Renewal Application" means a Drivered Testing Permit Application, form OL 311 (Rev. 2/2025), which is hereby incorporated by reference, that is submitted by a manufacturer that possesses a valid Drivered Testing Permit at the time of application submission to renew the Driverless Testing Permit pursuant to section 227.20 (a). The content of the form may be submitted electronically to the department via the department's web page or portal.

(w) "Driverless Testing Permit Operational Parameters Modification Application" means a Driverless Testing Permit, form OL 318 (Rev. 2/2025), which is hereby incorporated by reference, that is submitted by a manufacturer that possesses a valid Driverless Testing Permit at the time of application submission to make changes listed in sections 227.42 (o)(1) through (7). The content of the form may be submitted electronically to the department via the department's web page or portal.

(x) "Driverless Testing Permit Renewal Application" means a Driverless Testing Permit, form OL 318 (Rev. 2/2025), which is hereby incorporated by reference, that is submitted by a manufacturer that possesses a valid Driverless Testing Permit at the time the application is submitted to renew the Driverless Testing Permit pursuant to section 227.20 (a). The content of the form may be submitted electronically to the department via the department's web page or portal.

~~(g)~~(y) "Dynamic driving task" means all of the real-time operational and tactical functions required to operate a vehicle in on-road traffic, excluding the strategic functions such as trip scheduling, selection of ~~final and intermediate~~ destinations and waypoints, and including without limitation~~:~~ the following

subtasks: lateral vehicle motional control via steering (operational); longitudinal vehicle motional control via acceleration and deceleration (operational); monitoring the driving environment via object and event detection, recognition, classification, and response preparation (operational and tactical); object and event ~~detection, recognition, and classification~~ response execution (operational and tactical); ~~object and event response;~~ maneuver planning (tactical); and enhancing conspicuity via lighting, sounding the horn, signaling, gesturing, etc.(tactical) ~~steering, turning, lane keeping, and lane changing, including providing the appropriate signal for the lane change or turn maneuver; and acceleration and deceleration~~.

(z) "Dynamic driving task fallback" is (1) the response by the vehicle user to either perform the dynamic driving task or achieve a minimal risk condition after occurrence of any dynamic driving task performance-relevant system failure(s) or upon operational design domain exit, or (2) the response by an automated driving system to achieve a minimal risk condition given the circumstances identified in (1).

(aa) "Dynamic driving task performance relevant system failure" is a malfunction in an automated driving system and/or other vehicle system that prevents the automated driving system from reliably performing its portion of the dynamic driving task on a sustained basis, including the complete dynamic driving task that it would otherwise perform. Dynamic driving task performance relevant system failures include, but are not limited to, situations in which the automated driving system's performance of the dynamic driving task is degraded or inhibited.

(bb) "Emergency" means a sudden, unexpected occurrence demanding immediate action to prevent or mitigate loss or damage to life, health, property, or essential public services.

(cc) "Emergency geofencing message" is a message using commonly available communication methods to identify a location using a street address, intersection, coordinates, or any other reasonable and customary way of identifying a location, that directs an autonomous vehicle to leave or avoid an area because of an emergency.

(dd) "Emergency response official" includes, but is not limited to, emergency dispatchers, first responders, and peace officers as defined in Chapter 4.5 (commencing with Section 830) of Title 3 of Part 2 of the Penal Code.

(ee) "End user" means the registered owner or lessee of the relevant autonomous vehicle who is not the manufacturer.

(ff) "First responder" includes law enforcement, fire department, and emergency medical personnel.

(gg) "Imminent hazard" is the existence of an operating condition that presents a substantial likelihood that a severe injury or exacerbation of a severe injury may occur if operations are not restricted or discontinued before an investigation of the risk can be completed.

(hh) "Local roads" are public roads that provide primary access to residential areas, businesses, farms, and other local areas.

(ii) "Low-speed autonomous vehicle" is an autonomous vehicle that can attain a speed, in one mile, of more than 20 miles per hour and not more than 25 miles per hour, on a paved level surface.

~~(h)~~(jj) "Manufacturer" means a manufacturer of autonomous technology as defined in Vehicle Code section 38750 (a)(5) and includes a vehicle manufacturer as defined in Vehicle Code section 672 that produces an autonomous vehicle from raw materials or new basic components; and, a person as defined in Vehicle Code section 470 who modifies any vehicle by installing autonomous technology.

~~(i)~~(kk) "Minimal risk condition" is a ~~low-risk operating condition that an autonomous vehicle automatically resorts to when either the automated driving systems fails or when the human driver fails to respond appropriately to a request to take over the dynamic driving task~~ stable, stopped condition to which a vehicle user or an automated driving system may bring a vehicle after performing the dynamic driving task fallback in order to reduce the risk of a crash when a given trip cannot or should not be continued.

(ll) "Notice of Autonomous Vehicle Noncompliance" is a notice, form OL 325 (Rev. 12/2024), which is hereby incorporated by reference, that is issued by a peace officer, as defined in Chapter 4.5 (commencing with Section 830) of Title 3 of Part 2 of the Penal Code, to a manufacturer due to an alleged violation of the Vehicle Code or local traffic ordinance while an autonomous vehicle was operating in autonomous mode.

~~(j)~~(mm) "Operational ~~D~~design ~~D~~domain" ~~is the specific~~ are the operating conditions under ~~domain(s) in~~ which a given automated driving ~~an automated function or~~ system or feature thereof is specifically designed to ~~properly operate,~~function, including but not limited to, environmental, geographic ~~area, roadway type, speed range, environmental conditions (weather, daytime/nighttime, etc.)~~, and ~~other domain constraints~~ time-of-day restrictions;

and/or the requisite presence or absence of certain traffic or roadway characteristics.

(nn) "Original Drivered Testing Permit Application" means a Drivered Testing Permit Application, form OL 311 (Rev. 2/2025), which is hereby incorporated by reference, that is submitted by a manufacturer that does not possess a valid Drivered Testing Permit at the time of application.

(oo) "Original Driverless Testing Permit Application" means a Driverless Testing Permit Application, form OL 318 (Rev. 2/2025), which is hereby incorporated by reference, that is submitted by a manufacturer that does not possess a valid Driverless Testing Permit at the time of application.

~~(k)~~(pp) "Passenger" means an occupant of a vehicle who has no role in the operation of that vehicle when the autonomous technology is engaged. A passenger may summon a vehicle or input a destination, but does not engage the technology, monitor the vehicle, or drive or operate the vehicle. A member of the public may ride as a passenger in an autonomous test vehicle if there are no fees charged to the passenger or compensation received by the manufacturer.

~~(l)~~(qq) "Personal information" means information that the autonomous vehicle collects, generates, records, or stores in an electronic form that is retrieved from the vehicles, that is not necessary for the safe operation of the vehicle, and that is linked or reasonably capable of being linked to the vehicle's ~~registered owner or lessee~~ end user or passengers using the vehicle for transportation services.

(rr) "Preliminary information notice" is a request by the department to obtain preliminary information from the manufacturer that addresses or identifies incident(s) involving the operation of an autonomous vehicle(s) on public roads.

~~(m)~~(ss) "Public road" means "highway" as defined in Vehicle Code section 360, "offstreet public parking facility" as defined in Vehicle Code section 4000, and "street" as defined in Vehicle Code section 590.

(tt) "Remote assistant" is a natural person who: is not physically located in the driver's seat of the vehicle; is able to provide information or advice to an autonomous vehicle to facilitate trip continuation when the autonomous vehicle encounters a situation it cannot manage, or alerts the automated driving system of the need to fallback to a minimal risk condition, but does not include remote driving; and is able to provide an autonomous vehicle with revised goals and/or tasks.

~~(n)~~(uu) "Remote ~~operator~~ driver" is a natural person who: ~~possesses the proper class of license for the type of test vehicle being operated;~~ is not ~~seated~~ physically located in the driver's seat of the vehicle, and who performs real time performance of part or all of the dynamic driving task and/or the dynamic driving task fall back (including real-time braking, steering, acceleration, and transmission shifting).~~; engages and monitors the autonomous vehicle; is able to communicate with occupants in the vehicle through a communication link. A remote operator may also have the ability to perform the dynamic driving task for the vehicle or cause the vehicle to achieve a minimal risk condition.~~

(vv) "Remote operations support" includes provision of a function by a remotely located human to support on-road operations of an autonomous vehicle, including remote assistance, remote driving, customer support, or dispatching.

(ww) "Request for information" is a request by the department to obtain substantive information from the manufacturer that addresses or identifies an incident(s) that occurred involving the operation of an autonomous vehicle(s) on public roads.

(xx) "Safety case" is the manufacturer's structured argument, supported by a body of relevant evidence, that provides a compelling, comprehensible, and valid case that safety engineering efforts have ensured an automated driving system does not pose an unreasonable risk of accident, death, injury, or exacerbating injury. A comprehensive description of the safety case shall include a description of the evidence demonstrating functional safety, safety of the intended function, artificial intelligence safety, cybersecurity, and operational safety. The comprehensive description of a safety case must also include core safety information elements. These elements must be addressed in accordance with relevant standards and best practices. Unless noted, each element applies to drivered testing, driverless testing and deployment. A summary of core safety information elements includes, but is not limited to the following:

(1) Use Case Description – How the automated driving system will be utilized in public-facing operations. Description may include a high level description of automated driving system intended use case; types of interactions with other road users; consumers; infrastructure; expected fleet size for deployment; list of likely hazards associated with the use case.

(2) Operational Design Domain – Driverless testing and deployment only.

(3) Non-Proprietary Aspects System Design – Outline of the interaction between key elements within the system. Description may include system design, functional design, hardware, software, supporting system design.

(4) Vehicle Integration – Description may include information about the existing vehicle platform; high level description of relevant changes made to the vehicle and their impact, if any, to the base vehicle safety features; description of the integration testing conditions for new hardware or software.

(5) Validation and Verification Testing – Processes for testing and analysis, ensuring completion of testing and analysis, and addressing test failures. Description may include how the validation and verification requirement generation process and testing approach cover known unsafe and unknown unsafe scenarios; outline safety assurance processes which explain the measures in place to assess the effectiveness and safety of all components of the system.

(6) Safety Relevant Human Machine Interactions – Description may include functionality of the human machine interface communication system.

(7) Safety Management Systems – Addresses all relevant functions of development, manufacturer, testing, monitoring covering the full scope of the product lifecycle.

(A) Description shall include the following four components:

(i) Safety policy objectives;

(ii) Safety promotion;

(iii) Safety risk management;

(iv) Safety assurance.

(B) An established methodology for managing safety risks with examples of detected safety incidents and how they were addressed through the safety management system.

(C) Information on how the safety management system incorporates feedback loops across all areas.

(8) Fleet Operations and Maintenance and Operations. Description may include:

(A) Processes to track damage, maintenance inspections, and return to service.

(B) Tracking maintenance activities, demonstrating compliance with maintenance schedules.

(9) Remote Operations, including Remote Assistance – Driverless testing and deployment only. Description shall include:

(A) Broad summary of remote assistance system activation processes- triggering conditions, criteria for initiating remote assistance, response times.

(B) Data shared with remote assistant (e.g., camera feeds, vehicle speed, telematics data). Description shall include how this data exchange promotes situational awareness.

(C) Communication infrastructure that facilitates real-time data exchange between the remote assistant and the autonomous vehicles. The description shall include the average and maximum latencies between the autonomous vehicle and the remote assistant and provide a description of the testing and validation the manufacturer performed to ensure operations are robust in light of these latencies.

(D) Training process for remote drivers or remote assistants, as applicable.

(10) Incident Response and Post-Incident Analysis. Description shall include:

(A) Explanation of incident response processes.

(B) Processes for how information will be shared with third parties (e.g., first responders, department), as appropriate.

(C) Processes for testing incident response plans (e.g., simulations, dry runs, tabletop exercises).

(D) Procedures for post-incident investigations, in-depth root cause analysis, potential corrective measures, prevention strategies and information sharing.

(11) Post Crash Vehicle Response, Data Collection and Analysis. Description shall include:

(A) Process for communicating the incident internally and externally.

(B) Process and steps taken to support the passenger or other road users and parties involved after the crash.

(C) Process for collecting and managing crash related data.

(12) First Responder Safety Interactions – Driverless testing and deployment only.

(13) Safety-Relevant Cybersecurity – Formal, comprehensive, and effective methodology to manage safety- relevant cybersecurity. Description may include:

(A) Company's security goals.

(B) Foundational elements of the established methodology.

(14) Misuse Mitigation – Driverless testing and deployment only. Description may include:

(A) Safety guidelines for passengers and end users.

(B) Educational programs for passengers and end users.

(C) Automated driving system's general response in situations where misuse has been detected to facilitate safety of the passengers and the public.

~~(o)~~(yy) "Testing" means the operation of an autonomous vehicle on public roads by employees, contractors, or designees of a manufacturer for the purpose of assessing, demonstrating, and validating the ~~autonomous technology's~~ automated driving system's capabilities.

(zz) "Vehicle immobilization" means a stop on a public road in an active travel lane when the autonomous vehicle operating in a driverless configuration is not able to continue the dynamic driving task and must be retrieved or requires the vehicle to be driven by a human driver at the scene or a remote driver.

NOTE: Authority cited: Sections 1651 and 38750, Vehicle Code. Reference: Sections 360, 470, 590, 672, 4000 and 38750, Vehicle Code.

§ 227.04. Requirements for a Manufacturer's Testing Permit.

A manufacturer may conduct testing of autonomous vehicles on public roads in California if all of the following requirements are met:

(a) The manufacturer is conducting the testing.

(b) Except as provided in Section 227.~~38~~42, ~~when~~ the vehicle is operated by an autonomous vehicle test driver who is an employee, contractor, or designee of the manufacturer, who has been certified by the manufacturer to the department as competent to operate the vehicle and has been authorized by the manufacturer to operate the vehicle.

(c) The manufacturer has in place and has provided the department ~~with~~ evidence of the manufacturer's ability to respond to a judgment or judgments for damages for personal injury, death, or property damage arising from the operation of autonomous vehicles on public roads in the amount of five million dollars ($5,000,000), in the form of: an instrument of insurance issued by an insurer admitted to issue insurance in California; a surety bond issued by an admitted surety insurer or an eligible surplus lines insurer, and not a deposit in lieu of bond; or a certificate of self-insurance.

