Order to Adopt

Title 13, Division 1, Chapter 1

Article 3.8. Deployment of Autonomous Vehicles

§ 228.02. Definitions.

As used in this article the following definitions apply:

(a) "Autonomous technology data recorder" is a mechanism, in addition to, and separate from, any other mechanism required by law, installed in an autonomous vehicle to record technical information about the status and operation of the vehicle's autonomous technology sensors for 30 seconds prior to a collision.

(b) "Deployment" means the operation of an autonomous vehicle on public roads outside of a testing program authorized by the department pursuant to Article 3.7 of this Chapter.

(c) "Deployment Permit" means a Permit to Deploy Autonomous Vehicles on Public Streets, form OL 321A (Rev. 12/2024), which is hereby incorporated by reference that is issued by the department to a manufacturer.

(d) "Deployment Permit Application" means an Application for a Permit to Deploy Autonomous Vehicles on Public Streets, form OL 321 (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 Deployment Permit. The content of the form may be submitted electronically to the department via the department's web page or portal.

(e)" Deployment Permit Operational Parameters Amendment Application "form OL 321 (Rev. 2/2025), which is hereby incorporated by reference, means a Deployment Permit Application submitted by a manufacturer that possesses a valid Deployment Permit at the time the application is submitted to make changes listed in section 228.12 (b). The content of the form may be submitted electronically to the department via the department's web page or portal.

(f) "Fallback-ready user" means the natural person physically located in the driver's seat of a vehicle, who is able to operate the vehicle and is receptive to a request to intervene, and receptive to evident dynamic driving task performance-relevant system failures in the vehicle notifying the natural person to perform the dynamic driving task fallback when necessary.

(g) "Original Deployment Permit Application" means an Application for a Permit to Deploy Autonomous Vehicles on Public Streets, form OL 321 (Rev. 2/2025),

which is hereby incorporated by reference, that is submitted by a manufacturer that does not possess a valid Deployment Permit at the time of application and must be approved by the department in order to issue a Deployment Permit. The content of the form may be submitted electronically to the department via the department's web page or portal.

(h) The definitions specified in Section 227.02 of Article 3.7 shall also apply to this article.

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

§ 228.04. Financial Requirements for a Permit to Deploy Autonomous Vehicles on Public Roads.

(a) A manufacturer of autonomous vehicles, either those that require a driver inside the vehicle or those that do not require a driver inside the vehicle, may satisfy the requirements of Vehicle Code section 38750(c)(3) by presenting evidence of one of the following:

(1) 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 collisions or accidents caused by the autonomous vehicles produced by the manufacturer in the form of an instrument of insurance, a surety bond, or proof of self-insurance.

(2) A surety bond, that meets the requirements of Section 227.10 of Article 3.7, and is conditioned that the surety shall be liable if the manufacturer, as principal, fails to pay any final judgment for damages for personal injury, death or property damage arising from a collision involving an autonomous vehicle deployed by the manufacturer pursuant to Vehicle Code section 38750(c), and shall be submitted to the department with the Autonomous Vehicles Manufacturer Deployment Program Surety Bond, form OL 317A (New 6/2014), which is hereby incorporated by reference.

(3) An insurance policy that meets the requirements of Section 227.08 of Article 3.7.

(4) A proof of self-insurance that meets the requirements of, and be governed by, Section 227.12 of Article 3.7 and is submitted to the department on an Autonomous Vehicle Manufacturer's Deployment

Program Application for Certificate of Self-Insurance, form OL 319A (New 2/2017), which is hereby incorporated by reference.

(b) Any cancellation of the insurance permission to satisfy the requirements of Vehicle Code section 38750, subsection (c)(3), shall be subject to the hearing requirements provided in these regulations for the suspension or revocation of permits or authorizations.

(c) The manufacturer's evidence of financial responsibility as required by Vehicle Code section 38750, subsection (c)(3), is in addition to that required by Vehicle Code section 38750, subsection (b)(3), and does not absolve any vehicle owner of the requirement to be able to show, at all times, evidence of financial responsibility in the amounts specified in Vehicle Code section 16056.

NOTE: Authority cited: Sections 1651 and 38750, Vehicle Code. Reference: Section 995.010, Code of Civil Procedure; Sections 11110-11113, Government Code; and Sections 16056 and 38750, Vehicle Code.

§ 228.06. Requirements, Qualifications, and Training for Remote Drivers and Remote Assistants.

A manufacturer that provides remote operations support to an autonomous vehicle authorized for deployment shall adhere to the requirements set forth in Sections 227.38 and 227.40 of Article 3.7.

NOTE: Authority cited: Sections 1651 and 38750, Vehicle Code. Reference: Sections 322, 11701 and 38750, Vehicle Code; and Title 49 Code of Federal Regulations, Part 571.

§ 228.08. Application for a Permit for Post-Testing Deployment of Autonomous Vehicles on Public Roads.

