

## Express Terms

### 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 a registered owner or lessee, 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 design 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.

~~(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, where operation of autonomous vehicles is prohibited until the public agency that issued the emergency geofencing message authorizes travel to resume in that area.

~~(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.

(f)(o) "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.

(p) "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.

(q) "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.

(r) "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).

(s) "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.

(t) "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). The content of the form may be submitted electronically to the department via the department's web portal.

(g)(u) "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.

(v) "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).

(w) "Emergency" means a sudden, unexpected occurrence demanding immediate action to prevent or mitigate any risk to public safety and/or loss or damage to life, health, property, or essential public services.

(x) "Emergency geofencing message" is a message issued by emergency response officials to a manufacturer directing autonomous vehicles to leave or avoid an area in the event of an emergency. The message shall include the initial duration of the defined avoidance area, and provides the street address, intersection, longitude and latitude coordinates, or any other identifying information of the location.

(y) "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.

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

(aa) "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.

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

~~(h)~~(cc) "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. A manufacturer also includes a person who directly or indirectly through one or more intermediaries, controls, is controlled by, or is under the common direction and control with, the manufacturer.

~~(i)~~(dd) "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.

(ee) "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)~~(ff) "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.

~~(k)~~(gg) "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.

~~(h)~~(hh) "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 or passengers using the vehicle for transportation services.

(ii) "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)~~(jjj) "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.

(kk) "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 provide a command to achieve 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)~~(lll) "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; engages and monitors the autonomous vehicle; and is able to communicate with occupants in the vehicle through a communication link provide 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). 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.~~

(mm) "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.

(nn) "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.

(oo) "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. The safety case shall describe a manufacturer's safety lifecycle processes (e.g., development, deployment readiness, and continuous improvement) and include core safety information elements and safety performance indicators associated with core safety information elements. 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. Full scope includes safety policy and objectives, safety promotion, safety risk management and safety assurance. Description shall include:



(A) Description of the manufacturer's safety policy objectives.

(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 operators.

(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.

~~(e),(pp)~~ “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.

(qq) “Vehicle immobilization” means a stop on a public road in an active travel lane when the autonomous vehicle is not able to continue the dynamic driving task and must be retrieved or requires manual intervention.

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 227.3842, ~~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)~~, 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 vehicle 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), or a Driverless Testing Permit Application, form OL 318 (Rev. 2/2025). 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), 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 an Autonomous Vehicle Testing (AVT) Manufacturer's Testing Permit Drivered Testing Permit, form OL 315 (Rev. 9/2024) or a Manufacturer's Testing Permit—Driverless Vehicles Testing Permit, form OL 315A (Rev. 10/2023), 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 the shortest distance to freeways from hubs, motor carrier and shipper facilities, distribution centers, fueling and charging stations and end points. Manufacturers shall use arterial roadways wherever possible.

(1) Manufacturers shall provide the department the specific routes associated with the operational design domain and identify any local roads associated with accessing the primary routes within the operational design domain.

(2) Should circumstances arise which conflict with those limitations, the following provisions apply:

(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), or Manufacturer's Testing Permit~~ — Driverless Vehicles Testing Permit, form OL 315A (Rev. 10/2023), issued under this article shall be valid for a period of ~~two~~ one 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~~ one-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), or a Manufacturer's Testing Permit~~ — Driverless Vehicles Testing Permit, form OL 315A (Rev. 10/2023), 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 renewal application form to the department and payment of the three thousand six hundred dollars (\$3,600) ~~biennial for renewal fee of a~~ Drivered Testing Permit, form OL 315 (Rev. 9/2024), and renewal of a Driverless Testing Permit, form OL 315A (Rev. 10/2023).

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 ~~227.3842,~~ 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) 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 34500(g), 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) Commercial motor vehicles used to transport passengers under any circumstances including when there are no passengers in the vehicle.



(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), 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)~~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. A m~~Manufacturers submitting an original, modification, or renewal of the Drivered Testing Permit Application, form OL 311 (Rev. 2/2025), may also choose to submit the form electronically via the department's web portal.