(d) The manufacturer has applied for and the department has issued to the manufacturer a ~~Manufacturer's~~ Drivered Testing Permit, form OL 315 (Rev. 9/2024), or a ~~Manufacturer's~~ Driverless Testing Permit ~~-- Driverless Vehicles~~, form OL 315A (Rev. 10/2023), which is hereby incorporated by reference, to conduct autonomous vehicle testing on public roads in California.

NOTE: Authority cited: Sections 1651 and 38750, Vehicle Code. Reference: Section 38750, Vehicle Code.

§ 227.14. Autonomous Test Vehicles Proof of Financial Responsibility.

(a) A manufacturer insured by a policy of insurance shall at all times maintain in its autonomous test vehicles a copy of the proof of insurance provided by the insurance company.

(b) A manufacturer, when operating ~~shall maintain in~~ its test vehicles on public roads, shall keep ~~at all times it is operated on public roads~~ a copy of the bond inside the vehicle, when the manufacturer relies upon a bond to comply with the requirements of Vehicle Code section 38750(b)(3).

Note: Authority cited: Sections 1651 and 38750, Vehicle Code. Reference: Section 38750, Vehicle Code.

§ 227.16. Identification of Autonomous Test Vehicles.

(a) A manufacturer shall not operate an autonomous test vehicle on public roads unless the manufacturer has ~~provided the department, in writing, the~~

~~identification~~ identified all ~~of the~~ autonomous vehicles to be used for testing on public roads at the time of submission of a Drivered Testing Permit Application, form OL 311 (Rev. 2/2025), which is hereby incorporated by reference, or a Driverless Testing Permit Application, form OL 318 (Rev. 2/2025), which is hereby incorporated by reference. For each vehicle so identified, the manufacturer shall provide to the department all of the following:

(1) The make, model, and model year of the vehicle, or other identifying information if such is not available.

(2) The full vehicle identification number, or other identifying information if such is not available.

(3) The license plate number and state of issuance.

(4) The software version of the automated driving system equipped to the vehicle.

(b) In addition to the information identified in subsection (a), for each autonomous heavy-duty commercial motor vehicle so identified, the manufacturer shall provide to the department all of the following:

(1) A valid United States Department of Transportation number.

(2) An active carrier identification number (California number) issued by the Department of the California Highway Patrol.

~~(b)~~(c) Each document identifying autonomous vehicles for testing shall be signed by a person authorized by the manufacturer to bind the manufacturer, under penalty of perjury under the laws of the State of California.

(d) For each vehicle identified on an Autonomous Vehicle Testing (AVT) Program Test Vehicle Permit, form OL 313 (Rev. 9/2024), which is hereby incorporated by reference, the manufacturer shall certify that a physical copy of the permit will be maintained in the vehicle at all times while operated on public roads.

(e) For each vehicle identified on a Driverless Testing Permit, form OL 315A (Rev. 10/2023), which is hereby incorporated by reference, the manufacturer shall certify that a copy of the permit will be readily available in the vehicle at all times while the vehicle is operating on public roads.

NOTE: Authority cited: Sections 1651 and 38750, Vehicle Code. Reference: Section 38750, Vehicle Code.

§ 227.18. Manufacturer's Testing Permit and Manufacturer's Testing Permit -- Driverless Vehicles.

(a) A manufacturer shall not conduct testing of an autonomous vehicle on public roads in California without having applied to the department for a permit to conduct testing, the department having issued a~~n Autonomous Vehicle Testing (AVT) Manufacturer's Testing Permit~~ Drivered Testing Permit, form OL 315 (Rev. 9/2024), which is hereby incorporated by reference, or a ~~Manufacturer's Testing Permit --~~ Driverless ~~Vehicles~~ Testing Permit, form OL 315A (Rev. 10/2023), which is hereby incorporated by reference, to conduct testing, and the permit being currently in full force and effect.

(b) A manufacturer shall not test autonomous vehicles on public roads unless the manufacturer has tested the autonomous vehicles under controlled conditions that simulate, as closely as practicable, each Operational Design Domain in which the manufacturer intends the vehicles to operate on public roads and the manufacturer has reasonably determined that it is safe to operate the vehicles in each Operational Design Domain.

(c) Manufacturers of autonomous heavy-duty commercial motor vehicles are limited to conducting driverless testing and deployment within an operational design domain that allows operation only on specified routes legal for the size, weight and loading of the vehicle or vehicle combination. Operation on local roads with a posted speed limit of 25 miles per hour or less is prohibited unless those roads fall within a direct route between hubs, motor carrier and shipper facilities, distribution centers, fueling or charging stations, maintenance facilities or terminals as defined in California Vehicle Code 34515, or other non-residential facilities, and the roads utilized permit travel by that vehicle weight class. This regulation shall not apply to autonomous heavy-duty commercial motor vehicles used to transport passengers as described in 227.26 (a)(6)(B).

(1) Should circumstances arise which conflict with those limitations, the following provisions apply to manufacturers of autonomous heavy duty commercial motor vehicles:

(A) A driver shall assume conventional mode operation of the vehicle and follow direction given by first responders, traffic control personnel and/or devices when conditions on the predesignated routes require a detour or alternate route for commercial motor vehicles.

(B) When a driver is not present with the vehicle, a remote assistant or remote driver shall follow direction given by first responders, traffic control personnel and/or devices when conditions on the predesignated-specified routes require a detour or alternate route for commercial motor vehicles.

(C) When a designated detour or alternate route conflicts with the Vehicle Code or a local ordinance for compliance with maximum height, maximum length, or maximum weight limits, as recognized or limited by the operational design domain, the manufacturer shall ensure the vehicle can be legally parked and an assessment made confirming the legality and physical capability of the commercial motor vehicle to safely travel on the detour or alternate route.

(D) Alternate routing decisions made by a driver, remote assistant, or remote driver shall not be made using only commercially available mapping programs (e.g., Google maps, Apple maps) which do not reflect legal access for the type or configuration of commercial motor vehicle being operated.

(E) An alternate route may be utilized only when there is a necessity to continue the movement of an autonomous heavy-duty commercial vehicle for the purpose of safety and not for the purpose of continuing the movement for a commercial reason.

NOTE: Authority cited: Sections 1651 and 38750, Vehicle Code. Reference: Section 38750, Vehicle Code.

§ ~~227.22.~~ 227.20. Term of Permit.

(a) Every Drivered ~~Manufacturer's~~ Testing Permit, form OL 315 (Rev. 9/2024), which is hereby incorporated by reference, or ~~Manufacturer's Testing Permit --~~ Driverless Vehicles Testing Permit, form OL 315A (Rev. 10/2023), which is hereby incorporated by reference, issued under this article shall be valid for a period of two years from midnight of the last day of the month of issuance unless sooner suspended, revoked, or surrendered. Renewal of the permit for the ensuing two-year period may be obtained by the manufacturer to whom the permit was issued upon application to and approval by the department and payment of the fee required by subsection (b).

(b) Every ~~application for renewal of a~~ Drivered ~~Manufacturer's~~ Testing Permit, form OL 315 (Rev. 9/2024), which is hereby incorporated by reference, or a ~~Manufacturer's Testing Permit –~~ Driverless ~~Vehicles~~ Testing Permit, form OL 315A

(Rev. 10/2023), which is hereby incorporated by reference, which expires pursuant to this section shall be made by the manufacturer to whom the permit was issued at least 60 days prior to the expiration date, and shall be made by submitting the completed Drivered Testing Permit Renewal Application, form OL 311 (Rev. 2/2025), which is hereby incorporated by reference, or Driverless Testing Permit ~~r~~Renewal ~~a~~Application, form OL 318 (Rev. 2/2025), which is hereby incorporated by reference, to the department and payment of the three thousand six hundred dollars ($3,600) biennial renewal fee of a Drivered Testing Permit, form OL 315 (Rev. 9/2024), which is hereby incorporated by reference, and renewal of a Driverless Testing Permit, form OL 315A (Rev. 10/2023), which is hereby incorporated by reference.

(c) The two-year validity period of a Driverless Testing Permit, form OL 315A (Rev. 10/2023), which is hereby incorporated by reference, shall restart for a successive two-year period upon the department's approval of a Driverless Testing Operational Parameters Modification Application, form OL 318 (Rev. 2/2025), which is hereby incorporated by reference.

NOTE: Authority cited: Sections 1651 and 38750, Vehicle Code. Reference: Section 38750, Vehicle Code.

§ ~~227.24.~~ 227.22. Enrollment in Employer Pull Notice Program.

(a) Prior to applying for a testing permit, a manufacturer shall enroll in the Employer Pull Notice Program pursuant to Vehicle Code section 1808.1.

(b) If the manufacturer fails to enroll in the Employer Pull Notice Program, the application for a testing permit shall be denied until the manufacturer provides proof that it has enrolled in the Employer Pull Notice Program.

Note: Authority cited: Sections 1651 and 38750, Vehicle Code. Reference: Sections 1808.1 and 38750, Vehicle Code.

§ ~~227.26.~~ 227.24. Prohibitions on Operation on Public Roads.

A manufacturer shall not ~~permit~~ allow operation of ~~any of~~ its autonomous test vehicles ~~to be operated~~ on public roads in California:

(a) By a person other than one of its employees, contractors, or designees who has been identified to the department as authorized by the manufacturer to operate the manufacturer's autonomous vehicle.

(b) By a person who does not meet the requirements of Section 227.34, 227.38, or 227.40 of this Article.

(c) Except as provided in section 227.~~38~~42, when an autonomous vehicle test driver is not seated in the vehicle's driver's seat ~~and monitoring its operations and able to take over physical control of the vehicle in the event of an autonomous technology failure or other emergency~~ tasked with supervising the autonomous vehicle, including by performing the dynamic driving task as needed.

(d) When the manufacturer does not have in effect evidence or proof of financial responsibility as required by Vehicle Code section 38750 and these regulations and as required by any other insurance obligation required by law.

(e) When the ~~Manufacturer's~~ Drivered Testing Permit, form OL 315 (Rev. 9/2024), or the Driverless Testing Permit, form OL 315A (Rev. 10/2023), which is hereby incorporated by reference, is revoked, suspended, expired, or otherwise not in full force and effect.

(f) When members of the public that are not employees, contractors, or designees of the manufacturer are charged a fee to ride in the vehicle, or the manufacturer receives compensation for providing a ride to the members of the public.

~~(g) When members of the public are charged a fee or the manufacturer receives compensation for transporting property in motortrucks as defined in Section 227.28 of this article.~~

NOTE: Authority cited: Sections 1651 and 38750, Vehicle Code. Reference: Sections 16000 and 38750, Vehicle Code.

§ ~~227.28.~~ 227.26. Vehicles Excluded from Testing and Deployment.

(a) The following vehicles shall not be approved for testing or deployment as autonomous vehicles on public roads:

(1) Trailers as defined in Vehicle Code section 242 (camp trailer), section 324 (fifth-wheel travel trailer), and section 635 (trailer coach).

(2) Motorcycles as defined in Vehicle Code section 400.

~~(3) Motor vehicles with interstate operating authority pursuant to Vehicle Code sections 8050 through 8058.~~

~~(4) A vehicle with a gross vehicle weight rating of 10,001 or more pounds.~~

~~(5)~~(3) Vehicles described in Vehicle Code ~~sections 31309 and~~ section 3450027903~~, excluding motortrucks as defined in Vehicle Code section 410 with a gross vehicle weight rating of less than 10,001 pounds~~.

(4) Vehicles used by Household movers, as defined in the Business and Professions Code section 19225.5, under the Household Mover Permit, pursuant to section 19237 of that code.

(5) Commercial motor vehicles used to transport oversize loads (i.e., any combination of vehicles that require a permit issued by the California Department of Transportation or a local agency). This does not apply to vehicle equipment that is permanently attached and required for safe operation of a vehicle. When a permit is required for equipment permanently attached to the vehicle, the manufacturer shall provide the department with evidence of a permit that has been approved by the authorized issuing entity.

(6) Autonomous heavy-duty commercial motor vehicles used to transport passengers. This regulation shall not apply to autonomous heavy-duty commercial motor vehicles used to transport passengers in the following cases:

(A) To a manufacturer of an autonomous heavy-duty commercial motor vehicle designed to carry property, when transporting passengers (e.g., third-party validators, business partners, manufacturer personnel) for testing and demonstration purposes.

(B) Commercial motor vehicles with a gross vehicle weight rating under 14,001 pounds, classified as buses under Vehicle Code section 233 (b) and designed to carry no more than 15 passengers, when operated by or in partnership with a public entity as defined in Government Code section 811.2 or independent institutions of higher education as defined in the California Education Code section 66010 (b). A manufacturer operating under this exemption shall provide to the department any complete and unredacted terminal inspection reports and all attachments including but not limited to the CHP 343, CHP 407F, and the CHP 345, if applicable, issued by the California Highway Patrol within 30 business days of receipt.

(7) Commercial motor vehicles used to transport bulk liquids, requiring a tank endorsement, as defined in the Vehicle Code section 15278.

(8) Salvage vehicles that are not able to perform the dynamic driving task in a manner that is consistent with the definition of SAE International's Levels 3, 4, or 5, unless the manufacturer provides the department with a completed Statement of Facts, REG 256 form (REV. 8/2008), which is hereby incorporated by reference, signed by an authorized representative of the manufacturer certifying that the automated driving system is capable of operating as designed in the intended operational design domain.

(b) A permit to test or deploy autonomous vehicles is not a substitute for and does not replace any other license or permit requirement that may be necessary for a manufacturer's intended operation of vehicles on public roads.

NOTE: Authority cited: Sections 1651 and 38750, Vehicle Code. Reference: Sections 242, 260, 324, 400, 410, 431, 544, 635, 8050-8058 and 38750, Vehicle Code.

§ ~~227.30.~~ 227.28. Manufacturer's Testing Permit Application.