(a) Except for testing as provided in Sections 227.28 and 227.42 of Article 3.7, an autonomous vehicle shall not be deployed on any public road in California until the manufacturer has submitted and the department has approved a~~n~~ Deployment Permit Application, form OL 321 (Rev. 2/2025), which is hereby incorporated by reference. A manufacturer~~s~~ submitting an Original Deployment Permit Application, form OL 321 (Rev. 2/2025), or Deployment Permit Operational Parameters Amendment Application, form OL 321 (Rev. 2/2025), which is hereby incorporated by reference, may also choose to submit the form via the department's web page or portal.

(1) In order to submit an Original Deployment Permit Application, form OL 321 (Rev. 2/2025) which is hereby incorporated by reference, the manufacturer shall provide the department with:

(A) Certification that the manufacturer, except a manufacturer of autonomous heavy-duty commercial motor vehicles, as described in (B), has tested a minimum of 50,000 autonomous miles on public roads throughout the intended operational design domain with a valid Drivered Testing Permit, form OL 315 (Rev. 9/2024), which is hereby incorporated by reference, for vehicles that require a driver physically located in the driver's seat of the vehicle or with a valid Driverless Testing Permit, form OL 315A (Rev. 10/2023), which is hereby incorporated by reference, for vehicles that are capable of operating without the presence of a driver physically located in the driver's seat of the vehicle. A manufacturer operating a low-speed autonomous vehicle shall test a minimum of 10,000 autonomous miles on public roads throughout the intended operational design domain with a valid Drivered Testing Permit, form OL 315 (Rev. 9/2024), which is hereby incorporated by reference, for vehicles that require a driver physically located in the driver's seat of the vehicle or with a valid Driverless Testing Permit, form OL 315A (Rev. 10/2023), which is hereby incorporated by reference, for vehicles that are capable of operating without the presence of a driver physically located in the driver's seat of the vehicle.

(i) The results of an assessment, of operational data from testing with a valid Testing Permit, form OL 315 (Rev. 9/2024), which is hereby incorporated by reference, and/or form OL 315A (Rev. 10/2023) which is hereby incorporated by reference, described in subsection (D).

(aa) The department may request additional information from the manufacturer that it deems necessary to assess the safety of operating an autonomous vehicle on public roads.

(B) A manufacturer of autonomous heavy-duty commercial motor vehicles must have tested a minimum of 500,000 autonomous miles on public roads throughout the intended operational design domain and in all conditions under which the subject automated driving system is intended to operate with a valid Drivered Testing Permit, form OL 315 (Rev. 9/2024), which is hereby incorporated by reference, and a minimum of 500,000 autonomous miles with a valid Driverless Testing Permit, form OL 315A (Rev. 10/2023) which is hereby incorporated by reference, . Up to 400,000 of these miles on either the Drivered Testing Permit, form OL 315 (Rev. 9/2024)

which is hereby incorporated by reference, or Driverless Testing Permit, form OL 315A (Rev. 10/2023) which is hereby incorporated by reference, may occur in other jurisdictions contingent upon the manufacturer providing all the reports that California requires to cover that out-of-state testing as described in subsection (E). 100,000 miles must occur within the intended operational design domain in California. 100,000 miles on the Driverless Testing Permit, form OL 315A (Rev. 10/2023), which is hereby incorporated by reference, must occur within the intended operational design domain in California.

(i) The results of an assessment, of operational data from testing with a valid Testing Permit, form OL 315 (Rev. 9/2024)and/or form OL 315A (Rev. 10/2023), which is hereby incorporated by reference, described in subsection (D).

(ii) The department may request additional information from the manufacturer that it deems necessary to assess the safety of operating an autonomous heavy-duty commercial motor vehicle on public roads.

(C) A comprehensive description of a safety case, supported by a description of the evidence demonstrating: functional safety, safety of the intended function, artificial intelligence safety, cybersecurity, and operational safety. Each of these areas must be addressed in accordance with relevant standards and best practices. The comprehensive description of a safety case must also include core safety information elements documentation, as outlined in section 227.02 (xx) of Article 3.7. If any element of the core safety information is not applicable, the manufacturer shall provide a justification explaining its exclusion. The department's review of the safety case may involve consultation with third-party experts.

(D) An assessment of operational data pursuant to Subsection (A)(i) and (B)(i) shall include:

(i) For Automated Driving System features that meet the definition of an SAE International's J3016 Level 3:

(aa) The total number of vehicle test miles driven on public roads in autonomous mode in the operational design domain described in the Original Deployment Permit Application, form OL 321 (Rev. 2/2025), which is

hereby incorporated by reference. The report shall be submitted using the electronic Vehicle Miles Traveled Template (Rev. 12/2025), provided by the department, which is hereby incorporated by reference. The manufacturer shall submit the report electronically in .csv format via the department's web page or portal.

(bb) Copies of collision reports submitted to the National Highway Traffic Safety Administration in the year prior to the date of application. The report shall be submitted using the electronic Collision Reporting Template (Rev. 12/2025) provided by the department, which is hereby incorporated by reference. The manufacturer shall submit the report electronically in .csv format via the department's web page or portal.