(1) The manufacturer shall submit a fee of three thousand six hundred dollars (\$3,600) for the processing of the Drivered Testing Permit Application, form OL 311 (Rev. 2/2025) ~~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 Testing Permit 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), and issued a permit by the department, removing any vehicles from the Drivered Testing Permit, form OL 315 (Rev. 9/2024), and removing autonomous vehicle test drivers from the Drivered Testing Permit, form OL 315 (Rev. 9/2024), 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) and submitting the fee of seventy dollars (\$70) for the processing of the modification.

(d) A manufacturer submitting either an original or renewal of a Drivered Testing Permit Application, form OL 311 (Rev. 2/2025), or an original, renewal or modification, that is intended to implement changes as defined in section 227.42, subsections (n) (1) through (n) (8), of a Driverless Testing Permit Application, form OL 318 (Rev. 2/2025), shall provide a safety case and complete set of core safety information elements, including safety metrics as described in section 227.02, subsection (oo), for the subject autonomous vehicle for testing on public roads in the intended operational design domain. Within 10 business days of the adoption of any material modifications to the core safety information elements, the manufacturer shall provide the department with the modified version, including a summary of the modifications made.

(e) A manufacturer submitting a Drivered Testing Permit Application, form OL 311 (Rev. 2/2025), or a Driverless Testing Permit Application, form OL 318 (Rev. 2/2025), for an autonomous heavy-duty commercial motor vehicle shall at the time of application and throughout the duration of the permit adhere to all of the following:

(1) Compliance with required inspections pursuant to Vehicle Code sections 2800 and 2813. Autonomous heavy-duty commercial motor vehicles shall be subject to this paragraph notwithstanding the term "driver" when inspection stops are required.

(2) The Basic Inspection of Terminals program requirements contained in Vehicle Code section 34501.12 and periodic vehicle inspection requirements in Vehicle Code section 34505.5.

(3) Applicable safety requirements contained in Title 13, Division 2.

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), Autonomous Vehicle Tester Program (AVT) Application for Manufacturer's Testing Permit or the Driverless Testing Permit Application, form OL 318 (Rev. 2/2025)~~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 an ~~Autonomous Vehicle Testing (AVT) Program Manufacturer Permit, form OL 315 (Rev. 7/2020)~~ Drivered Testing Permit, form OL 315 (Rev. 9/2024) or an ~~Autonomous Vehicle Testing (AVT) Program Manufacturer Permit — Driverless Vehicles Testing Permit, form OL 315A, (Rev. 7/2020)~~ (Rev. 10/2023), 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 is 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 be 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 Driver ~~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.

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), 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, ~~and remote 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, ~~and remote driver~~, has ~~been maintained a valid licensed 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 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 an Autonomous Vehicle Remote Assistant / Remote Driver Permit, form OL 323 (Rev. 11/2024), 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 follow instructions issued by first responders, allow an emergency response official to move the autonomous vehicle, and 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 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 for the type of vehicle being operated.

(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) The manufacturer has identified each remote assistant to the department at the time of any original, renewal or modification driverless testing application, as applicable, providing the remote assistant's true full name and the driver's license number and jurisdiction of issuance of the license, and the remote assistant has been issued an Autonomous Vehicle Remote Assistant / Remote Driver Permit, form OL 323 (Rev. 11/2024), which is hereby incorporated by reference.

(b) 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 follow instructions issued by first responders, allow an emergency response official to move the autonomous vehicle, and 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.

(c) 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 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.

(d) 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 a Driverless Testing Permit Application, form OL 318 (Rev. 2/2025) ~~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 Driverless Testing Permit, form OL 315 (Rev. 9/2024), is a condition for maintenance of a Driverless Testing Permit, form OL 315A (Rev. 10/2023). A manufacturer submitting an original, modification, or renewal of the Driverless Testing Permit Application, form OL 318 (Rev. 2/2025), may also choose to submit the form electronically via the department's web portal. Notwithstanding the requirements of Sections 227.04(b), ~~227.2422~~, ~~227.2624~~(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):

(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 Driverless Testing Permit, form OL 315 (Rev. 9/2024), 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), 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), 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), 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). Up to 400,000 of these miles may occur in other jurisdictions contingent upon the manufacturer providing a summary of testing in a comparable operational design domain which includes crash reports from that jurisdiction, if available, and if not reported, instances where the autonomous vehicle was involved in a crash; disengagements and remediations; braking events and remediation. 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), 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 apply for a modification for an existing Driverless Testing Permit, form OL 315A (Rev. 10/2023):

(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), 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), 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 Driverless Testing Permit, form OL 315A (Rev. 10/2023). 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 (i.e., crash reports from that jurisdiction, if available, and if not reported, instances where the autonomous vehicle was involved in a crash; disengagements and remediations; events and remediation). 50,000 miles of such testing on the Driverless Testing Permit, form OL 315A (Rev. 10/2023), must occur within the intended operational design domain in California.