(a) A manufacturer desiring to conduct testing of autonomous vehicles on public roads in California shall submit a Drivered Testing Permit Application, form OL 311 (Rev. 2/2025), which is hereby incorporated by reference~~ an application to the department on Autonomous Vehicle Tester Program (AVT) Application for Manufacturer's Testing Permit, form OL 311 (Rev. 7/2020), which is hereby incorporated by reference, for a permit to conduct testing. Manufacturers may also choose to submit the form electronically via the department's web portal~~. A manufacturer submitting an original, modification, or renewal of the Drivered Testing Permit Application, form OL 311 (Rev. 2/2025), which is hereby incorporated by reference, may also choose to submit the form electronically via the department's web page or portal.

(1) The manufacturer shall submit a fee of three thousand six hundred dollars ($3,600) for the processing of the Original Drivered Testing Permit Application, form OL 311 (Rev. 2/2025), which is hereby incorporated by reference, ~~application~~, which will permit the operation of up to 10 autonomous vehicles and up to 20 autonomous vehicle test drivers.

(2) The manufacturer may ~~supplement the application with additional pages to~~ add more than 10 vehicles and more than 20 drivers to the application by submitting the fee of fifty dollars ($50) for each additional set of 1 to 10 vehicles and 1 to 20 drivers.

(b) Within ten (10) business days of any change to the contact information or the name of the manufacturer provided to the department ~~on the Application for Manufacturer's Testing Permit~~, a manufacturer shall notify the department in writing on the manufacturer's letterhead of the change, including changes in the authorized representative's contact name(s), telephone number(s), email address, or mailing address.

(c) Any changes or modifications to the ~~Manufacturer's~~Drivered Testing Permit, form OL 315 (Rev. 9/2024), which is hereby incorporated by reference, required by the manufacturer during the term of the permit, including but not limited to, changes to the autonomous vehicle test driver training program, as described in section 227.36, autonomous vehicle test driver licensing information, and vehicle registration information (e.g., replacing license plates that are lost or stolen, converting registration from auto to commercial), adding any vehicles or autonomous vehicle test drivers that were not identified in the Original Drivered Testing Permit Application, form OL 311 (Rev. 2/2025), which is hereby incorporated by reference, and issued a permit by the department, removing any vehicles from the Drivered Testing Permit, form OL 315 (Rev. 9/2024), which is hereby incorporated by reference, and removing autonomous vehicle test drivers from the Drivered Testing Permit, form OL 315 (Rev. 9/2024), which is hereby incorporated by reference, in compliance with section 227.34 (b) (4), shall be accomplished by submitting a revised Drivered Testing Permit Application, form OL 311 (Rev. 2/2025), which is hereby incorporated by reference, and submitting the fee of seventy dollars ($70) for the processing of the modification. ~~Manufacturers may also choose to submit the form electronically via the department's web portal.~~

(d) A manufacturer submitting either an Original Drivered Testing Permit Application, form OL 311 (Rev. 2/2025), which is hereby incorporated by reference, a Drivered Testing Permit Renewal Application, form OL 311 (Rev. 2/2025), which is hereby incorporated by reference, an Original Driverless Testing Permit Application, form OL 311 (Rev. 2/2025), which is hereby incorporated by reference, a Driverless Testing Permit Renewal Application, form OL 318 (Rev. 2/2025), which is hereby incorporated by reference, or a Driverless Testing Operational Parameters Modification Application, form OL 318 (Rev. 2/2025), which is hereby incorporated by reference, shall submit a comprehensive description of the safety case, supported by a description of the evidence demonstrating functional safety, safety of the intended function, artificial intelligence safety, cybersecurity, and operational safety. Each of these areas must be addressed in accordance with relevant standards and best practices.

The comprehensive description of a safety case must also include core safety information elements, as outlined in section 227.02 (xx). If any element of the core safety information is not applicable, the manufacturer shall provide a justification explaining its exclusion. The department's review of the safety case may involve consultation with third-party experts.

NOTE: Authority cited: Sections 1651 and 38750, Vehicle Code. Reference: Section 38750, Vehicle Code.

§ ~~227.20.~~ 227.30. Review of Application.

(a) The department shall review the Drivered Testing Permit Application, form OL 311 (Rev. 2/2025), which is hereby incorporated by reference, ~~Autonomous Vehicle Tester Program (AVT) Application for Manufacturer's Testing Permit~~ or the Driverless Testing Permit Application, form OL 318 (Rev. 2/2025), which is hereby incorporated by reference ~~a Manufacturer's Testing Permit -- Driverless Vehicles~~, and notify the manufacturer within 10 business days of receipt of the application whether all required documentation has been received. ~~it is complete or it is determined to be deficient. The department shall approve an application and issue a Manufacturer's Testing Permit after determining that~~ After such notification, the department will conduct a substantive review of the contents submitted by the manufacturer. Following this review, if it is determined that the application is sufficient and all requirements have been met, the~~. The~~ department shall approve ~~an~~ the application and issue a~~n Autonomous Vehicle Testing (AVT) Program Manufacturer Permit, form OL 315 (Rev. 7/2020)~~ Drivered Testing Permit, form OL 315 (Rev. 9/2024), which is hereby incorporated by reference, or a~~n Autonomous Vehicle Testing (AVT) Program Manufacturer Permit --~~ Driverless ~~Vehicles~~ Testing Permit, form OL 315A (Rev. 10/2023), which is hereby incorporated by reference ~~(Rev. 7/2020), which are hereby incorporated by reference~~.

(b) The department shall notify the manufacturer of any deficiency in the application and allow the manufacturer a reasonable period of time in which to correct the deficiency. The department will review material submitted to correct an application deficiency. If the department determines that the application remains deficient, the department shall notify the manufacturer/applicant of the continuing deficiency. The department shall deny an application if the manufacturer/applicant fails to make the application sufficient after a reasonable opportunity to do so.

NOTE: Authority cited: Sections 1651 and 38750, Vehicle Code. Reference: Section 38750, Vehicle Code.

§ 227.32. Requirements for Autonomous Vehicle Test Drivers.

A manufacturer shall not conduct testing of an autonomous vehicle on public roads unless the vehicle is operated or driven by an autonomous vehicle test driver who meets each of the following requirements:

(a) The autonomous vehicle test driver ~~is either in immediate physical control of the vehicle~~ has situational awareness of the automated driving system and the vehicle in relation to the driving environment or is actively monitoring the vehicle's operations and capable of taking over immediate physical control.

(b) The autonomous vehicle test driver is an employee, contractor or designee of the manufacturer.

(c) The autonomous vehicle test driver shall obey all provisions of the Vehicle Code, California Code of Regulations, and local ~~regulation~~ ordinances applicable to the operation of motor vehicles whether the vehicle is in autonomous mode or conventional mode, except when necessary for the safety of the vehicle's occupants and/or others, including vulnerable road users.

(d) The autonomous vehicle test driver knows the limitations of the vehicle's autonomous technology and is capable of safely operating the vehicle in all conditions under which the vehicle is tested, or can be reasonably expected to encounter, on public roads.

(e) Certification that each test driver of an autonomous heavy-duty commercial motor vehicle shall comply with the hours-of-service regulations set forth in the Title 49 Code of Federal Regulations, Part 395, and Title 13 of the California Code of Regulations section 1212.5 for the type of vehicle being driven or operated.

NOTE: Authority cited: Sections 1651 and 38750, Vehicle Code. Reference: Section 38750, Vehicle Code.

§ 227.34. Qualifications for Autonomous Vehicle Test Drivers ~~Qualifications~~.

A manufacturer shall not allow any person to act as an autonomous vehicle test driver for testing autonomous vehicles on public roads unless all of the following have been met:

(a) The manufacturer has identified each ~~the~~ autonomous vehicle test driver to the department ~~in writing~~, providing the driver's true full name and the driver's license number and jurisdiction of issuance of the license, and the autonomous vehicle test driver has been issued an Autonomous Vehicle Testing (AVT)

Program Test Vehicle Operator Permit, form OL 314 ~~(Rev. 7/2020)~~(Rev. 10/2023), which is hereby incorporated by reference.

(1) For each autonomous vehicle test driver, the manufacturer shall maintain a physical copy of the Autonomous Vehicle Testing (AVT) Program Test Vehicle Operator Permit, form OL 314 (Rev. 10/2023), which is hereby incorporated by reference, in the vehicle the autonomous vehicle test driver is operating at all times while the vehicle is operating on public roads.

(b) The manufacturer has certified to the department, for each autonomous vehicle test driver permitted by the manufacturer ~~to operate its autonomous vehicles on public roads~~, that the ~~driver~~ natural person meets all of the following requirements:

(1) ~~The~~ Each autonomous vehicle test driver has ~~been~~ maintained a valid license~~d to drive a motor vehicle~~ for the three years immediately preceding application to the department; and, at that time the ~~driver~~ natural person:

(A) Did not have more than one violation point count determined as provided in subdivisions (a), (b), (c), (d), (e), (g), or (h) of Vehicle Code section 12810.

(B) Was not the at-fault driver of a motor vehicle involved in an accident that resulted in injury or death of any person.

(C) For the ten years immediately preceding application to the department was not convicted for driving or operating a vehicle under the influence of alcohol or any drug, and did not suffer any driver's license suspension or revocation based on driving or operating any vehicle under the influence of alcohol or of any drug.

(2) The autonomous vehicle test driver has completed the manufacturer's autonomous vehicle test driver training program and the date the driver completed the program.

(3) Each autonomous vehicle test driver is enrolled in the manufacturer's Employer Pull Notice Program and must meet all eligibility requirements described in this article on a continuous basis while holding an active permit issued by the department.

(4) The manufacturer shall immediately remove any autonomous vehicle test driver, who no longer meets the eligibility requirements in this article. The person may not be reinstated to the Autonomous Vehicle Tester (AVT) Program until the manufacturer has verified the person now meets the eligibility requirements in this article.

(5) Absent any contrary requirements imposed by the Federal Motor Carrier Safety Administration:

(A) Each autonomous vehicle test driver that drives an autonomous heavy-duty commercial motor vehicle shall comply with the hours-of-service regulations, for the type of vehicle being driven or operated, set forth in Title 49 Code of Federal Regulations, Part 395, for vehicles engaged in interstate commerce, or Title 13 California Code of Regulations, Division 2, Chapter 6.5, for vehicles engaged in intrastate commerce, as those terms are defined in Title 13 California Code of Regulations, Section 1201.

(B) Each autonomous vehicle test driver that drives an autonomous heavy-duty commercial motor vehicle, for a type of commercial motor vehicle defined in Title 49 Code of Federal Regulations, section 382.107, shall be enrolled in a Controlled Substance and Alcohol Testing Program meeting the requirements of Title 49 Code of Federal Regulations, Part 382, and shall comply with Vehicle Code section 34520.

(C) Each autonomous vehicle test driver that drives an autonomous heavy-duty commercial motor vehicle, for a type of commercial motor vehicle that is not defined in Title 49 Code of Federal Regulations, section 382.107, shall be enrolled in a Controlled Substance and Alcohol Testing Program which is substantially similar to federal drug testing regulations contained in Title 49 Code of Federal Regulations, Part 382.

(D) The manufacturer of an autonomous heavy-duty commercial motor vehicle shall immediately remove any autonomous vehicle test driver who engages in conduct prohibited by the Controlled Substance and Alcohol Testing Program, pursuant to Title 49 Code of Federal Regulations, Section 382.501. The person may not be reinstated to the Autonomous Vehicle Tester (AVT) Program by the department until that person has met the return-to-duty

requirements contained in Title 49 Code of Federal Regulations, Part 40, Subpart O.

NOTE: Authority cited: Sections 1651 and 38750, Vehicle Code. Reference: Sections 12810 and 38750, Vehicle Code.

§ 227.36. Autonomous Vehicle Test Driver Training Program.

A manufacturer conducting testing of autonomous vehicles on public roads shall maintain a training program for its autonomous vehicle test drivers and shall provide the department with a course outline and description of the autonomous vehicle test driver training program. Within 10 business days of the adoption of any material modifications, the manufacturer shall provide the department with the modified version of the course outline and description of the training program. The autonomous vehicle test driver training program shall include, but not be limited to the following:

(a) Instruction on the automated driving system technology to be tested in the manufacturer's vehicles, including behind the wheel instruction provided by an experienced driver on the capabilities and limitations of the manufacturer's automated driving systems.

(1) For purposes of this section, an "experienced driver" is one who has met the qualifications provided in Section 227.34, subsections (a) and (b)(1) of this Article and through training and experience has developed skill and knowledge in the operation of the manufacturer's autonomous technology.

(b) Defensive driver training, including practical experience in recovering from hazardous driving scenarios.

(c) Instruction that matches the level of the autonomous test vehicle driver's experience operating the specific type of automated driving system technology with the level of technical maturity of the automated system.

NOTE: Authority cited: Sections 1651 and 38750, Vehicle Code. Reference: Section 38750, Vehicle Code.

§ 227.38. Requirements, Qualifications, and Training for Remote Drivers.

A manufacturer shall not allow any person to act as a remote driver unless all of the following have been met:

(a) The manufacturer has identified each remote driver to the department at the time of any original, renewal, or modification application described in

Article 3.7, as applicable, providing the driver's true full name, driver's license number, and jurisdiction of issuance of the license, and the remote driver has been issued a Remote Driver Permit, form OL 323 (Rev. 8/2025), which is hereby incorporated by reference.

(b) Functional requirements.

(1) A manufacturer utilizing remote driving in its operations on public roads shall provide the department a description of the specific remote driving tasks that may be assigned; the circumstances under which remote driving may occur; and the system and policies for assigning persons to be available for and engage in remote driving.

(2) Remote driving may only be performed by a person who has been trained and certified for the assigned remote driving task.

(3) A manufacturer shall describe the method for updating tooling utilized for remote driving to enable changes and improvements as appropriate.

(4) The manufacturer shall provide a description of fatigue risk assessments and how it will reduce or prevent human fatigue, error, or other adverse effects of fatigue.

(5) The remote driver shall have the ability to immobilize the autonomous vehicle, follow instructions issued by first responders, allow an emergency response official to move the autonomous vehicle if it is equipped with an override system, or cause the autonomous vehicle to move as directed by an emergency response official.

(6) The remote driver shall have the ability to bring the autonomous vehicle to a controlled stop in its current travel path allowing the vehicle to remain stopped and not perform any functions in autonomous mode.