(cc) Any braking event, as defined in section 227.66 of Article 3.7, subsection (a), occurring during the operation of an autonomous vehicle in autonomous mode on public roads within the 12 months preceding to the Original Deployment Permit Application, form OL 321 (Rev. 2/2025) which is hereby incorporated by reference. The report shall be submitted using the electronic Braking Event Reporting Template (Rev. 12/2025), provided by the department, which is hereby incorporated by reference. The manufacturer shall submit the report electronically in .csv format via the department's web page or portal.

(dd) A report of any dynamic driving task performance relevant system failure as defined in section 227.56 of Article 3.7 within the 12 months preceding the Deployment Permit Application, form OL 321 (Rev. 2/2025), which is hereby incorporated by reference. The report shall include all the reporting elements identified in section 227.56 (c) of Article 3.7. The report shall be submitted using the electronic Dynamic Driving Task Performance Relevant System Failure Reporting Template (Rev. 12/2025) provided by the department, which is hereby incorporated by reference. The manufacturer shall submit the report electronically in .csv format via the department's web page or portal.

(ii) For Automated Driving System features that meet the definition of an SAE J3106 Level 4 or 5:

(aa) The total number of vehicle test miles driven on public roads in autonomous mode in the operational design domain described in the Original Deployment Permit Application, form OL 321 (Rev. 2/2025) which is hereby incorporated by reference. The report shall be submitted using the electronic Vehicle Miles Traveled Template (Rev. 2/2025), provided by the department, which is hereby incorporated by reference. The manufacturer shall submit the report electronically in .csv format via the department's web page or portal.

(bb) Copies of collision reports submitted to the National Highway Traffic Safety Administration in the year prior to the date of application. The report shall be submitted using the electronic Collision Reporting Template (Rev. 2/2025), which is hereby incorporated by reference, provided by the department. The manufacturer shall submit the report electronically in .csv format via the department's web page or portal.

(cc) Any braking event, as defined in section 227.66 of Article 3.7, subsection (a), occurring during the operation of an autonomous vehicle in autonomous mode on public roads within the 12 months preceding the Original Deployment Permit Application, form OL 321 (Rev. 2/2025), which is hereby incorporated by reference. The report shall be submitted using the electronic Braking Event Reporting Template provided by the department. The manufacturer shall submit the report electronically in .csv format via the department's web page or portal.

(dd) A summary report of any vehicle immobilization occurring within the 12 months preceding the Original Deployment Permit Application, form OL 321 (Rev. 2/2025), which is hereby incorporated by reference. The report shall include all the reporting elements identified in section 227.58 (b) of Article 3.7. The report shall be submitted using the electronic Vehicle

Immobilization Reporting Template (Rev. 12/2025) provided by the department, which is hereby incorporated by reference. The manufacturer shall submit the report electronically in .csv format via the department's web page or portal.

(E) A manufacturer of autonomous heavy-duty commercial motor vehicles may provide a summary of out-of-state testing conducted over the year prior to application in autonomous mode on public roads in an operational design domain that is the same or comparable to that which is intended for operation with a Deployment Permit, form OL 321A (Rev. 12/2024), which is hereby incorporated by reference. This shall include:

(i) The total number of miles each autonomous vehicle operated in autonomous mode on public roads prior to the date of application. The total number of dynamic driving task performance relevant system failures that occurred in autonomous mode in the year prior to the date of application, if any, and a full description of all contributing factors that led to or caused each dynamic driving task performance relevant system failure. The reports shall be submitted using the electronic Vehicle Miles Traveled Template (Rev. 2/2025), which is hereby incorporated by reference, and Dynamic Driving Task Performance Relevant System Failure Reporting Templates (Rev. 2/2025), which is hereby incorporated by reference, provided by the department. The manufacturer shall submit the reports electronically in .csv format via the department's web page or portal.

(ii) Copies of collision reports submitted to the National Highway Traffic Safety Administration in the year prior to the date of application. The report shall be submitted using the electronic Collision Reporting Template (Rev. 2/2025) which is hereby incorporated by reference, provided by the department. The manufacturer shall submit the report electronically in .csv format via the department's web page or portal.

(iii) Any braking event, as defined in section 227.66, subsection (a), occurring during the operation of an

autonomous vehicle in autonomous mode on public roads over the year prior to application in the operational design domain that is the same or comparable to that which is intended for operation with a Deployment Permit, form OL 321A (Rev. 12/2024) which is hereby incorporated by reference. The report shall be submitted using the electronic Braking Event Reporting Template (Rev. 2/2025) which is hereby incorporated by reference, provided by the department. The manufacturer shall submit the report electronically in .csv format via the department's web page or portal.

(2) In order to submit a Deployment Permit Operational Parameters Amendment Application, form OL 321 (Rev. 2/2025) which is hereby incorporated by reference, as described in section 228.12 (b), the manufacturer shall provide:

(A) A comprehensive description of an updated safety case, supported by data collected by on-road testing or virtual simulation under a Drivered Testing Permit, form OL 315 (Rev. 9/2024) which is hereby incorporated by reference, and/or Driverless Testing Permit, form OL 315A (Rev. 10/2023) which is hereby incorporated by reference, that demonstrates: functional safety, safety of the intended function, artificial intelligence safety, cybersecurity, and operational safety. Each of these areas must be addressed in accordance with relevant standards and best practices. The comprehensive description of a safety case must also include core safety information elements documentation, as outlined in section 227.02 (xx) of Article 3.7. If any element of the core safety information is not applicable, the manufacturer shall provide a justification explaining its exclusion. The department's review of the safety case may involve consultation with third-party experts.