(c) In an original Driverless Testing or modification application, a manufacturer shall provide a report of all testing conducted with a Drivered Testing Permit, form OL 315 (Rev. 9/2024), on California public roads inclusive and reflective of the operational design domain for which a Driverless Testing Permit, form OL 315A (Rev. 10/2023), 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 disengagements 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 disengagement and measures taken to remediate the cause of each disengagement, where applicable.

(2) Any traffic collision occurring during the operation of an autonomous vehicle in autonomous mode on public roads resulting in damage of property in excess of one thousand dollars (\$1,000), bodily injury, or death, and a full description of all contributing factors that led to or caused each traffic collision and measures taken to remediate the cause of each traffic collision, where applicable.

(3) Any braking event, as defined in section 227.64, 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), and a full description of all contributing factors that led to or caused each braking event and measures taken to remediate the cause of each braking event, where applicable.

~~(a)~~(d) The 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)~~(e) The manufacturer certifies 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 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 support the vehicle in situations 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 plan should include, but not be limited to, response time, number of personnel, location of personnel, and 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, the manufacturer 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 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 personnel that have situational awareness.

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

(E) That remote operations personnel shall have 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 emergency response official.

(F) A manufacturer whose autonomous vehicle is operating under a Drivered Testing Permit, form OL 315 (Rev. 9/2024), or Driverless Testing Permit, form OL 315A (Rev. 10/2023), must direct its fleet to leave or avoid an identified area within 2 minutes of receiving an emergency geofencing message from an emergency response official. The avoidance area shall remain in place until it is cleared by the same agency that initiated the request.

(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) That the autonomous vehicle is equipped with an override system that allows law enforcement and firefighters to immobilize or cause the vehicle to move as necessary to address an emergency.

The manufacturer shall provide training to first responders 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 an indicator inside the cabin that is visible and interpretable to first responders and identifies when the vehicle is operating in autonomous mode, when the vehicle is operating in conventional mode, and when the vehicle will remain stopped.

~~(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, the manufacturer shall provide evidence of an exemption that has been approved 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.

~~(e)~~(f) 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)~~(g) The manufacturer informs the department of the intended operational design domains of the autonomous vehicle. The manufacturer shall identified 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 and 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)~~(h) The manufacturer provides a copy of a ~~law enforcement~~ First Responder interaction plan, which includes information that the manufacturer will make available to the law enforcement agencies and other first responders in the vicinity of located within the operational design domains of the autonomous vehicles that will instruct 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. The manufacturer shall develop an interaction plan, publish and maintain the plan, and provide automated driving system content to support first responder training development.

(1) The ~~law enforcement~~ First Responder interaction 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 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 personnel.

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

(E) Instructions on how to safely approach the autonomous vehicle; how to determine the vehicle's mode (e.g., autonomous mode); how to immobilize the autonomous vehicle.

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

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

(H) 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 they are unable to contact remote operations support personnel.

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

(J) 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.

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

(L) 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)~~(M) How to recognize whether the vehicle is in autonomous mode, Description of the visual indicator inside the cabin that identifies when the vehicle is operating in autonomous road, 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)~~(N) 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 (h) (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 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, verbal and non-verbal 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 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 personnel who have situational awareness of the autonomous vehicle.

~~(2)(3)~~ The law enforcement-First Responder interaction plan shall be reviewed 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, and as changes are needed, but no less than on an annual quarterly basis by the manufacturer.