(7) The manufacturer shall immediately remove any remote driver who no longer meets the eligibility requirements in this article. The remote driver may not be reinstated until the manufacturer has verified the person meets the eligibility requirements in this article.

(8) The manufacturer shall immediately remove any remote driver of an autonomous heavy-duty commercial motor vehicle who engages in conduct prohibited by the Controlled Substance and Alcohol Testing Program, pursuant to Title 49 Code of Federal Regulations, Section 382.501. The person may not be reinstated to the Autonomous Vehicle Tester (AVT) Program by the department until that person has met the

return-to-duty requirements contained in Title 49 Code of Federal Regulations, Part 40, Subpart O.

(9) Each remote driver shall comply with commands from the California Highway Patrol or other law enforcement officer during a vehicle inspection or traffic stop and will not cause the vehicle to move unless directed by a law enforcement officer.

(c) Training requirements.

(1) To perform a remote driving task, a person must receive training that includes training and assessment of knowledge about the automated driving system, escalation processes, and tooling utilized to engage in remote driving tasks.

(2) Training and assessments shall be designed to enable sufficient evaluation of a person's readiness to respond to the specific type of tasks assigned.

(3) A person may be certified for assignment of a specific type of remote driving task only after completion of foundational training and assessments and necessary training for that specific type of task.

(4) Records, including the individual's true first name, driver's license number and jurisdiction of issuance, shall be continually maintained showing at any given time a list of remote driving tasks and each person who is trained and certified for each task.

(5) Within 10 business days of the adoption of any material modifications, the manufacturer shall provide the department with the modified version of the course outline and description of the training program.

(d) Qualifications.

(1) The remote driver of an autonomous heavy-duty commercial vehicle shall comply with subparts (F), (G), and (H) of part 383 of Title 49 of the Code of Federal Regulations.

(2) The remote driver meets eligibility requirements as described in section 227.38 (a).

(3) The person is an employee, contractor, or designee of the manufacturer.

(4) The person has been trained and is certified to respond to each request they are assigned.

(5) The person holds a valid driver's license with endorsements, if applicable for the type of vehicle being operated, and has maintained a valid license for the three years immediately preceding application to the department; and, at that time the natural person:

(A) Did not have more than one violation point count determined as provided in subdivisions (a), (b), (c), (d), (e), (g), or (h) of Vehicle Code section 12810.

(B) Was not the at-fault driver of a motor vehicle involved in an accident that resulted in injury or death of any person.

(C) For the ten years immediately preceding application to the department was not convicted for driving or operating a vehicle under the influence of alcohol or any drug, and did not suffer any driver's license suspension or revocation based on driving or operating any vehicle under the influence of alcohol or of any drug.

(6) The person is enrolled in the manufacturer's Employer Pull Notice Program, and must meet all eligibility requirements described in this article on a continuous basis while holding an active permit issued by the department.

(7) Each remote driver that operates an autonomous heavy-duty commercial motor vehicle shall comply with the hours-of-service regulations, for the type of vehicle being driven or operated, set forth in Title 49 Code of Federal Regulations, Part 395, for vehicles engaged in interstate commerce, or Title 13 California Code of Regulations, Division 2, Chapter 6.5, for vehicles engaged in intrastate commerce, as those terms are defined in Title 13 California Code of Regulations, Section 1201. All logs of hours-of-service records must be available for inspection at the manufacturer's terminal location pursuant to the Basic Inspection of Terminals program requirements contained in Vehicle Code section 34501.12.

(8) Each remote driver that operates an autonomous heavy-duty commercial motor vehicle, for a type of commercial motor vehicle defined in Title 49 Code of Federal Regulations, section 382.107, shall be enrolled in a Controlled Substance and Alcohol Testing Program meeting

the requirements of Title 49 Code of Federal Regulations, Part 382, and shall comply with Vehicle Code section 34520. All records must be available for inspection at the manufacturer's terminal location pursuant to the Basic Inspection of Terminals program requirements contained in Vehicle Code section 34501.12.

NOTE: Authority cited: Sections 1651 and 38750, Vehicle Code. Reference: Section 38750, Vehicle Code.

§ 227.40. Requirements, Qualifications, and Training for Remote Assistants.

A manufacturer shall not allow any person to act as a remote assistant unless all of the following have been met:

(a) Functional requirements.

(1) A manufacturer utilizing remote assistance in its operations on public roads shall provide the department a description of how requests for remote assistance are assigned and the process for determining how many agents are required to be available to respond to requests at a given time.

(2) A request shall be assigned only to an agent that has been trained and certified for responding to such a request.

(3) There shall be a method for updating tooling utilized to provide remote assistance to enable changes and improvements as appropriate.

(4) The remote assistant shall have the ability to immobilize the autonomous vehicle, follow instructions issued by first responders, allow an emergency response official to move the autonomous vehicle if it is equipped with an override system, or cause the autonomous vehicle to move as directed by an emergency response official.

(5) The remote assistant shall have the ability to bring the autonomous vehicle to a controlled stop in its current travel path allowing the vehicle to remain stopped and not perform any functions in autonomous mode.

(6) Each remote assistant shall comply with commands from the California Highway Patrol or other law enforcement officer during a vehicle inspection or traffic stop and will not cause the vehicle to move unless directed by a law enforcement officer.

(7) The manufacturer shall immediately remove any remote assistant who no longer meets the eligibility requirements in this article. The remote

assistant may not be reinstated until the manufacturer has verified the person meets the eligibility requirements in this article.

(b) Training requirements.

(1) To be assigned to any remote assistance request, a person must receive training that includes training and assessment of knowledge about the automated driving system, escalation processes, and tooling utilized to provide remote assistance.

(2) Training and assessments shall be designed to enable sufficient evaluation of a person's readiness to respond to the specific type of requests assigned.

(3) A person may be certified for assignment of a specific type of request only after completion of foundational training and assessments and necessary training for that specific type of request.

(4) Records, including the individual's true first name, driver's license number and jurisdiction of issuance, shall be continually maintained showing at any given time a list of requests for which each agent is trained and certified.

(5) Within 10 business days of the adoption of any material modifications, the manufacturer shall provide the department with the modified version of the course outline and description of the training program.

(c) Qualifications.

(1) The person has been trained and is certified to respond to each request they are assigned.

(2) The person is an employee, contractor, or designee of the manufacturer.

(3) The person holds a valid driver's license.

NOTE: Authority cited: Sections 1651 and 38750, Vehicle Code. Reference: Section 38750, Vehicle Code.

§ ~~227.38~~ 227.42. Manufacturer's Permit to Test Autonomous Vehicles That Do Not Require a Driver in the Driver's Seat.

A manufacturer desiring to conduct testing of autonomous vehicles designed to be capable of operating on public roads in California in a specific operational design domain without the presence of a driver physically located in the driver's

seat of ~~inside~~ the vehicle ~~on public roads in California~~ shall submit an Original Driverless Testing Permit Application, form OL 318 (Rev. 2/2025), which is hereby incorporated by reference, ~~an application for a permit to conduct driverless testing to the department on an Autonomous Vehicle Tester (AVT) Program Application for a Manufacturer's Testing Permit -- Driverless Vehicles, form OL 318 (Rev. 7/2020)~~, which is hereby incorporated by reference. At all times, a valid Drivered Testing Permit, form OL 315 (Rev. 9/2024), which is hereby incorporated by reference, is a condition for maintenance of a Driverless Testing Permit, form OL 315A (Rev. 10/2023), which is hereby incorporated by reference. A manufacturer submitting an Original Driverless Testing Permit Application, form OL 318 (Rev. 2/2025), which is hereby incorporated by reference, a Driverless Testing Permit Renewal Application, form OL 318 (Rev. 2/2025), which is hereby incorporated by reference, Driverless Testing Permit Operational Parameters Modification Application, form OL 318 (Rev. 2/2025), which is hereby incorporated by reference, ~~Manufacturers~~ may also choose to submit the form electronically via the department's web page or portal. Notwithstanding the requirements of Sections 227.04(b), 227.~~24~~22, 227.~~26~~24(a) and (b), 227.32, 227.34, and 227.36, a manufacturer may conduct testing of autonomous vehicles designed to be capable of operating on public roads in California in a specific operational design domain without the presence of a driver physically located in the driver's seat of ~~inside~~ the vehicle ~~on public roads in California~~ only if all of the following requirements are met:

(a) In order to apply for an Original Driverless Testing Permit, form OL 315A (Rev. 10/2023), which is hereby incorporated by reference:

(1) A manufacturer, except a manufacturer of autonomous heavy-duty commercial motor vehicles, as described in (2), must have tested a minimum of 50,000 autonomous miles with a valid Drivered Testing Permit, form OL 315 (Rev. 9/2024), which is hereby incorporated by reference, on public roads throughout the operational design domain. A manufacturer operating a low-speed autonomous vehicle shall have tested a minimum of 10,000 autonomous miles with a valid Drivered Testing Permit, form OL 315 (Rev. 9/2024), which is hereby incorporated by reference, on public roads throughout the operational design domain.

(A) The manufacturer shall provide the department with the results of an assessment of operational data from testing with a valid Drivered Testing Permit, form OL 315 (Rev. 9/2024), which is hereby incorporated by reference, under the testing parameters described in subsection (c).

(B) The department may request additional information from the manufacturer that it deems necessary to assess the safety of an autonomous vehicle capable of operating without the presence of a driver inside the vehicle.

(2) A manufacturer of autonomous heavy-duty commercial motor vehicles must have tested a minimum of 500,000 autonomous miles with a valid Drivered Testing Permit, form OL 315 (Rev. 9/2024), which is hereby incorporated by reference, on public roads throughout the operational design domain and in all conditions under which the subject automated driving system is intended to operate with a Driverless Testing Permit, form OL 315A (Rev. 10/2023), which is hereby incorporated by reference. Up to 400,000 of these miles may occur in other jurisdictions contingent upon the manufacturer providing all the reports that California requires to cover that out-of-state testing as described in subsection (d). 100,000 miles of such testing must occur within the intended operational design domain in California.

(A) The manufacturer shall provide the department with the results of an assessment of operational data from testing with a valid Drivered Testing Permit, form OL 315 (Rev. 9/2024), which is hereby incorporated by reference, under the testing parameters described in subsection (c).

(B) The department may request additional information from the manufacturer that it deems necessary to assess the safety of an autonomous heavy-duty commercial motor vehicle capable of operating without the presence of a driver inside the vehicle.

(b) In order to submit a Driverless Testing Permit Operational Parameters Modification Application, form OL 318 (Rev. 2/2025), which is hereby incorporated by reference:

(1) A manufacturer, except a manufacturer of autonomous heavy-duty commercial motor vehicles as described in (2), must have tested a minimum of 25,000 autonomous miles with a valid Drivered Testing Permit, form OL 315 (Rev. 9/2024), which is hereby incorporated by reference, on public roads throughout the operational design domain. A manufacturer operating a low-speed autonomous vehicle shall have tested a minimum of 10,000 autonomous miles with a valid Drivered Testing Permit, form OL 315 (Rev. 9/2024), which is hereby incorporated by reference, on public roads throughout the operational design domain.

(2) A manufacturer of an autonomous heavy-duty commercial motor vehicle must have tested a minimum of 250,000 autonomous miles under an existing Drivered Testing Permit, form OL 315 (Rev. 9/2024), which is hereby incorporated by reference, on public roads throughout the operational design domain. Up to 200,000 of these miles may occur in other jurisdictions contingent upon the manufacturer providing all the reports that California requires to cover that out-of-state testing as described in subsection (d). 50,000 miles of such testing on the Drivered Testing Permit, form OL 315 (Rev. 9/2024), which is hereby incorporated by reference, must occur within the intended operational design domain in California.

(c) In an Original Driverless Testing Permit Application, form OL 318 (Rev. 2/2025), which is hereby incorporated by reference, or Driverless Testing Permit Operational Parameters Modification Application, form OL 318 (Rev. 2/2025), which is hereby incorporated by reference, a manufacturer shall provide a report of all testing conducted with a Drivered Testing Permit, form OL 315 (Rev. 9/2024), which is hereby incorporated by reference, on California public roads inclusive and reflective of the operational design domain for which a Driverless Testing Permit, form OL 315A (Rev. 10/2023), which is hereby incorporated by reference, is being sought. This shall include:

(1) The total number of miles each autonomous vehicle operated in autonomous mode on public roads prior to the date of application. The total number of dynamic driving task performance relevant system failures that occurred in autonomous mode in the year prior to the date of application, if any, and a full description of all contributing factors that led to or caused each dynamic driving task performance relevant system failure. The reports shall be submitted using the electronic Vehicle Miles Traveled Template (Rev. 12/2025) and the Dynamic Driving Task Performance Relevant System Failure Reporting Template (Rev. 12/2025) provided by the department, which are hereby incorporated by reference. The manufacturer shall submit the reports electronically in .csv format via the department's web page or portal.

(2) Copies of collision reports submitted to the National Highway Traffic Safety Administration in the year prior to the date of application. The report shall be submitted using the electronic Collision Reporting Template (Rev. 12/2025), which is hereby incorporated by reference, provided by the department, which is hereby incorporated by reference. The

manufacturer shall submit the report electronically in .csv format via the department's web page or portal.

(3) Any braking event, as defined in section 227.66, subsection (a), occurring during the operation of an autonomous vehicle in autonomous mode on public roads over the year prior to application in the operational design domain that is the same or comparable to that which is intended for testing with a Driverless Testing Permit, form OL 315A (Rev. 10/2023), which is hereby incorporated by reference. The report shall be submitted using the electronic Braking Event Reporting Template (Rev. 12/2025), which is hereby incorporated by reference provided by the department, which is hereby incorporated by reference. The manufacturer shall submit the report electronically in .csv format via the department's web page or portal.

(d) A manufacturer of autonomous heavy-duty commercial motor vehicles may provide a summary of out-of-state testing conducted over the year prior to application in autonomous mode on public roads in an operational design domain that is the same or comparable to that which is intended for testing with a Driverless Testing Permit, form OL 315A (Rev. 10/2023), which is hereby incorporated by reference. This shall include:

(1) The total number of miles each autonomous vehicle operated in autonomous mode on public roads prior to the date of application. The total number of dynamic driving task performance relevant system failures that occurred in autonomous mode in the year prior to the date of application, if any, and a full description of all contributing factors that led to or caused each dynamic driving task performance relevant system failure. The reports shall be submitted using the electronic Vehicle Miles Traveled Template (Rev. 12/2025), which is hereby incorporated by reference, and Dynamic Driving Task Performance Relevant System Failure Reporting Template (Rev. 12/2025), which is hereby incorporated by reference, provided by the department. The manufacturer shall submit the reports electronically in .csv format via the department's web page or portal.