(B) The department may request additional information from the manufacturer that it deems necessary to assess the safety of operating an autonomous vehicle on public roads.

(C) A manufacturer, except a manufacturer of autonomous heavy-duty commercial motor vehicles as described in subsection (a)(1)(B), must test a minimum of 25,000 autonomous miles with either a valid Drivered Testing Permit, form OL 315 (Rev. 9/2024) which is hereby incorporated by reference, or Driverless Testing

Permit, form OL 315A (Rev. 10/2023) which is hereby incorporated by reference, on public roads throughout the intended operational design domain. A manufacturer operating a low-speed autonomous vehicle shall test a minimum of 10,000 autonomous miles with either a valid Drivered Testing Permit, form OL 315 (Rev. 9/2024) which is hereby incorporated by reference, or Driverless Testing Permit, form OL 315A (Rev. 10/2023) which is hereby incorporated by reference, on public roads throughout the intended operational design domain.

(D) A manufacturer of an autonomous heavy-duty commercial motor vehicle must test a minimum of 250,000 autonomous miles either under an existing valid Drivered Testing Permit, form OL 315 (Rev. 9/2024) which is hereby incorporated by reference, or Driverless Testing Permit, form OL 315A (Rev. 10/2023) which is hereby incorporated by reference, on public roads throughout the intended operational design domain. Up to 200,000 of these miles on either the Drivered Testing Permit, form OL 315 (Rev. 9/2024) which is hereby incorporated by reference, or Driverless Testing Permit, form OL 315A (Rev. 10/2023) which is hereby incorporated by reference, may occur in other jurisdictions contingent upon the manufacturer providing all the reports that California requires to cover that out-of-state testing as described in subsection (a)(1)(E) 50,000 miles on the Driverless Testing Permit, form OL 315A (Rev. 10/2023) which is hereby incorporated by reference, must occur within the intended operational design domain in California.

(3) In order to submit an Original Deployment Permit Application, form OL 321 (Rev. 2/2025) which is hereby incorporated by reference, or Deployment Permit Operational Parameters Amendment Application, form OL 321 (Rev. 2/2025) which is hereby incorporated by reference, t~~T~~he manufacturer shall identify the operational design domain in which the subject autonomous vehicles are designed to operate and certify that the vehicles are designed to be incapable of operating in the autonomous mode outside of the identified operational design domain.

(A) Manufacturers of autonomous heavy-duty commercial motor vehicles are limited to conducting deployment within an operational design domain that allows operation only on specified routes legal for the size, weight and loading of the vehicle or vehicle combination. Operation on local roads with a posted speed limit of 25 miles per hour or less is prohibited unless those roads fall

within a direct route between hubs, motor carrier and shipper facilities, distribution centers, fueling and charging stations, maintenance facilities or terminals as defined in California Vehicle Code 34515, or other non-residential facilities, and the roads utilized permit travel by that vehicle weight class. This regulation shall not apply to autonomous heavy-duty commercial motor vehicles used to transport passengers as described in 227.26 (a)(6)(B).

Should circumstances arise which conflict with those limitations, the following provisions shall apply:

(i) 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.

(ii) 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.

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

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

(4) In an Original Deployment Permit Application, form OL 321 (Rev. 2/2025) which is hereby incorporated by reference, or Deployment Permit Operational Parameters Amendment Application, form OL 321 (Rev. 2/2025) which is hereby incorporated by reference, the manufacturer shall identify any commonly-occurring or restricted conditions, including

but not limited to: inclement weather conditions, 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 road type, under which the vehicles are either designed to be incapable of operating or unable to operate reliably in the autonomous mode or state the mechanism for safely disengaging out of autonomous mode in the event of experiencing conditions outside of its operational design domain.

(5) In an Original Deployment Permit Application, form OL 321 (Rev. 2/2025) which is hereby incorporated by reference, or Deployment Permit Operational Parameters Amendment Application, form OL 321 (Rev. 2/2025) which is hereby incorporated by reference, the manufacturer shall certify that the local authorities, as defined in Vehicle Code section 385, within the jurisdiction where the subject autonomous vehicles will be deployed have been provided a written notification, a copy of which must be submitted to the department, that contains all of the following:

(A) The operational design domain of the autonomous vehicles.

(B) A list of all public roads in the jurisdiction where the vehicles will operate.

(C) The date deployment will begin.

(D) The days and times of operation on public roads.

(E) Contact information, including name, telephone number, address, and email for the authorized representative for the manufacturer conducting deployment.