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

~~(4)(5)~~ No later than 10 business days prior to commencing testing, A manufacturers shall provide the department and all other law enforcement agencies and first responders in the vicinity of the operational design domain where testing of driverless autonomous vehicles is being conducted and the department with a copy of the most current version First Responder Interaction Plan and the internet web site address where the law enforcement-First Responder interaction 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 all other law enforcement and first responders within the operational design domain 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.~~

(i) When applying for a Driverless Testing Permit, form OL 315A (Rev. 10/2023), the manufacturer shall provide:

(1) Certification that the automated driving system is able to positively recognize and respond to each type of emergency vehicle (e.g., law enforcement, fire department, emergency medical personnel) that travels in the operational design domain(s) in which the autonomous vehicle is authorized to operate.

(2) A description of how the automated driving system, at any given moment, is able to positively recognize and respond to an active emergency vehicle, e.g., via line-of-sight only, audio only, or both line-of-sight and audio.

(3) A description of distances and positions at which the automated driving system is able to positively recognize and respond to an active emergency vehicle's location, including information about how the system accounts for the emergency vehicle's driving path or direction, speed, and emergency lights and sirens.

(4) A description of how testing in simulation, on private roads, and/or on public roads is used to validate that the automated driving system is able to recognize and respond to all probable interactions involving an active emergency vehicle or where first responders are directing traffic in the operational design domain(s) in which the autonomous vehicle is authorized to operate. This shall include: testing methods, testing models, testing results, and number of tests conducted prior to application to conduct driverless testing.

(5) A description of how the automated driving system is designed to respond to an approaching emergency vehicle, as necessary to comply with applicable provisions of the Vehicle Code.

(6) A description of how the autonomous vehicle is able to avoid obstructing an active emergency vehicle and the zones where emergency vehicles enter, exit, or are parked, as necessary to comply with applicable provisions of the Vehicle Code.

(7) A description of how the automated driving system and remote assistant and/or remote driver recognizes, responds to, and complies with

the lawful directions of individuals authorized to direct traffic, as necessary to comply with applicable provisions of the Vehicle Code.

(8) A description of how the manufacturer's automated driving system is capable of complying with first responders directing traffic in accordance with applicable provisions of the Vehicle Code, including when such direction is provided (i) at, or near, an active emergency response scene, (ii) on any roadway where operating a motor vehicle is prohibited by first responders, or (iii) near an emergency vehicle being operated under the provisions of the Vehicle Code section 21055.

(9) 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. The manufacturer shall provide the course outline and description of the training program, and the dates and agencies where training has been provided.

(10) A training program for first responders with training on how to access and use a system that allows first responders to completely stop the vehicle in its current travel path or move the vehicle as necessary to address an emergency, and update training. The training program shall be reviewed 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, but no less than on a quarterly basis by the manufacturer.

~~(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)~~(i) 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.

(k) 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.



~~(j)(l)~~ The manufacturer shall submit the fee of three thousand six hundred dollars (\$3,600.00) for the processing of the Driverless Testing Permit Application, form OL 318 (Rev. 2/2025) 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)(m)~~ ~~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)(n)~~ The manufacturer shall submit a revised Driverless Testing Permit Application, form OL 318 (Rev. 2/2025), 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) Change how law enforcement and other first responders interact with the autonomous vehicle.
- (8) Add vehicle make and/or model different than the vehicle(s) identified on the approved permit.
- (9) The training program, as described in sections 227.38 (c) (5) and 227.40 (c) (5).

(10) Remote driver or remote assistant licensing information.

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

(12) Add any vehicles, remote drivers, or remote assistants that were not identified in the original Driverless Testing Permit Application, form OL 318 (Rev. 2/2025), and issued a permit by the department

(13) Remove any vehicles from the Driverless Testing Permit, form OL 315A (Rev. 10/2023).

(14) Remove any remote drivers from the Driverless Testing Permit, form OL 315A (Rev. 10/2023), in compliance with section 227.38 (b) (7).

(15) Remove any remote assistants from the Driverless Testing Permit form OL 315A (Rev. 10/2023), in compliance with section 227.40 (b) (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.~~

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.**

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

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

(b) For any act or omission of the manufacturer or one of its agents, employees, contractors, or designees which causes the department to find ~~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) 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.