(2) Copies of collision reports submitted to the National Highway Traffic Safety Administration in the year prior to the date of application. The report shall be submitted using the electronic Collision Reporting Template (Rev. 12/2025), which is hereby incorporated by reference, provided by

the department. The manufacturer shall submit the report electronically in .csv format via the department's web page or portal.

(3) Any braking event, as defined in section 227.66, subsection (a), occurring during the operation of an autonomous vehicle in autonomous mode on public roads over the year prior to application in the operational design domain that is the same or comparable to that which is intended for testing with a Driverless Testing Permit, form OL 315A (Rev. 10/2023), which is hereby incorporated by reference. The report shall be submitted using the electronic Braking Event Reporting Template (Rev. 12/2025), which is hereby incorporated by reference, provided by the department. The manufacturer shall submit the report electronically in .csv format via the department's web page or portal.

~~(a)~~(e) In an Original Driverless Testing Permit Application, form OL 318 (Rev. 2/2025), which is hereby incorporated by reference, or Driverless Testing Permit Operational Parameters Modification Application, form OL 318 (Rev. 2/2025), which is hereby incorporated by reference, t~~T~~he manufacturer certifies that the local authorities, as defined in Vehicle Code section 385, within the jurisdiction where the vehicle will be tested have been provided a written notification, a copy of which must be submitted to the department, that contains all of the following:

(1) The operational design domain of the test vehicles.

(2) A list of all public roads in the jurisdiction where the vehicles will be tested.

(3) The date that testing will begin.

(4) The days and times that testing will be conducted on public roads.

(5) The number of vehicles to be tested and the types of vehicles to be tested.

(6) Contact information, including name, telephone number, address, and email for the contact person for the manufacturer conducting the testing.

~~(b)~~(f) In an Original Driverless Testing Permit Application, form OL 318 (Rev. 2/2025), which is hereby incorporated by reference, Driverless Testing Permit Renewal Application, form OL 318 (Rev. 2/2025), which is hereby incorporated by reference, or Driverless Testing Permit Operational Parameters Modification Application, form OL 318 (Rev. 2/2025), which is hereby incorporated by

reference, t~~T~~he manufacturer ~~certifies~~must certify that the autonomous test vehicle(s) complies with ~~the~~ all of the following:

(1) There is a communication link that enables the autonomous vehicle to seek and receive remote operations support, as applicable, and includes communication of information on the vehicle's location and status. For autonomous vehicles designed for passenger service, there is a method to enable two-way communication for purposes of providing remote operations support to any passengers if the vehicle experiences any failures or other conditions that would endanger the safety of the vehicle's passengers or other road users, or otherwise prevent the vehicle from functioning as intended without a driver physically located in the driver's seat of the vehicle. ~~between the vehicle and the remote operator to provide information on the vehicle's location and status and allow two-way communication between the remote operator and any passengers if the vehicle experiences any failures that would endanger the safety of the vehicle's passengers or other road users, or otherwise prevent the vehicle from functioning as intended, while operating without a driver.~~ The certification shall include:

(A) That the manufacturer ~~will~~ has a system and process, which includes use of a redundant communications network to continuously monitor the status and functionality of the vehicle and the two-way communication link while the autonomous test vehicle is being operated without a driver physically located in the driver's seat of the vehicle~~;~~.

(B) A description of how the manufacturer will continuously monitor the status of the vehicle and communication link, and what type of data will be monitored. ~~; and,~~

~~(C) An explanation of how all of the vehicles tested by the manufacturer will be monitored.~~

(C) A description of what redundancies and automated driving system capabilities are in place if there is a loss or degradation of the communication link.

(D) A description of how the manufacturer will address situations where the autonomous vehicle achieves a minimal risk condition, including, but not limited to, when the automated driving system executes an automated fallback to a minimal risk condition, a minimal risk condition is triggered by a remote driver or remote

assistant, the communication network fails or is degraded, vehicle hardware or software failures. The description should include, but not be limited to, roles and responsibilities of personnel.

(E) A description and photographic evidence of the type of control output (e.g., screens, speakers, haptic feedback, etc.) input devices (e.g., steering wheels, joysticks, keyboards, microphones, etc.) utilized to provide remote operations support, as applicable.

(2) There is a process to display or communicate vehicle owner or operator information as specified in Vehicle Code section 16025 in the event that the vehicle is involved in a collision or if there is a need to provide that information to a law enforcement officer for any reason.

(3) Commencing July 1, 2026, for autonomous vehicles with a gross vehicle weight rating of less than 10,001 pounds, a manufacturer submitting an Original Driverless Testing Permit Application, form OL 318 (Rev. 2/2025), which is hereby incorporated by reference, Driverless Testing Permit Renewal Application, form OL 318 (Rev. 2/2025), which is hereby incorporated by reference, or Driverless Testing Permit Operational Parameters Modification Application form OL 318 (Rev. 2/2025), which is hereby incorporated by reference, shall certify:

(A) That there is a dedicated emergency response telephone line available for emergency response officials during all hours when the autonomous vehicle is on a public road and is available at no cost to public agencies.

(B) That the dedicated emergency response telephone line is equipped and staffed to ensure calls are picked up within 30 seconds by remote operations support personnel who have situational awareness of the autonomous vehicle.

(C) That there is a two-way voice communication device that enables emergency response officials that are near the vehicle to communicate effectively with remote operations support personnel that have situational awareness.

(D) That an emergency response official is able to reach remote operations support personnel within 30 seconds after making a request through the two-way voice communication device.

(E) That there is remote operations support personnel with the ability to immobilize the autonomous vehicle, allow an emergency response official to move the vehicle, or cause the autonomous vehicle to move as directed by an emergency response official.

(F) A manufacturer whose autonomous vehicle is operating under a Drivered Testing Permit, form OL 315 (Rev. 9/2024), which is hereby incorporated by reference, or Driverless Testing Permit, form OL 315A (Rev. 10/2023), which is hereby incorporated by reference, must issue direction to its fleet to leave or avoid the identified area within two minutes of receiving an emergency geofencing message from an emergency response official. The avoidance area shall remain in place for the initial duration provided by the emergency response official or for an extended duration, when specified by the emergency response official.

(G) Within 30 business days of receiving a notice that an emergency response official wishes to begin issuing emergency geofencing messages, a manufacturer shall provide the emergency response official with all information necessary for the emergency response official to begin issuing and for the manufacturer to receive and respond to emergency geofencing messages.

(H) If the autonomous vehicle is equipped with an override system, it shall allow law enforcement and firefighters to immobilize or cause the vehicle to move as necessary to respond to an emergency.

(1) The manufacturer shall provide training to law enforcement and firefighters on the use of the override system. The training shall be reviewed on a regular basis and updated by the manufacturer as changes are needed.

(4) The autonomous vehicle has a visual indicator inside the cabin to indicate when the autonomous technology is engaged.

~~(3)~~(5) The subject autonomous vehicles comply with all required Federal Motor Vehicle Safety Standards (FMVSS), Title 49 Code of Federal Regulations, Part 571 and the California Vehicle Code, Division 12 (Equipment of Vehicles), except for manufacturers exempt from such requirements pursuant to 49 U.S.C. § 30112(b)(10). If exempt, the manufacturer shall describe how the vehicle materially deviates from the

FMVSS. ~~Alternatively, t~~The manufacturer shall provide the ~~evidence of an~~ exemption that has been ~~approved~~ issued by the National Highway Traffic Safety Administration or the Federal Motor Carrier Safety Administration for an autonomous heavy-duty commercial motor vehicle. The manufacturer shall provide a copy of the exemption to law enforcement upon request.

(6) The automated driving system is designed to detect and respond to roadway situations in compliance with all provisions of the California Vehicle Code, California Code of Regulations, and local ordinances applicable to the performance of the dynamic driving task in the vehicle's operational design domain, except when necessary to enhance the safety of the vehicle's occupants and/or others.

~~(c)~~(g) The manufacturer certifies that the autonomous vehicles are capable of operating without the presence of a driver ~~inside~~ physically located in the driver's seat of the vehicle and that the autonomous technology meets the description of a level 4 or level 5 automated driving system under SAE International's Taxonomy and Definitions for Terms Related to Driving Automation Systems for On-Road Motor Vehicles, standard J3016 (APR2021), as may be revised, which is hereby incorporated by reference.

~~(d)~~(h) The manufacturer informs the department of the intended operational design domains of the autonomous vehicle. The manufacturer shall identify all commonly-occurring or restricted conditions, including, but not limited to: inclement weather conditions and a description of how inclement weather affecting performance in a manner that requires achieving a minimal risk condition is identified, traffic, roadway characteristics, and other known domain constraints, and geo-fencing by location or roadway type, under which the vehicle is unable to operate reliably in autonomous mode, and state the mechanism for safely disengaging autonomous mode in the event the vehicle encounters conditions outside of its prescribed operational design domain.

The operational design domain shall identify how an autonomous heavy-duty commercial vehicle will operate when detours or alternate routing is required by emergency incidents, weather conditions, road construction, other road closures, or other conditions or circumstances.

~~(e)~~(i) The manufacturer shall develop a First Responder Interaction Plan, publish and maintain the plan, and provide automated driving system content to support first responder training development. The ~~manufacturer provides a copy of a law enforcement~~ First Responder ~~i~~Interaction ~~p~~Plan~~, which~~ shall include~~s~~

information that ~~the manufacturer will make available to the law enforcement agencies and other first responders in the vicinity of the operational design domains of the autonomous vehicles that will~~ instructs first responders ~~those agencies~~ on how to interact with the vehicle in emergency and traffic enforcement situations. ~~For the purposes of this section "first responder" means law enforcement, fire department, and emergency medical personnel.~~

(1) The ~~law enforcement~~ First Responder ~~i~~Interaction ~~p~~Plan shall include, but not be limited to the following:

(A) A description of the operational design domain, including, but not limited to geographical area description, road types, speed range, weather condition, time of day.

(B) A description of remote operations support – roles and responsibility, types of services and hours of operation.

~~(A)~~(C) ~~How~~ A telephone number dedicated for emergency response officials to directly contact and communicate with a remote ~~operator~~ operations support personnel who has situational awareness of the vehicle ~~who~~ and is available at all times that the vehicle is in operation~~, including providing a contact telephone number for the manufacturer;~~ and how to use the two-way voice communication link enabling communication between emergency response officials and the remote operations support personnel.

(D) The manufacturer's address.

(E) A description and pictures, diagrams, or other means to identify the autonomous vehicle.

(F) Instructions on how to safely approach the autonomous vehicle; how to determine the vehicle's mode (e.g., autonomous mode); and how to immobilize the autonomous vehicle when equipped with an override system.

(G) Instructions for accessing registration, permit, and proof of insurance information.

(H) Instructions on the vehicle's electrical power source and instructions for safely disconnecting or otherwise disabling electrical power on the vehicle.

(I) Instructions that enable first responders to act independently or in concert with remote operations support personnel to drive or otherwise safely remove the autonomous vehicle from the active portion of the roadway. Instructions shall include how first responders will move the autonomous vehicle from the roadway, if the vehicle is equipped with an override system.

(J) The means for determining the presence of passengers and how first responders may assist them with exiting the vehicle.

(K) Any special considerations for extricating passengers from the autonomous vehicle, including any appropriate or inappropriate cut points or cut zones in the vehicle body/structure.

(L) A description of any unique hazards or special considerations for extinguishing fires on or around the vehicle, if applicable.

(M) Instructions for coordinating with remote operations support personnel and safety considerations for first responders needing to tow the autonomous vehicle from the roadway.

~~(B) Where, in the vehicle, to obtain owner information, vehicle registration, and proof of insurance in the event of a collision or traffic violation involving the vehicle;~~

~~(C) How to safely remove the vehicle from the roadway;~~

~~(D)~~(N) How to recognize whether the vehicle is in autonomous mode, description of the visual indicator inside the cabin that indicates when the autonomous technology is engaged, description of automated driving system marker lamps as described in Vehicle Code 38750 (d) (4) (i), if applicable, and ~~if possible~~, how to safely ~~disengage~~ deactivate the autonomous mode; and validate that the autonomous mode has been deactivated.

~~(E) How to detect and ensure that the autonomous mode has actually been deactivated,~~

~~(F) How to safely interact with electric and hybrid vehicles, when applicable.~~

~~(G) A description of the operational design domain of the vehicle.~~

~~(H)~~(O) Any additional information the manufacturer deems necessary regarding hazardous conditions or public safety risks associated with the operation of the autonomous vehicle.

(2) In addition to the requirements of subsection (i) (1), notwithstanding a two-way voice communication link, the First Responder Interaction Plan for autonomous heavy-duty commercial motor vehicles shall include the following:

(A) Description of how the vehicle will maneuver to the designated location for a vehicle inspection without posing any unreasonable risk to traffic safety, other vehicles being inspected, or pedestrians.

(B) Certification that the automated driving system and remote driver and/or remote assistant is able to recognize, respond to, and comply with law enforcement and vehicle inspectors during a vehicle inspection.

(C) Description of how the automated driving system will recognize and respond to a vehicle inspection, including, but not limited to, directions by law enforcement and vehicle inspectors, traffic control devices (e.g., signal lamps, changeable message signs, etc.), pavement markings, and zones designated for vehicle inspection without posing any unreasonable risk to traffic safety, other vehicles being inspected, or pedestrians.

(D) Certification that each remote assistant and remote driver shall comply with an officer's commands during a vehicle inspection or traffic stop and will not cause the vehicle to move unless directed by a law enforcement officer.

(E) A dedicated emergency response telephone line available for emergency response officials during all hours when the autonomous vehicle is on a public road and is staffed to ensure calls are picked up within 30 seconds by remote operations support personnel who have situational awareness of the autonomous vehicle.