(6) In an Original Deployment Permit Application or Deployment Permit Operational Parameters Amendment Application, form OL 321 (Rev. 2/2025) which is hereby incorporated by reference, the manufacturer shall describe how the automated driving system is designed to react when the vehicle is outside of its operational design domain or encounters the commonly-occurring or restricted conditions disclosed on the Original Deployment Permit Application, form OL 321 (Rev. 2/2025) which is hereby incorporated by reference. Such reactions can include, but are not limited to, measures such as the driver, or remote driver, performing the dynamic driving task fallback, with or without the automated driving system issuing a request to intervene, the remote driver and/or remote assistant requests that the automated driving system achieves a minimal

risk condition, the automated driving system automatically performs a dynamic driving task fallback maneuver to achieve a minimal risk condition, the vehicle moves a safe distance from the active travel lanes, or activating systems that will allow the vehicle to continue operation until it has reached a safe location where it can come to a controlled stop.

(7) The manufacturer shall submit the fee of three thousand two hundred and seventy-five dollars ($3,275) for the processing of the Original Deployment Permit Application, form OL 321 (Rev. 2/2025) which is hereby incorporated by reference, or Deployment Permit Operational Parameters Amendment Application, form OL 321 (Rev. 2/2025) which is hereby incorporated by reference.

(8) The manufacturer must provide on the Original Deployment Permit Application, form OL 321 (Rev. 2/2025) which is hereby incorporated by reference, the number of the Manufacturer's License issued by the department pursuant to Vehicle Code section 11701.

(9) In an Original Deployment Permit Application, form OL 321 (Rev. 2/2025) which is hereby incorporated by reference, or Deployment Permit Operational Parameters Amendment Application, form OL 321 (Rev. 2/2025) which is hereby incorporated by reference, the manufacturer shall certify that the autonomous vehicles are equipped with an autonomous technology data recorder to capture~~s~~ and store~~s~~ autonomous technology sensor data for all vehicle functions that are controlled by the automated driving system at least 30 seconds before a collision with another vehicle, person, or object 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.

(10) In an Original Deployment Permit Application, form OL 321 (Rev. 2/2025) which is hereby incorporated by reference, or Deployment Permit Operational Parameters Amendment Application, form OL 321 (Rev. 2/2025) which is hereby incorporated by reference, the manufacturer shall certify that the subject autonomous vehicles comply with all applicable Federal Motor Vehicle Safety Standards, Title 49 Code of Federal Regulations, Part 571, and the California Vehicle Code, Division 12 (Equipment of Vehicles), or the manufacturer shall provide evidence of an exemption that has been approved by the National Highway Traffic

Safety Administration. The manufacturer shall provide to the department evidence of any Federal Motor Carrier Safety Administration exemption and to law enforcement upon request.

(11) In an Original Deployment Permit Application, form OL 321 (Rev. 2/2025) which is hereby incorporated by reference, or Deployment Permit Operational Parameters Amendment Application, form OL 321 (Rev. 2/2025) which is hereby incorporated by reference, the manufacturer shall certify that the automated driving system meets Federal Motor Vehicle Safety Standards, if any, for the vehicles' model year, and that the autonomous technology does not make inoperative any Federal Motor Vehicle Safety Standards, Title 49 Code of Federal Regulations, Part 571, and the California Vehicle Code, Division 12 (Equipment of Vehicles).

(12) In an Original Deployment Permit Application, form OL 321 (Rev. 2/2025) which is hereby incorporated by reference, or Deployment Permit Operational Parameters Amendment Application, form OL 321 (Rev. 2/2025) which is hereby incorporated by reference, the manufacturer shall certify that the automated driving system is designed to detect and respond to roadway situations in compliance with all provisions of the California Vehicle Code 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 other road users.

(A) The manufacturer shall certify that it will make updates to the automated driving system as necessary to improve safety, and by the effective date of any changes in the California Vehicle Code and local ordinance applicable to the operation of motor vehicles to ensure that the autonomous vehicle is in compliance with any changes made to the California Vehicle Code and local regulation applicable to the performance of the dynamic driving task in the vehicle's operational design domain.

(B) The manufacturer shall also certify that it has established processes for making updates to location and mapping information utilized or referenced by the automated driving system for the safe operation of the vehicle in the operational design domain on a continual basis consistent with changes to the physical environment and physical infrastructure captured by the maps and vehicle's sensors. Such processes and procedures shall include consideration of reliable public information, when appropriate.

(C) The manufacturer shall notify the end user of the autonomous vehicle of the availability of the updates pursuant to (A) and (B) above and provide instructions on how to access the updates.

(D) The manufacturer shall not allow the automated driving system of an autonomous vehicle owned or leased by a person other than the manufacturer to operate on public roads until available updates pursuant to (A) and (B) above, that have been fully validated and released by the manufacturer, are implemented for such vehicle.

(13) The manufacturer shall certify that the autonomous vehicles meet appropriate and applicable current industry standards to help defend against, detect, and respond to cyber-attacks, unauthorized intrusions, or false vehicle control commands.

(14) In a Deployment Permit Operational Parameters Amendment Application, form OL 321 (Rev. 2/2025) which is hereby incorporated by reference, a manufacturer shall submit a comprehensive description of the safety case, supported by a description of the evidence demonstrating: functional safety, safety of the intended function, artificial intelligence safety, cybersecurity, and operational safety. Each of these areas must be addressed in accordance with relevant standards and best practices. The comprehensive description of a safety case must also include core safety information elements documentation, as outlined in section 227.02 (xx). If any element of the core safety information is not applicable, the manufacturer shall provide a justification explaining its exclusion. The department's review of the safety case may involve consultation with third-party experts.