~~(e)~~(d) The department shall provide a written notice of a refusal to issue a Drived Testing Permit, form OL 315 (Rev. 9/2024), ~~Manufacturer's Testing Permit~~, or a Driverless Testing Permit, form OL 315A (Rev. 10/2023), ~~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 Drived Testing Permit, form OL 315 (Rev. 9/2024), and/or Driverless Testing Permit, form OL 315A (Rev. 10/2023), 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 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.

(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), 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 or affiliate 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) 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 the operation of autonomous vehicles on public roads in California 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), 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 227.3842 of this article.

(4) The manufacturer fails to make the disclosures required by subdivision (i) of Section 227.3842.

(5) Any act or omission of the manufacturer or one of its agents, employees, contractors, or designees which causes the department to find ~~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 or affiliate 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) 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 (Rev. 9/2024), or a Manufacturer's Testing Permit—Driverless Vehicles Testing Permit, form OL 315A (Rev. 10/2023). However, the department shall immediately suspend, ~~or revoke,~~ or impose restrictions on the Drivered Manufacturer's Testing Permit, form OL 315 (rev. 9/2024), or a Manufacturer's Testing Permit—Driverless Vehicles Testing Permit, form OL 315A (10/2023), 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), or a Driverless Manufacturer's Testing Permit, form OL 315A (Rev. 10/2023), ~~—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) or a Driverless Manufacturer's Testing Permit, form OL 315A (Rev. 10/2023), ~~— 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 submitted data to the department describing 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), shall provide to the department the full National Highway Traffic Safety Administration Standing General Order crash report, including full content of the report, within the timeframes specified pursuant to the National Highway Traffic Safety Administration Standing General Order (MAY2023), which is hereby incorporated by reference. If the Standing General Order is rescinded, then subdivision (a) shall apply.

(a) A manufacturer whose autonomous vehicle while operating under a Drivered Manufacturer's Testing Permit or a Driverless Manufacturer's Testing Permit — Driverless Vehicles is in any manner involved in a collision originating from during the operation of the autonomous vehicle on a public road that resulted in the damage of to property shall report to the department within 10 calendar days. If the collision resulted or in bodily injury or death shall report the collision to the department, within 10 days 24 hours 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.~~

(b) The department may require supplemental information from the manufacturer at any time in connection with the 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 host vehicle and the acceleration, braking and steering commands that were issued by the automated driving system, and camera footage with target tracking representations.

(c) 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.

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

### **§ 227.50-227.56. Reporting Disengagement of Autonomous Mode.**

(a) Upon receipt of a ~~Drivered Manufacturer's~~ Testing Permit or a ~~Manufacturer's Testing Permit~~ -- ~~Driverless Vehicles Testing Permit~~, a manufacturer shall commence retaining data related to the disengagement of the autonomous mode. All disengagements shall be reported, irrespective of the results of simulations that predict the likelihood of crashes, except any expected disengagements associated with a planned test or reaching the geographic boundary of the operational design domain. If no disengagement occurred during the reporting period, the manufacturer shall report such to the department.

(1) For the purposes of an autonomous vehicle operating under a Drivered Testing Permit, form OL 315 (Rev. 9/2024), this



section, “disengagement” includes any of the following occurrences, which shall be classified by the following categories:

(A) ~~means a~~ A deactivation of the autonomous mode when an anomalous behavior failure of the automated driving system autonomous technology is detected by the automated driving system 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.; or,

(B) A deactivation of the autonomous mode when the autonomous vehicle test driver determines it to be appropriate; or

(C) A deactivation of the autonomous mode to avoid operating outside the operational design domain of the automated driving system; or

(D) The automated driving system performs a dynamic driving task fallback maneuver to achieve a minimal risk condition; or

(2) For the purposes of an autonomous vehicle operating under a Driverless Testing Permit, form OL 315A (Rev. 10/2023), “disengagement” includes any of the following occurrences, which shall be classified by the following:

(A) Occurrences:

(i) A first responder drove an autonomous vehicle manually, except for training purposes;

(ii) Where the autonomous vehicle is blocking an active emergency vehicle or first responder station (e.g., police or fire);

(iii) Where an autonomous vehicle is stopped on heavy rail tracks;

(iv) Where the autonomous vehicle is interfering with the scene of an active emergency; and/or

(v) That involves multiple autonomous vehicles of the same manufacturer obstructing traffic on the same roadway.