~~(2)~~(3) The ~~law enforcement~~ First Responder ~~i~~Interaction ~~p~~Plan shall be reviewed at least annually ~~on a regular basis by the manufacturer~~ and updated based on incidents involving interactions with first responders, including, but not limited to, traffic stops and emergency response scenes that occur on public roads, as changes are needed~~, but no less than an~~

~~annual basis~~. Such reviews shall be documented including by the issuance of a new version of the training program following the review.

~~(3)~~(4) Within 10 business days of the approval of the ~~testing~~ application, the manufacturer shall submit the First Responder ~~law enforcement~~ ~~i~~Interaction ~~p~~Plan to the California Highway Patrol by E-mail to, AVUnit@chp.ca.gov.

~~(4)~~(5) In an Original Driverless Testing Permit Application, form OL 318 (Rev. 2/2025, which is hereby incorporated by reference , or Driverless Testing Permit Operational Parameters Modification Application, form OL 318 (Rev. 2/2025), which is hereby incorporated by reference, the manufacturer shall provide a copy of the First Responder Interaction Plan that will be made available to law enforcement agencies and other first responder agencies located within the operational design domain. No later than 10 business days prior to commencing testing, ~~M~~manufacturers shall provide the department and all ~~other~~ law enforcement agencies and first responder~~s~~ agencies located in ~~the vicinity of~~ the operational design domain where testing of driverless autonomous vehicles is being conducted ~~and the department with~~ the internet web site address where the ~~law enforcement~~ First Responder ~~i~~nteraction ~~p~~Plan may be accessed.

(6) If the manufacturer intends to make any changes to their autonomous vehicle or testing operations that include a material change to how law enforcement and other first responders interact with the autonomous vehicle, the manufacturer shall submit a revised plan, prior to posting the plan, to the department and the California Highway Patrol prior to operation of autonomous vehicles on public roads pursuant to the changes.

~~(f) The manufacturer shall maintain a training program for its remote operators and certify that each remote operator has completed training sufficient to enable him or her to safely execute the duties of a remote operator and possesses the proper class of license for the type of test vehicle being operated. The manufacturer shall provide the department with a course outline and description of the remote operator training program and the date that each remote operator completed the program. The remote operator training program shall include, but not be limited to the following:~~

~~(1) Instruction on the automated driving system technology being tested, including how to respond to emergency situations and hazardous driving~~

~~scenarios that could be experienced by the vehicle or the vehicle's occupants.~~

~~(2) The instruction shall match the level and technical maturity of the automated driving system.~~

(j) When applying for an Original Driverless Testing Permit Application, form OL 318 (Rev. 2/2025), which is hereby incorporated by reference, or Driverless Testing Permit Operational Parameters Modification Application, form OL 318 (Rev. 2/2025), which is hereby incorporated by reference, the manufacturer shall provide:

(1) Certification that the automated driving system is designed to detect and respond to an active emergency vehicle, or first responder as necessary to comply with applicable provisions of the California Vehicle Code, including Sections 21806, 21809, and 21706.

(2) Regular training to first responders located within the operational design domain on how to safely interact with the autonomous vehicle in the event of a collision, traffic violation, or other traffic enforcement situation, and any incident whereby the vehicle is stopped in an active lane of traffic and unable to proceed. In an Original Driverless Testing Permit Application, form OL 318 (Rev. 2/2025), which is hereby incorporated by reference, Driverless Testing Permit Renewal Application, form OL 318 (Rev. 2/2025), which is hereby incorporated by reference, or Driverless Testing Permit Operational Parameters Modification Application, form OL 318 (Rev. 2/2025), which is hereby incorporated by reference, the manufacturer shall provide the course outline and description of the training program, and the dates and agencies where training has been provided.

(3) A training program for first responders, including training on how to access and use the override system referenced in the Vehicle Code section 38751(b)(3). The training program shall be reviewed at least annually and updated based on incidents involving interactions with first responders, including, but not limited to, traffic stops and emergency response scenes that occur on public roads, and as changes are needed. Such reviews shall be documented, including by the issuance of a new version of the training program following the review.

~~(g) Manufacturers that have publicly disclosed an assessment demonstrating their approaches to achieving safety shall provide the department with a copy of that assessment.~~

~~(h)~~(k) The manufacturer shall disclose to any passenger in the vehicle that is not an employee, contractor, or designee of the manufacturer what personal information, if any, that may be collected about the passenger and how it will be used.

(l) In an Original Driverless Testing Permit Application, form OL 318 (Rev. 2/2025), which is hereby incorporated by reference, or Driverless Testing Permit Operational Parameters Modification Application, form OL 318 (Rev. 2/2025), which is hereby incorporated by reference, the manufacturer shall describe how the automated driving system achieves a minimal risk condition, and how the vehicle uses a failure mitigation strategy to bring the vehicle to a controlled stop in the event of a system failure in which the automated driving system is unable to perform the dynamic driving task fallback and achieve a minimal risk condition.

~~(i)~~(m) The manufacturer shall submit the fee of three thousand six hundred dollars ($3,600~~.00~~) for the processing of the Original Driverless Testing Permit Application, form OL 318 (Rev. 2/2025), which is hereby incorporated by reference, ~~application~~ which will accommodate up to 10 driverless autonomous test vehicles. The manufacturer may ~~supplement the application with additional pages to~~ add more than 10 vehicles to the application by submitting the additional fee of fifty dollars ($50) for each set of 1 to 10 vehicles.

~~(j)~~(n) ~~Within ten (10) days of a~~Any change to the contact information or the name of the manufacturer provided to the department shall be accomplished by meeting the requirements specified in section 227.28 (b)~~on the Application for Manufacturer's Testing Permit -- Driverless Vehicles, a manufacturer shall notify the department in writing on the manufacturer's letterhead of the change, including changes in contact names, telephone numbers, or mailing address~~.

~~(k)~~(o) The manufacturer shall submit a ~~revised~~ Driverless Testing Permit Operational Parameters Modification Application, form OL 318 (Rev. 2/2025), which is hereby incorporated by reference, ~~as specified in subdivision (m) of this section~~ and submit the fee of seventy dollars ($70) ~~prior~~ to process implementing changes to:

(1) Make the vehicle capable of operation at a SAE International level that is different than ~~and/or in addition to~~ the level in the approved permit.

(2) Make the vehicle capable of operation on a roadway type that is different than ~~and/or in addition to~~ those in the approved permit.

(3) Increase the maximum speed of the vehicle by more than 15 miles per hour above that on the approved permit.

(4) Make the vehicle capable of operation in geographic areas different than ~~and/or in addition to~~ those in the approved permit.

(5) Modify the days of the week or hours of operation that were identified on the approved permit.

(6) Remove or modify any restricted conditions that were identified on the approved permit.

(7) Add a vehicle make and/or model different than the vehicle(s) identified on the approved permit.

(p) The manufacturer shall provide the following information by submitting a Driverless Testing Permit Operational Parameters Modification Application, form OL 318 (Rev. 2/2025), which is hereby incorporated by reference, and the fee of seventy dollars ($70) to process implementing changes to:

(1) The training program, as described in sections 227.38 (c) (5) and 227.40 (b) (5).

(2) Remote driver licensing information.

(3) Vehicle registration information (e.g., replacing license plates that are lost or stolen, converting registration from auto to commercial).

(4) Add any vehicles, or remote drivers that were not previously identified in the Original Driverless Testing Permit Application, form OL 318 (Rev. 2/2025), which is hereby incorporated by reference, and issued a permit by the department.

(5) Remove any vehicles from the Driverless Testing Permit, form OL 315A (Rev. 10/2023), which is hereby incorporated by reference.

(6) Remove any remote drivers from the Driverless Testing Permit, form OL 315A (Rev. 10/2023), which is hereby incorporated by reference, in compliance with section 227.38 (b) (7).

(7) Remove any remote assistants from the Driverless Testing Permit form OL 315A (Rev. 10/2023), which is hereby incorporated by reference, in compliance with section 227.40 (a) (7).

~~(l) Any changes or modifications to the Manufacturer's Testing Permit -- Driverless Vehicles required by the manufacturer during the term of the permit shall be accomplished by submitting a revised form OL 318 and submit the additional fee of seventy dollars ($70) for the processing of the modification. Manufacturers may also choose to submit the form electronically via the department's web portal.~~

NOTE: Authority cited: Sections 1651 and 38750, Vehicle Code. Reference: Sections 385, 2410, 16025 21367, 21461, and 38750, Vehicle Code; and Title 49 Code of Federal Regulations, Part 571.

§ ~~227.40~~ 227.44. Refusal of Autonomous Vehicle Testing Permit or Testing Permit Renewal.

(a) The department may refuse an application for an original, ~~or~~ a renewal, or a modification of a Drivered ~~Manufacturer's~~ Testing Permit, form OL 315, (Rev. 9/2024), which is hereby incorporated by reference, or a Driverless Testing Permit, form OL 315A (Rev. 10/2023), which is hereby incorporated by reference. ~~Manufacturer's Testing Permit -- Driverless Vehicles:~~

~~(a)~~(1) For a violation of Vehicle Code section 38750 or this Article.

~~(b)~~(2) For any act or omission of the manufacturer or one of its agents, employees, contractors, or designees which causes the department to find~~s~~ ~~makes the conduct of autonomous vehicle testing on public roads by the manufacturer an unreasonable risk to the public~~ the operation of the manufacturer's autonomous vehicle on public roads in California poses an unreasonable risk of accident, death, injury, or exacerbating injury.

~~(c)~~(3) Upon the department's determination that the operation of the manufacturer's autonomous vehicles on public roads in California poses an unreasonable risk of accident, death, injury, or exacerbating injury.

~~(c)~~(b) The department shall provide a written notice of a refusal to issue a Drivered Testing Permit, form OL 315 (Rev. 9/2024), ~~Manufacturer's Testing Permit,~~ or a Driverless Testing Permit, form OL 315A (Rev. 10/2023), which is hereby incorporated by reference, ~~Manufacturer's Testing Permit -- Driverless Vehicles~~ as specified in Government Code section 11504.

Note: Authority cited: Sections 1651 and 38750, Vehicle Code. Reference: Section 11504, Government Code; and Section 38750, Vehicle Code.

§ 227.46. Restriction of Autonomous Vehicles Testing Permit.

(a) The department may assess incremental enforcement measures, including operational restrictions, against a manufacturer where the department determines that the circumstances of the incident do not require a full suspension or revocation of a Testing Permit to address or mitigate the precipitating issue.

(b) Operational restrictions may include, but are not limited to, any or all of the following:

(1) Reduction in daily fleet in an area determined by the department or any portion in the operational design domain as determined by the department.

(2) Reduction in operational design domain (e.g., geographic area of operation, road type, weather, etc.).

(3) Reduction in hours of operation.

(4) Requirement that an autonomous vehicle test driver or support personnel be present in the vehicle under certain conditions.

(c) The department may issue a notice of immediate restriction on a Drivered Testing Permit, form OL 315 (Rev. 9/2024), which is hereby incorporated by reference, and/or Driverless Testing Permit, form OL 315A (Rev. 10/2023), which is hereby incorporated by reference, upon data, or evidence that the conduct of autonomous vehicle testing on public roads by the Manufacturer poses an imminent hazard. Such immediate restrictions may include, but are not limited to, any or all of the items listed in subdivision (b).

(d) The manufacturer may request lifting of the operational restriction by submitting data to the department describing how the deficiencies precipitating the restrictions have been addressed. Upon satisfaction that the deficiencies have been addressed, the department shall lift any associated operational restriction.

NOTE: Authority cited: Sections 1651 and 38750, Vehicle Code. Reference: Section 38750, Vehicle Code.

§ ~~227.42~~ 227.48. Suspension, ~~or~~ Revocation, or Restriction of Autonomous Vehicle Testing Permit.

(a) The department may suspend or revoke the Drivered ~~Manufacturer's~~ Testing Permit, form OL 315 (Rev. 9/2024), which is hereby incorporated by reference, or impose an operational restriction on the permit of any manufacturer for any of the following reasons:

(1) The manufacturer has failed to maintain financial responsibility in the amount required by Vehicle Code section 38750 and Sections 227.06, 227.08, or 227.12 of this Article.

(2) The manufacturer has violated Vehicle Code section 38750 or this Article.

(3) Any act or omission of the manufacturer or one of its agents, employees, contractors, or designees which causes the department to finds ~~makes the conduct of autonomous vehicle testing on public roads by the manufacturer an unreasonable risk to the public~~ operation of the manufacturer's autonomous vehicles on public roads in California poses an unreasonable risk of accident, death, injury, or exacerbating injury.

(4) The manufacturer failed to respond to a Preliminary Information Request or Request for Information issued by the department or failed to respond in the time or manner specified.

(5) The United States Department of Transportation number associated with an autonomous vehicle is placed on the list of Out-of-Service Orders by the Federal Motor Carrier Safety Administration for any of the reasons defined in Title 49, Code of Federal Regulations, Parts 385.13, 386.72, and 386.83.

(6) The Motor Carrier Permit associated with an autonomous vehicle that is classified as a commercial motor vehicle has been suspended by the Department of Motor Vehicles for any of the reasons defined in Division 14.85 of the California Vehicle Code.

(7) The Federal Transit Administration issues a directive, restriction, or prohibition related to the manufacturer's subject autonomous vehicles pursuant to Title 49, Code of Federal Regulations, Part 5329 (h).

(8) For any other reason giving the department good cause to find the conduct of autonomous vehicle testing on public roads by the manufacturer poses an unreasonable risk of accident, death, injury, or exacerbating injury.

(b) The department may suspend, ~~or~~ revoke, or impose an operational restriction on the Driverless ~~Manufacturer's~~ Testing Permit ~~– Driverless Vehicles~~, form OL 315A (Rev. 10/2023), which is hereby incorporated by reference, of any manufacturer for any of the following reasons:

(1) The manufacturer has failed to maintain financial responsibility in the amount required by Vehicle Code section 38570 and Sections 227.06, 227.08, or 227.12 of this Article.

(2) The manufacturer has violated Vehicle Code section 38750 or this Article.

(3) The manufacturer's driverless autonomous vehicles are operating outside of operational design domain specified in the application submitted pursuant to Section 227.~~38~~42 of this article.