(15) A certification that the manufacturer has conducted test and validation methods and is satisfied, based on the results of the tests and validations, that the vehicles are safe for deployment on public roads in California.

(b) In addition to the requirements specified in subsection (a), for vehicles that do not require a driver, in an Original Deployment Permit Application, form OL 321 (Rev. 2/2025) which is hereby incorporated by reference, or Deployment Permit Operational Parameters Amendment Application, form OL 321 (Rev. 2/2025) which is hereby incorporated by reference, the manufacturer shall also certify that the vehicle complies with all of the following:

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

(A) That the manufacturer 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 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.

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

(D) A description of how the manufacturer will address situations where the autonomous vehicle achieves a minimal risk condition including, but not limited to, when the automated driving system executes an automated fallback to a minimal risk condition, a minimal risk condition is triggered by a remote driver or remote assistant, the communication network fails or is degraded, and vehicle hardware or software failures. The description should include, but not be limited to, roles and responsibilities of personnel.

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

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

(2) The ability to display or transfer vehicle owner or operator information as specified in Vehicle Code section 16025 in the event that the vehicle is involved in a crash, collision, or accident or if there is a need to provide that information to a law enforcement officer for any reason.

(3) Any vehicle that is not equipped with manual controls for completing the dynamic driving task, such as a steering wheel, brake pedal, and accelerator pedal, complies with all applicable Federal Motor Vehicle Safety Standards, or the manufacturer provides 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 evidence of an exemption that was approved by the National Highway Traffic Safety Administration or the Federal Motor Carrier Safety Administration to law enforcement upon request.

(c) The manufacturer shall submit with the Original Deployment Permit Application, form OL 321 (Rev. 2/2025) which is hereby incorporated by reference, or Deployment Permit Operational Parameters Amendment Application, form OL 321 (Rev. 2/2025) which is hereby incorporated by reference, all of the following:

(1) For autonomous vehicles to be sold or leased to end users, an end user education plan, which covers the operational design domain of the automated driving system and also includes the following:

(A) Certification that the manufacturer shall provide the end user with an agreement which the end user must accept prior to initial operation of the automated driving system feature(s). This agreement shall certify that the end user is fully aware of and understands any and all capabilities and restrictions of the automated driving system feature(s) and shall explain the educational materials that will be provided to end users of the autonomous vehicles produced by the manufacturer.

(B) Notification to the end user on how to access updates to the automated driving system and a description of the process by which updates will occur (e.g., over-the-air communication, manual process requiring an end-user to physically bring the vehicle to a service center for updates, etc.).

(C) A copy of the sections of the vehicle owner's manual, or an equivalent vehicle operator instruction guide, or pamphlet that provides information on the following:

(i) The mechanism to engage and disengage the automated driving system feature(s) showing that the mechanism is easily accessible to the vehicle operator.

(ii) The visual indicator inside the vehicle's cabin to indicate when the automated driving system feature(s) is engaged.

(iii) Describe to the end user how the automated driving system will function if there is damage to any of the sensors which may degrade the automated driving system performance, and indicate to the end user how to remediate.

(iv) The end user and manufacturer's responsibilities with respect to the operation of the autonomous vehicles.

(D) An explanation how end users will receive education after purchasing a previously-owned vehicle.

(E) An explanation that the use of autonomous vehicles, is subject to the manufacturer of the automated driving system possessing and maintaining a valid and applicable Deployment Permit, form OL 321A (Rev. 12/2024) which is hereby incorporated by reference.

(F) An explanation of the first responder interaction plan described in Article 3.7, section 227.42 (i).

(2) For autonomous vehicles to be sold or leased to end users, certification that the manufacturer shall provide an internet web site address where copies of the end user education plan may be accessed shall be provided at no cost to first responder agencies located within of the operational design domain of the vehicles, and the manufacturer shall provide the internet website to the California Highway Patrol at the E-mail address provided in section 227.42 (i)(4) of Article 3.7.

(3) A description of how a vehicle equipped with an automated driving system that meets the definition of an autonomous vehicle is able to safely come to a controlled stop when there is an automated driving system failure that would endanger the safety of the vehicle's occupants or other road users, including but not limited to, all of the following:

(A) To the extent practicable, moving the vehicle a safe distance from the active travel lanes.

(B) Activation of systems that allow the vehicle to continue operation until the vehicle has reached a location where it can come to a controlled stop.

(4) A copy of a First Responder interaction plan that meets all of the requirements of Section 227.42 (i) of Article 3.7.

(5) Certification that for a SAE International's J3016 level 3 automated driving system that requires the presence of a fallback-ready user in the driver's seat, the following information shall be made available via a publicly accessible website and provided to first responders located within the intended operational design domain where deployment is being conducted.

(A) A description of the display(s) or indicator(s) that indicates when the vehicle is operating in autonomous mode.

(B) A description of the operational design domain of the vehicle.

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

(6) A copy of the written disclosure required by Section 228.24.