(B) Categories:

- (i) The automated driving system deactivates autonomous mode because of an anomalous behavior or a failure that prevents the vehicle from successfully completing its trip; or
- (ii) The automated driving system performs a dynamic driving task fallback maneuver to achieve a minimal risk condition; or
- (iii) The remote driver requests that the automated driving system achieves a minimal risk condition; or
- (iv) The remote driver responds to a request from the automated driving system to intervene in the performance of the dynamic driving task; or
- (v) The remote driver or remote assistant intervenes to perform the dynamic driving task or to achieve a minimal risk condition, even if the automated driving system did not request this intervention.

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

(1) The first report shall be submitted on the fifteenth day of the month following ~~cover the period from the date of issuance of the Drivered Manufacturer's Testing Permit, form OL 315 (Rev. 9/2024) or a Manufacturer's Testing Permit—Driverless Vehicles Testing Permit, form OL 315A (Rev 10/2023), to November 30th of the following year and cover all testing conducted on public roads up to that time.~~ A manufacturer that holds both a Manufacturer's Testing Permit and a Manufacturer's Testing Permit—Driverless Vehicles more than one testing permit may submit a single report that makes clear which disengagements occurred under each type of testing permit.

(2) After the first report, subsequent ~~annual~~ monthly reports shall be submitted by the ~~cover the period December 1st of the current year to November 30th~~ first business day on or after the fifteenth day of the following year month.

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

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

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

(i) The date and time of the occurrence.

~~(i)~~ (ii) The longitude and latitude coordinates of the location: interstate, freeway, highway, rural road, street, or parking facility.

~~(ii)~~ (iii) Whether the manufacturer was operating the vehicle was operating with a Drivered Testing Permit, form OL 315 (Rev. 9/2024) or a Driverless Testing Permit, form OL 315A (Rev. 10/2023) 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: automated driving system ~~(autonomous technology, autonomous vehicle test driver, remote operator assistant, remote driver, or passenger), law enforcement or other.~~

(v) The vehicle's distance (in feet) from the nearest intersection, if applicable.

(B) The vehicle identification number.

(C) The software version number engaged at the time of the disengagement.

(D) The primary cause of the disengagement, which shall be classified by one of the following categories:

(i) Software discrepancy

Localization/mapping discrepancy

Perception/data fusion discrepancy

Motion planning discrepancy

Prediction discrepancy

Other (lower-level) software fault

(ii) Lower-level technical fault

Hardware fault (specify which component or subsystem)

Vehicle motion control fault

Other low-level technical fault

(iii) Operational design domain constraint violation

Geographical boundary

Weather condition

Lighting condition

Traffic condition

Emergency / anomalous incident condition

Obstruction in vehicle's path

Other operational design domain condition

(iv) Action(s) by:

Other vehicle or driver

Pedestrian

Bicyclist

First responder

Micro-mobility device user

Animal

Other road user

(E) The secondary cause of the disengagement, if any, which shall be classified by one of the following categories described in subsection (D):

(F) The circumstances or actions taken after the disengagement was initiated, including:

(i) The post-disengagement action: the autonomous vehicle test driver immediately took over dynamic driving task to continue the vehicle's trip, the remote driver immediately took over the dynamic driving task to continue the vehicle's trip, or the vehicle stopped.

(ii) If the vehicle stopped, the report shall include the following:

(aa) The date and time of the occurrence.

(bb) The longitude and latitude coordinates of the location.

(cc) The vehicle's distance (in feet) from the nearest intersection, if applicable.

(dd) Length of time (in minutes) the vehicle was stopped before it was cleared from the travel lane and removed from the roadway.

(iii) The actions taken to remove the vehicle from where it stopped in the roadway: 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.

~~(4)~~(iv) The ~~annual~~ monthly report shall include the total number of miles each autonomous vehicle tested in autonomous mode on public roads each month, subdivided by drivered and driverless testing.

(c) The ~~annual~~ monthly report shall be submitted to the department on the Annual Monthly 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.

(d) The department may require the manufacturer to provide supplemental information in connection with a disengagement 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 host 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) Every manufacturer with an authorized Driverless Testing Permit, form OL 315A (Rev. 10/2023), 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.

(b) The report shall include the following:

(1) The date and time of the occurrence.