(4) The manufacturer fails to make the disclosures required by subdivision (i) of Section 227.~~38~~42.

(5) Any act or omission of the manufacturer or one of its agents, employees, contractors, or designees which causes the department to find~~s makes the conduct of autonomous vehicle testing on public roads by the manufacturer an unreasonable risk to the public~~ operation of the manufacturer's autonomous vehicles on public roads in California poses an unreasonable risk of accident, death, injury, or exacerbating injury.

(6) The manufacturer failed to respond to a Preliminary Information Request or Request for Information issued by the department or failed to respond in the time or manner specified.

(7) The United States Department of Transportation number associated with an autonomous vehicle that is classified as a commercial motor vehicle is placed on the list of Out-of-Service Orders by the Federal Motor Carrier Safety Administration for any of the reasons defined in Title 49, Code of Federal Regulations, Parts 385.13, 386.72, and 386.83.

(8) The Motor Carrier Permit associated with an autonomous vehicle that is classified as a commercial motor vehicle has been suspended by the Department of the California Highway Patrol for any of the reasons defined in Division 14.85 of the California Vehicle Code.

(9) The Federal Transit Administration issues a directive, restriction, or prohibition related to the manufacturer's subject autonomous vehicles pursuant to Title 49, Code of Federal Regulations, Part 5329 (h).

(10) For any other reason giving the department good cause to find the conduct of autonomous vehicle testing on public roads by the manufacturer poses an unreasonable risk of accident, death, injury, or exacerbating injury.

(c) The department will provide a 15-day written notice ~~and follow the procedures specified in Government Code section 11505,~~ to the manufacturer and follow the procedures in Government Code section 11505 before suspending or revoking the Drivered ~~Manufacturer's~~ Testing Permit, form OL 315, or a ~~Manufacturer's Testing Permit – Driverless~~ ~~Vehicles~~ Testing Permit, form OL 315A (Rev. 10/2023), which is hereby incorporated by reference. However, the department shall immediately suspend, ~~or~~ revoke, or impose restrictions on the Drivered ~~Manufacturer's~~ Testing Permit, form OL 315 (Rev. 9/2024), which is hereby incorporated by reference, or a ~~Manufacturer's Testing Permit –~~ Driverless ~~Vehicles~~Testing Permit, form OL 315A (Rev. 10/2023), which is hereby incorporated by reference, if ~~a manufacturer is engaging in a practice in such a manner that immediate suspension is required for the safety of persons on a public road~~ the department determines that the conduct of testing pursuant to a Testing Permit on public roads by the manufacturer poses an imminent hazard.

NOTE: Authority cited: Sections 1651 and 38750, Vehicle Code. Reference: Section 11505, Government Code; and Section 38750, Vehicle Code.

§ ~~227.44.~~ 227.50. Demand for Hearing.

(a) Upon a refusal by the department to issue or renew a Drivered ~~Manufacturer's~~ Testing Permit, form OL 315 (Rev. 9/2024), which is hereby incorporated by reference ,or a Driverless ~~Manufacturer's~~ Testing Permit, form OL 315A (Rev. 10/2023), which is hereby incorporated by reference, ~~– Driverless Vehicles,~~ or upon the suspension, ~~or~~ revocation, or restriction of ~~either~~ any permit by the department, the manufacturer shall be entitled to demand in writing a hearing before the director or his or her representative within 60 days after the notice of refusal.

(b) The hearing shall be conducted pursuant to the provisions of Chapter 5 (commencing with Section 11500) of Part 1 of Division 3 of Title 2 of the Government Code.

NOTE: Authority cited: Sections 1651 and 38750, Vehicle Code. Reference: Section 11500, Government Code; and 38750, Vehicle Code.

§ ~~227.46~~ 227.52. Reinstatement of Testing Permit.

Upon the suspension, ~~or~~ revocation, or restriction of a Drivered ~~Manufacturer's~~ Testing Permit, form OL 315 (Rev. 9/2024), which is hereby incorporated by reference, or a Driverless~~Manufacturer's~~ Testing Permit, form OL 315A (Rev. 10/2023), which is hereby incorporated by reference, ~~-- Driverless Vehicles~~ by the department, the restriction shall remain in effect or, in the case of a suspension or revocation, the manufacturer shall cease all testing of autonomous vehicles on public roads until the ~~department has verified that the manufacturer has taken appropriate action to correct the deficiencies that caused the suspension or revocation and the department has lifted the suspension or revocation~~ manufacturer has described how the deficiencies precipitating the restriction, suspension, or revocation have been addressed.

NOTE: Authority cited: Sections 1651 and 38750, Vehicle Code. Reference: Section 38750, Vehicle Code.

§ ~~227.48~~ 227.54 Reporting Collisions.

A manufacturer operating under a Drivered Testing Permit, form OL 315 (Rev. 9/2024), or a Driverless Testing Permit, form OL 315A (Rev. 10/2023), which is hereby incorporated by reference, shall provide to the department the full National Highway Traffic Safety Administration Standing General Order 2021-01 (June 2025) crash report for crashes occurring within the State of California, including full content of the report, within the timeframes specified pursuant to the National Highway Traffic Safety Administration Standing General Order 2021-01 (June 2025), which is hereby incorporated by reference. If the Standing General Order 2021-01 is rescinded, then reporting requirements from the National Highway Traffic Safety Administration Standing General Order 2021-01 (June 2025) shall apply. The report shall be submitted using the electronic Collision Reporting Template (Rev. 2/2025), which is hereby incorporated by reference, provided by the department, which contains all the data reporting categories from the National Highway Traffic Safety Administration Standing General Order 2021-01 (June 2025). The manufacturer shall submit the report electronically in .csv format via the department's web page or portal.

~~A manufacturer whose autonomous vehicle while operating under a Manufacturer's Testing Permit or a Manufacturer's Testing Permit -- Driverless Vehicles is in any manner involved in a collision originating from the operation of the autonomous vehicle on a public road that resulted in the damage of property or in bodily injury or death shall report the collision to the department, within 10 days after the collision, on Report of Traffic Collision Involving an~~

~~Autonomous Vehicle, form OL 316 (Rev. 7/2020) which is hereby incorporated by reference. Manufacturers may also choose to submit the form electronically via the department's web portal. The manufacturer shall identify on the form, by name and current address, if available, all persons involved in the collision, and a full description of how the collision occurred. Nothing in this section relieves any person from compliance with any other statutory and/or regulatory collision reporting requirements.~~

(a) The department may require supplemental information relevant to assessing the safety performance of an autonomous vehicle from the manufacturer in connection with a collision report. This may include, but is not limited to, technical information, images, video and depictions about the status and operation of the vehicle's sensors recorded 30 seconds prior to the time of the collision, including, but not limited to, plots of the distance and the speed difference relative to the relevant targets in the collision path, the speed and acceleration of the subject vehicle and the acceleration, braking and steering commands that were issued by the automated driving system, and camera footage with target tracking representations.

(b) The manufacturer shall certify that the autonomous vehicle has a separate mechanism, in addition to, and separate from, any other mechanism required by law, to capture and store the autonomous technology sensor data for at least 30 seconds before a collision occurs between the autonomous vehicle and another vehicle, object, or natural person while the vehicle is operating in autonomous mode. The autonomous technology sensor data shall be captured and stored in a read-only format by the mechanism so that the data is retained until extracted from the mechanism by an external device capable of downloading and storing the data. The data shall be preserved for three years after the date of the collision.

(c) If no collision occurred during the reporting period, the manufacturer shall report such to the department.

NOTE: Authority cited: Sections 1651 and 38750, Vehicle Code. Reference: Section 38750, Vehicle Code.

~~§ 227.50. Reporting Disengagement of Autonomous Mode.~~

~~(a) Upon receipt of a Manufacturer's Testing Permit or a Manufacturer's Testing Permit -- Driverless Vehicles, a manufacturer shall commence retaining data related to the disengagement of the autonomous mode. For the purposes of this section,"disengagement" means a deactivation of the autonomous mode~~

~~when a failure of the autonomous technology is detected or when the safe operation of the vehicle requires that the autonomous vehicle test driver disengage the autonomous mode and take immediate manual control of the vehicle, or in the case of driverless vehicles, when the safety of the vehicle, the occupants of the vehicle, or the public requires that the autonomous technology be deactivated.~~

~~(b) Every manufacturer authorized under this article to test autonomous vehicles on public roads shall prepare and submit to the department an annual report summarizing the information compiled pursuant to subsection (a) by January 1st, of each year.~~

~~(1) The first report shall cover the period from the date of issuance of the Manufacturer's Testing Permit or a Manufacturer's Testing Permit -- Driverless Vehicles to November 30th of the following year. A manufacturer that holds both a Manufacturer's Testing Permit and a Manufacturer's Testing Permit -- Driverless Vehicles may submit a single report that makes clear which disengagements occurred under each type of testing permit.~~

~~(2) After the first report, subsequent annual reports shall cover the period December 1st of the current year to November 30th of the following year.~~

~~(3) The annual report shall summarize disengagements as follows:~~

~~(A) An indication of whether the test vehicle is capable of operating without a driver,~~

~~(B) The circumstances or testing conditions at the time of the disengagement including:~~

~~(i) The location: interstate, freeway, highway, rural road, street, or parking facility.~~

~~(ii) Whether the vehicle was operating with or without a driver at the time of the disengagement.~~

~~(iii) A description of the facts causing the disengagements, including: weather conditions, road surface or traffic conditions, construction, emergencies, accidents or collisions. The description should be written in plain language with enough detail that a non-technical person can understand the circumstances triggering the disengagement.~~

~~(iv) The party that initiated the disengagement (autonomous technology, autonomous vehicle test driver, remote operator, or passenger).~~

~~(4) The annual report shall include the total number of miles each autonomous vehicle tested in autonomous mode on public roads each month.~~

~~(c) The annual report shall be submitted to the department on the Annual Report of Autonomous Vehicle Disengagements, form OL 311R (Rev. 7/2020), which is hereby incorporated by reference. Manufacturers may also choose to submit the form electronically via the department's web portal.~~

~~NOTE: Authority cited: Sections 1651 and 38750, Vehicle Code. Reference: Section 38750, Vehicle Code.~~

§ 227.56. Reporting of Dynamic Driving Task Performance Relevant System Failures.

(a) Reporting required under this section shall become operative 120 days after the effective date of these regulations.

(b) For purposes of this section, a manufacturer shall report each instance in which an autonomous vehicle test driver took over performance of the dynamic driving task, or performed the dynamic driving task fallback, in response to a dynamic driving task performance relevant system failure. All dynamic driving task performance relevant system failures shall be reported, irrespective of the results of simulations that predict the likely outcomes of crashes or events. If no dynamic driving task performance relevant system failure occurred during the reporting period, the manufacturer shall report such to the department.

(c) Every manufacturer with an authorized Drivered Testing Permit, form OL 315 (Rev. 9/2024), which is hereby incorporated by reference, shall prepare and submit to the department a monthly report summarizing occurrences of dynamic driving task performance relevant system failures. Monthly reports shall be submitted by the first business day on or after the fifteenth day following the end of the month. The report shall be submitted using the electronic Dynamic Driving Task Performance Relevant System Failure Reporting Template, (Rev. 12/2025), which is hereby incorporated by reference, provided by the department. The manufacturer shall submit the report electronically in .csv format via the department's web page or portal.

(d) The report shall include the following:

(1) The date (YYYY-MM-DD) and time of the occurrence (in 24-hour format).

(2) The longitude and latitude coordinates of the location with four decimal places of precision.

(3) A description of the underlying causes using the following categories: type of software issue, type of hardware issue, actions of other road users, weather conditions, road surface or traffic conditions, construction, loss of communication, other emergencies, or collisions. The description should be written in plain language with enough detail that a non-technical person can understand the circumstances.

(e) The department may require the manufacturer to provide supplemental information relevant to assessing the behavior of an autonomous vehicle in connection with a dynamic driving task performance relevant system failure at any time. This may include, but is not limited to, technical information about the status and operation of the vehicle's sensors recorded up to 30 seconds prior to the time of the event, including, but not limited to, plots of the distance and the speed difference relative to the relevant targets in the vehicle's path, the speed and acceleration of the subject vehicle and the acceleration, braking and steering commands that were issued by the automated driving system, and camera footage with target tracking representations.

NOTE: Authority cited: Sections 1651 and 38750, Vehicle Code. Reference: Section 38750, Vehicle Code.

§ 227.58. Reporting Vehicle Immobilizations.

(a) Reporting required under this section shall become operative 120 days after the effective date of these regulations.

(b) Every manufacturer with an authorized Driverless Testing Permit, form OL 315A (Rev. 10/2023), which is hereby incorporated by reference, shall prepare and submit to the department a monthly report summarizing occurrences of vehicle immobilizations. Monthly reports shall be submitted by the first business day on or after the fifteenth day of the following month. The report shall be submitted using the electronic Vehicle Immobilization Reporting Template (Rev.12/2025) provided by the department, which is hereby incorporated by reference. The manufacturer shall submit the report electronically in .csv format via the department's web page or portal. If no vehicle immobilization occurred during the reporting period, the manufacturer shall report such to the department.

(c) The report shall include the following:

(1) The date (YYYY-MM-DD) and time (in 24-hour format) of the occurrence.

(2) The longitude and latitude coordinates of the location with four decimal places of precision.

(3) 17-character vehicle identification number.

(4) The speed limit of the roadway (in meters per second) where the vehicle immobilization occurred.

(5) Length of time (in minutes) the vehicle was stopped before it was driven by a human driver at the scene or a remote driver.

(6) Types of efforts to move a vehicle before manual intervention: automated driving system, remote assistance, or other.

(7) The actions taken to remove the vehicle from where it stopped in the travel lane: driven by the autonomous test vehicle driver; driven by the remote driver; moved by command issued by the remote assistant; driven by first responder; driven by manufacturer's designee dispatched to stop location; towed away; or other actions taken.

(8) Whether the autonomous vehicle was blocking an active emergency vehicle or first responder station (e.g., police or fire).

(9) Whether the autonomous vehicle is interfering with the scene of an active emergency.

(10) Whether the autonomous vehicle was stopped on rail tracks.