(7) A certification that the subject autonomous vehicle satisfies each requirement of Vehicle Code section 38750, subsection (c)(1).

(8) A certification that the manufacturer has complied with its responsibility to register with the National Highway Traffic Safety Administration and that it is aware of its responsibilities to comply with federal motor vehicle safety requirements.

(9) Certification that the manufacturer operating an autonomous heavy-duty commercial motor vehicle shall comply with applicable hours-of-service regulations set forth in Title 49, Code of Federal Regulations, Part 395 for the type of vehicle being driven or operated.

(10) Commencing July 1, 2026, for autonomous vehicles capable of operating at SAE International's J3016 Level 4 or 5 with a gross vehicle weight rating 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 staffed to ensure calls are picked up within 30 seconds by remote operations support personnel who have situational awareness of the autonomous vehicle.

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

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

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

(E) A manufacturer whose autonomous vehicle operating under a Deployment Permit, form OL 321A (Rev. 12/2024) which is hereby incorporated by reference, must issue direction to its fleet to leave or avoid an identified area within two minutes of receiving an emergency geofencing message from an emergency response official. The avoidance area shall remain in place for the initial duration provided by the emergency response official or for an extended duration, when specified by the emergency response official.

(F) 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.

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

(H) The manufacturer shall provide training to law enforcement and firefighters on the use of the override system. The training shall be

reviewed on a regular basis and updated by the manufacturer as changes are needed.

(d) The requirements identified in subsections (a), (b), and (c), of this section shall be submitted as follows:

(1) Documents shall be submitted on business letterhead and clearly identify the party completing the plan or report.

(2) Each plan or report shall contain at least a two-page summary including the contents and conclusion of the plan or report. Charts, graphs or other visual or audio materials may be included as attachments to the summary.

(3) Each page shall be sequentially numbered and contain the name of the party completing the plan or report and shall name or identify the subject autonomous vehicles covered by the technology in the plan or report.

(4) Each plan or report shall be signed and dated under penalty of perjury, by the party completing the plan or report, certifying the correctness of its contents.

NOTE: Authority cited: Sections 1651 and 38750, Vehicle Code. Reference: Sections 322, 385, 11701, 16025, 2410, 21367, 21461, 35400, 35401, 35401.5, 35559, 35650, 35655, 38750, 35753, and 38750, Vehicle Code; and Title 49 Code of Federal Regulations, Part 571.

§ 228.10. Review of Application.

(a) The department shall review the applications submitted pursuant to Section 228.08 and notify the manufacturer within thirty (30) business days of receipt whether the application is determined to be incomplete. After notification by the department, manufacturers may submit materials necessary to complete the application up to one year after the date of the original submission of the application.

(b) Applications deemed complete will be reviewed for approval, except as required by the timeframes set forth in Vehicle Code section 38750.

(c) The department shall issue a notice of correction to manufacturers whose applications are deemed deficient in content details within thirty (30) business days of the application being deemed complete. The manufacturer may resubmit the application with the corrections required by the notice of correction within one year of the original submission of the application.

(d) Pending applications that have not been approved by the department after notice of incompleteness under subsection (a) or notice of correction under subsection (c) shall expire one year from the original date of submission to the department.

(e) The department shall approve the application if the manufacturer has:

(1) Submitted all the information and certifications required by Sections 228.04 and 228.08; and,

(2) Based on the submitted information and certifications, conducted testing necessary to satisfy the department that operation of the subject automated driving system does not pose an unreasonable risk of accident, death, injury, or exacerbating injury.

(f) An application submitted under section 228.08(b) will not be approved until 30 days after the department has provided the public notice require by Vehicle Code Section 38750(f).

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

§ 228.12. Amendment of Application.

(a) Within 10 business days of any change to the contact information or the name of the manufacturer provided on the Deployment Permit Application, form OL 321 (Rev. 2/2025) which is hereby incorporated by reference 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, and any changes to remote assistants or remote drivers.

(b) A manufacturer shall submit an amended Deployment Permit Application, form OL 321 (Rev. 2/2025) which is hereby incorporated by reference, and submit the fee of three thousand two hundred seventy-five dollars ($3,275) to process implementing changes to:

(1) Make the vehicle capable of operation at a SAE International's level that is different than the level in the approved permit.

(2) Make the vehicle capable of operation on a roadway type that is different than 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 those in the approved permit.

(5) Remove any commonly-occurring or restricted conditions that were identified on the approved permit.

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

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

(c) A manufacturer shall not deploy vehicles with the changes specified in this section until the amended application has been approved by the department.

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

§ 228.14. Reporting Safety Defects.

A manufacturer that identifies a safety-related defect in accordance with Part 573, Title 49 of the Code of Federal Regulations shall submit to the department a copy of the defect information report on the same day it is filed with the National Highway Traffic Safety Administration.

NOTE: Authority cited: Sections 1651 and 38750, Vehicle Code. Reference: Section 38750, Vehicle Code; and Part 573, Title 49, Code of Federal Regulations.

§ 228.16. Conditions Related to the Term of Permit.