(2) The longitude and latitude coordinates of the location.

(3) License plate or vehicle identification number

(4) Length of time (in minutes) the vehicle was stopped before it was cleared from the travel lane and removed from the roadway.

(5) 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.

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

**§ ~~227.52~~ 227.60. 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. 7/2020)~~ (Rev. 9/2024) and the Driverless Testing Permit, form OL 315A (Rev. 9/2023), 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.

**§ 227.54-227.62. 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 Driverless ~~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).

(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.

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

**§ 227.64. Reporting Braking Events.**

(a) The manufacturer shall report to the department any automated driving system braking event equal to or exceeding 0.5g where a drop in speed of 7 miles per hour occurs in one (1) second during the operation of an autonomous vehicle in autonomous mode on public roads. The report shall include the following:

(1) Date and time of the braking event.

(2) Vehicle identification number of autonomous test vehicle.

(3) Latitude and longitude coordinates where braking event was initiated by the autonomous test vehicle.

(4) The target object that triggered the braking action (e.g., another vehicle, vulnerable road user, object on the road, roadside object, or no recognized object).

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

(6) Magnitude and duration of the braking event.

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

(1) The first report shall cover the period from 30 days after issuance of the Drivered Testing Permit, form OL 315 (Rev. 9/2024), or a Driverless Testing Permit, form OL 315A (Rev. 10/2023). A manufacturer that holds both a Drivered Testing Permit, form OL 315 (Rev. 9/2024), and a Driverless Testing Permit, form OL 315A (Rev. 10/2023), may submit a single report that makes clear which braking events occurred under each type of testing permit.

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

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



**§ 227.66. 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 this 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 incident to the department within 72 hours of issuance, by a peace officer. The form may be submitted electronically to the department via the department's web portal or to AVIncident@dmv.ca.gov.

(c) 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 issuance.

(d) The peace officer shall identify on the Notice of Autonomous Vehicle Noncompliance, form OL 325 (Rev. 12/2024), 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 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.

(e) 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). 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). 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 host vehicle and the acceleration, braking and steering commands that

were issued by the automated driving system, and camera footage with target tracking representations.

(f) Pursuant to sections 227.44, 227.46, and 227.48 of this Article, the department may choose restriction, revocation, suspension, or denial of any license or any approval under a Drivered Testing Permit, form OL 315 (Rev. 9/2024), or Driverless Testing Permit, form OL 315A (Rev. 10/2023), the manufacturer may request lifting of the operational restriction by submitting data to the department describing the operational improvements which remediate any deficiencies identified by the investigation.

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

### **§ 227.68. Preliminary Information Notice.**

(a) The manufacturer shall respond to a Preliminary Information Notice in a manner that provides information solicited by the department within 72 hours, however the manufacturer may request, in writing, additional time depending on the scope or nature of the request. The department may require the manufacturer provide information 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 hazard. The department may issue a Preliminary Information Notice to the manufacturer to obtain specific information about any incident, including, but is 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).

(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 (Rev. 12/2024).

(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.

### **§ 227.70. Request for Information.**

(a) The manufacturer shall respond to a Request for Information by responding to the request within 10 business days, however the manufacturer may request in writing for additional time to respond when the request involves a complex issue or a request that is large in scope. 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 Deployment Permit.

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

(5) Occurrence of a dynamic driving task performance-relevant system failure(s).

(6) Traffic collision as defined in section 227.54.

(7) Posing any risk to traffic safety or other road users, traffic delay, or impediment to first responders.

(8) Actions that do not comply with verbal and/or non-verbal directions from first responders.

(9) Obstruction of an active emergency vehicle and the zones where emergency vehicles enter, exit, or are parked.

(10) Operation at, near the vicinity, or in the direction of travel of an active emergency response scene, avoidance area, or any emergency roadway scenario whereby operating a motor vehicle is prohibited by first responders, and an emergency vehicle being operated under the provisions of the Vehicle Code section 21055.

(11) Receipt of a Notice of Autonomous Vehicle Noncompliance, form OL 325 (Rev. 12/2024).

(12) Any other incident reported to the department by local, state, or federal agencies or the public, and or on publicly accessible platforms.

(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.

#### **§ 227.72 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.

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