(11) Whether the immobilization involves multiple autonomous vehicles of the same manufacturer simultaneously experiencing an immobilization and blocking a travel lane within 50 meters of each other.

Note: Authority cited: Sections 1651 and 38750, Vehicle Code. Reference: Sections 672, 4150, 5902, 9255.1 and 38750, Vehicle Code.

§ 227.60 Reporting Vehicle Miles Traveled.

(a) Reporting required under this section shall become operative 120 days after the effective date of these regulations.

(b) Every manufacturer with an authorized Drivered Testing Permit, form OL 315 (Rev. 9/2024), which is hereby incorporated by reference, and/or Driverless

Testing Permit, form OL 315A (Rev. 10/2023), which is hereby incorporated by reference, shall prepare and submit to the department a monthly report summarizing total number of vehicle miles traveled while testing on public roads. The report shall specify the total number of miles each autonomous vehicle operated in autonomous mode on public roads, disaggregated by individual permit- Drivered Testing and Driverless Testing. If no testing in autonomous mode occurred on public roads during the reporting period, the manufacturer shall report such to the department.

(c) Monthly reports shall be submitted by the first business day on or after the fifteenth day of the following month. The report shall be submitted using the electronic Vehicle Miles Traveled Reporting Template (Rev. 12/2025), which is hereby incorporated by reference, provided by the department. The manufacturer shall submit the report electronically in .csv format via the department's web page or portal.

Note: Authority cited: Sections 1651 and 38750, Vehicle Code. Reference: Sections 11701, 11713 and 38750, Vehicle Code.

§ ~~227.52~~ 227.62. Test Vehicle Registration and Certificates of Title.

(a) A person shall not drive, move, or leave standing an autonomous test vehicle upon public roads unless the department has been notified of its use pursuant to Section 227.16 of this Article.

(b) In addition to the requirements set forth in Vehicle Code section 4150, an application for original registration of an autonomous test vehicle shall include:

(1) The certificate of ownership or certificate of origination from the vehicle manufacturer as defined in Vehicle Code section 672.

(2) A written description of the autonomous technology or features integrated into the vehicle and the functional capabilities made possible by this technology.

(c) In addition to the requirements set forth in Vehicle Code section 5902, an application for transfer of ownership of an autonomous test vehicle shall include a written description of the autonomous technology or features integrated into the vehicle.

(d) An autonomous test vehicle shall be identified as such on the face of the registration card and any certificate of ownership and the Autonomous Vehicle Testing (AVT) Program Test Vehicle Permit, form OL 313 (Rev. 9/2024), which is hereby incorporated by reference, ~~(Rev. 7/2020)~~, and the Driverless Testing

Permit, form OL 315A (Rev. 10/2023), which ~~is~~ are incorporated by reference, issued by the department pursuant to this Article.

NOTE: Authority cited: Sections 1651 and 38750, Vehicle Code. Reference: Section 43014, Health and Safety Code; and Sections 672, 4150, 5902, 9255.1 and 38750, Vehicle Code.

§ ~~227.54~~ 227.64. Transfers of Interest or Title for an Autonomous Test Vehicle.

No person shall offer for sale, sell, transfer, or dispose of an autonomous test vehicle, or major component parts for such a vehicle that has been used for testing purposes on public roads except as follows:

(a) To a manufacturer holding a valid autonomous vehicle Drivered ~~Manufacturer's~~ Testing Permit, form OL 315 (Rev. 9/2024), or a Driverless ~~Manufacturer's~~ Testing Permit ~~– Driverless Vehicles~~, form OL 315A (Rev. 10/2023), which is hereby incorporated by reference.

(b) The manufacturer disposing of the vehicle has obtained a Nonrepairable Vehicle Certificate ensuring that the vehicle is not retitled or resold, and ownership of the vehicle is transferred to an auto dismantler.

(c) Transfer of ownership to an educational or research institution or a museum where it would be appropriate for display or study.

(d) The manufacturer disposing of the vehicle has obtained a Nonrepairable Vehicle Certificate ensuring that the vehicle is not retitled or resold and the manufacturer has internally dismantled or disposed of its own vehicle and its major component parts.

(e) An authorized representative of the original manufacturer, as defined in Vehicle Code section 470, of a vehicle which has been used for testing submits to the department a Statement of Facts (REG 256) certifying that the vehicle has been returned to its original factory specifications and is not an autonomous vehicle as defined in this Article.

(f) When a manufacturer originally manufactures a vehicle and equips autonomous technology on the originally completed vehicle.

Note: Authority cited: Sections 1651 and 38750; Vehicle Code. Reference: Section 38750; Vehicle Code.

§ 227.66. Reporting Braking Events.

(a) Reporting required under this section shall become operative 120 days after the effective date of these regulations.

(b) The manufacturer shall report to the department any automated driving system braking event that produces speed decrease of 3 m/s or more from braking at a deceleration rate that exceeds 5 m/s/s for at least 0.5 seconds during the operation of an autonomous vehicle in autonomous mode on a public road with a posted speed limit of 35 miles per hour or higher. The report shall be submitted using the electronic Braking Event Reporting Template (Rev. 12/2025) provided by the department, which is hereby incorporated by reference. The manufacturer shall submit the report electronically in .csv format via the department's web page or portal. The report shall include the following:

(1) Date (YYYY-MM-DD) and time (in 24-hour format) of the braking event.

(2) 17-character vehicle identification number of autonomous test vehicle.

(3) Latitude and longitude coordinates, with four decimal places of precision, where braking event was initiated by the autonomous test vehicle.

(4) The type of object(s) that the automated driving system perceived to trigger the braking action (e.g., another vehicle, vulnerable road user, object on the road, roadside object, or no recognized object).

(5) The range, in meters, and the closing rate (i.e., speed difference), in meters per second, between the autonomous vehicle and the object at the time that triggered the braking event.

(6) Magnitude of speed reduction produced by the braking event in m/s.

(7) Highest braking rate, averaged over 0.5 second interval, during the braking event.

(c) The first report shall cover the period from 60 days after issuance of the Drivered Testing Permit, form OL 315 (Rev. 9/2024), which is hereby incorporated by reference, or a Driverless Testing Permit, form OL 315A (Rev. 10/2023), which is hereby incorporated by reference. A manufacturer that holds both a Drivered Testing Permit, form OL 315 (Rev. 9/2024), which is hereby incorporated by reference, and a Driverless Testing Permit, form OL 315A (Rev. 10/2023), which is hereby incorporated by reference, may submit a single report that makes clear which braking events occurred under each type of testing permit.

(1) After the first report, subsequent monthly reports shall be submitted by the thirtieth day of the following month.

(d) If no applicable braking event occurred during the reporting period, the manufacturer shall report such to the department.

NOTE: Authority cited: Sections 1651 and 38750, Vehicle Code. Reference: Section 38750, Vehicle Code.

§ 227.68. Notice of Autonomous Vehicle Noncompliance.

(a) Commencing July 1, 2026, a Notice of Autonomous Vehicle Noncompliance, form OL 325 (Rev. 12/2024), which is hereby incorporated by reference, may be issued by a peace officer that observes an alleged violation of the Vehicle Code, or an alleged violation of local traffic ordinance adopted pursuant to the Vehicle Code.

(b) The manufacturer shall provide the notice and/or information related to the incident to the department within 72 hours of receipt. The form shall be submitted using the electronic Notice of Autonomous Vehicle Noncompliance Reporting Template (Rev. 12/2025) provided by the department, which is hereby incorporated by reference. The form shall be submitted electronically to the department via the department's web page or portal.

(c) If conducting a traffic stop, a peace officer shall state their name and department and follow provisions of the Vehicle Code section 2806.5. The peace officer shall place the notice in the area where the registration and insurance documents are held as described in the First Responder Interaction Plan. The peace officer may also give the notice to the manufacturer's designee arriving at the scene of the incident.

(d) If a Notice of Autonomous Vehicle Noncompliance, form OL 325 (Rev. 12/2024), which is hereby incorporated by reference, is issued by a peace officer in circumstances other than a traffic stop, the peace officer shall provide a copy of the notice to the department and to the manufacturer at the address listed in the First Responder Interaction Plan, within 72 hours of the incident.

(e) A peace officer may indicate a need for priority review of the form if the officer observes that the autonomous vehicle exhibited driving behavior which reasonably led the officer to believe that the operation presented a clear or potential danger or risk of injury to others. If a priority review is marked on the form, the manufacturer shall submit the notice to the department within 24 hours of receipt.

(f) The peace officer shall identify on the Notice of Autonomous Vehicle Noncompliance, form OL 325 (Rev. 12/2024), which is hereby incorporated by reference, at minimum the following:

(1) Confirmation that the autonomous technology was engaged.

(2) The alleged violation of the Vehicle Code or violation of the local ordinance observed.

(3) The date (YYYY-MM-DD) the alleged violation occurred.

(4) The time the alleged violation occurred.

(5) The location the alleged violation occurred.

(6) The autonomous vehicle's license plate number.

(g) The department may require supplemental information from the manufacturer in connection with the issuance of a Notice of Autonomous Vehicle Noncompliance, form OL 325 (Rev. 12/2024), which is hereby incorporated by reference. This may include but is not limited to technical information about the status and operation of the vehicle's sensors, audio and video data recorded during the initiation of the stop through the conclusion of the peace officer interaction and receipt of the Notice of Autonomous Vehicle Noncompliance, form OL 325 (Rev. 12/2024), which is hereby incorporated by reference. This data may include but is not limited to plots of the distance and the speed difference relative to the relevant targets in the collision path, the speed and acceleration of the subject vehicle and the acceleration, braking and steering commands that were issued by the automated driving system, and camera footage with target tracking representations.

Note: Authority cited: Sections 1651 and 38750, Vehicle Code. Reference: Section 38750, Vehicle Code.

§ 227.70. Preliminary Information Notice.

(a) The manufacturer shall respond to a Preliminary Information Notice by making a good faith effort to respond to the request within a reasonable time that is informed by the nature of the issue underlying the Notice and the scope of the Notice. In circumstances where the department believes an imminent hazard may exist, the department may require the manufacturer to provide information reasonably available within a more limited timeframe. Incidents requiring a response within a more limited timeframe may include, but are not limited to, collisions involving a fatality or serious injury, or any other incidents

indicating an imminent. The department may issue a Preliminary Information Notice to the manufacturer to obtain specific information about any incident, including, but not limited to, the following:

(1) Violation of the Vehicle Code or the requirements of this Article.

(2) Operation in a manner that was not approved by the department under the authorized Drivered Testing Permit, form OL 315 (Rev. 9/2024), or Driverless Testing Permit, form OL 315A (Rev. 10/2023), which is hereby incorporated by reference.

(3) Operation outside of a known operational design domain constraint and/or upon operational design domain exit.

(4) Receipt of a Notice of Autonomous Vehicle Noncompliance, form OL 325.

(5) Operation of the manufacturer's autonomous vehicles on public roads in California posing an unreasonable risk of accident, death, injury, or exacerbating injury.

(6) A credible report to the department about an incident by local, state, or federal agencies or the public, and or on publicly accessible platforms.

(b) In response to a Preliminary Information Notice the manufacturer shall make a good faith effort to provide information requested by the department, which may include, but is not limited to, the following: identification of all incidents of the type described; full description of the incident(s), including all contributing factors that led to or caused the incident; visual evidence, such as photographs, videos, or other documentation; date and time of the incident; latitude and longitude coordinates; vehicle identification number; software version number of the automated driving system equipped to the vehicle; other vehicles and/or road users involved; measures taken to resolve the incident; and any remediation to mitigate risk of future occurrence of the incident.

Note: Authority cited: Sections 1651 and 38750, Vehicle Code. Reference: Section 38750, Vehicle Code.

§ 227.72. Request for Information.

(a) The manufacturer shall respond to a Request for Information by making a good faith effort to respond to the request within a reasonable time that is informed by the nature of the issue underlying the Request and the scope of the Request. The department may issue a Request for Information to the

manufacturer to obtain specific information on incidents involving operation of an autonomous vehicle on public roads that led to or caused, including without limitation, any of the following:

(1) Operation of the manufacturer's autonomous vehicles on public roads in California poses an unreasonable risk of accident, death, injury, or exacerbating injury.

(2) Violation of the Vehicle Code or the requirements of this Article.

(3) Operation in a manner that was not approved by the department under the authorized Drivered Testing Permit, form OL 315 (Rev. 9/2024), which is hereby incorporated by reference, or Driverless Testing Permit, form OL 315A (Rev. 10/2023), which is hereby incorporated by reference.

(4) For purposes of this section, the department may request information or records from the manufacturer regarding any incident involving a safety issue reported to the department, occurrence, or circumstance involving the standards above, including but not limited to collisions, operational design domain exits, emergency response interactions, traffic safety hazards, or other conduct reported by governmental agencies or the public.

(b) In response to a Request for Information the manufacturer shall provide all information requested by the department, which may include, but is not limited to, the following: identification of all incidents of the type described; full description of the incident(s), including all contributing factors that led to or caused the incident; visual evidence, such as photographs, videos, or other documentation; date and time of the incident; latitude and longitude coordinates; vehicle identification number; software version number of the automated driving system equipped to the vehicle; other vehicles and/or road users involved; measures taken to resolve the incident; and any remediation to mitigate risk of any future occurrence of the incident.

Note: Authority cited: Sections 1651 and 38750, Vehicle Code. Reference: Sections 11701, 11713 and 38750, Vehicle Code.

§ 227.74. Confidential Business Information.

(a) When submitting applications or other data requested by the Department pursuant to Articles 3.7 and 3.8, manufacturers shall provide a redacted version of the information to protect Confidential Business Information (CBI).

(b) A redacted version of the submitted information may be subject to disclosure under the California Public Records Act.

(c) The manufacturer must clearly identify the information considered Confidential Business Information (CBI) and provide justification for the redactions in accordance with applicable regulations.

(d) For purposes of this section, "Confidential Business Information" includes information exempt from disclosure under the California Public Records Act (Government Code section 7927.205), information protected as a trade secret under the Evidence Code (section 1060), and related provisions of the Civil Code (sections 3426.1–3426.11).

Note: Authority cited: Sections 1651 and 38750, Vehicle Code. Reference: Section 38750, Vehicle Code.