Every Deployment Permit, form OL 321A (Rev. 12/2024) which is hereby incorporated by reference, issued under this article shall be valid until such time that it is suspended or revoked by the department pursuant to section 228.26 or surrendered by the manufacturer.

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

§ 228.18. Refusal of an Application for a Permit to Deploy.

(a) The department may refuse an Original Deployment Permit Application, form OL 321 (Rev. 2/2025) which is hereby incorporated by reference, or a Deployment Permit Operational Parameters Amendment Application, form OL 321 (Rev. 2/2025) which is hereby incorporated by reference, for a Deployment Permit, form OL 321A (Rev. 12/2024) which is hereby incorporated by reference, for any of the following:

(1) For a violation of Vehicle Code Sections 38750 – 38752, or Article 3.7 or 3.8.

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

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

(b) The department shall provide a written notice of a refusal to issue a Deployment Permit, form OL 321A (Rev. 12/2024) which is hereby incorporated by reference, 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.

§ 228.20. Demand for Hearing on Refusal of Permit.

(a) Upon refusal by the department to issue a Deployment Permit, form OL 321A (Rev. 12/2024) which is hereby incorporated by reference, a manufacturer shall be entitled to request in writing a hearing before the director or his or her representative. Such request must be delivered to the department within 60 days after the notice of refusal is issued.

(b) The hearing shall be conducted by the director, or by a hearing officer appointed by the director from the officers or employees of the department, at a time and place designated by the department.

(c) Upon conclusion of the hearing the director or hearing officer shall make findings and render a determination on behalf of the department and shall notify the manufacturer within 30 days.

(d) All matters in a hearing not covered by this section shall be governed, as far as applicable, by 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 et seq., Government Code; and Section 38750, Vehicle Code.

§ 228.22. Restriction of Autonomous Vehicles Deployment Permit.

(a) The department may assess incremental enforcement measures, including operational restrictions, against a manufacturer where the department determines that the circumstances do not require a full suspension or revocation of a Deployment Permit, form OL 321A (Rev. 12/2024) which is hereby incorporated by reference, 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.

(c) The department may issue a notice of immediate restriction on a Deployment Permit, form OL 321A (Rev. 12/2024) which is hereby incorporated by reference, upon department's determination 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.

(d) The manufacturer may request lifting of the operational restriction by submitting data to the department describing how the deficiencies precipitating the restriction 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 11500 et seq., Government Code; and Section 38750, Vehicle Code.

§ 228.24. Suspension, Revocation, or Restriction of Permit.

(a) The department shall provide a 30-day written notice, under the procedures specified in Government Code section 11505, to the manufacturer before suspending, revoking, or restricting a Deployment Permit, form OL 321A (Rev. 12/2024) which is hereby incorporated by reference pursuant to this subsection. The department may suspend, revoke, or impose an operational restriction on a Deployment Permit, form OL 321A for any of the following reasons:

(1) The manufacturer has failed to maintain financial responsibility in the amount required by Vehicle Code section 38750, subsection (c)(3), and section 228.04 of this Article.

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

(3) Any act or omission of the manufacturer or one of its agents, employees, contractors, or designees submitted incorrect or misleading information in the Original Deployment Permit Application, form OL 321 (Rev. 2/2025) which is hereby incorporated by reference, or any other submission to the department, including, but not limited to data reporting, requests for information or any other data request made pursuant to this Article.

(4) The manufacturer fails to report to the department any change to the information or certifications required and provided in the application under Section 228.12 within 10 business days of the date of the change.

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

(7) 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.

(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 Motor Vehicles for any of the reasons defined in Division 14.85 of the California Vehicle Code.

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

(10) The manufacturer fails to comply with any of the provisions of this article related to the deployment of autonomous vehicles.

(b) The department may immediately suspend, revoke or impose an operational restriction on a Deployment Permit, form OL 321A (Rev. 12/2024) for any of the following reasons:

(1) If a manufacturer's vehicle manufacturer, distributor, or remanufacturer license has been suspended or revoked by the department.

(2) If the manufacturer deploys any vehicle equipped with autonomous vehicle functions that were not disclosed in the manufacturer's Deployment Permit Application, form OL 321 (Rev. 2/2025) which is hereby incorporated by reference.

(3) If the manufacturer has misrepresented any information related to safety of the automated driving system of its vehicles.

(4) If the National Highway Traffic Safety Administration determines that the automated driving system of the manufacturer's vehicles makes inoperative any federally required motor vehicle safety systems.

(5) If the manufacturer's autonomous vehicles are subject to an open National Highway Traffic Safety Administration recall related to the vehicle's automated driving system. Such immediate suspension shall apply only to those vehicles the National Highway Traffic Safety Administration has deemed subject to the open recall.

(6) 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.

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

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

(9) Based on determination the deployment of autonomous vehicles pursuant to the manufacturer's permit poses an imminent hazard.

(c) Upon suspension, revocation, or restriction of a Deployment Permit, form OL 321A (Rev. 12/2024) which is hereby incorporated by reference, a manufacturer shall cease all further deployments of affected autonomous vehicles with the affected autonomous technology feature enabled on public streets until the department has verified that the manufacturer has described how the deficiencies precipitating the restriction, suspension, or revocation have been addressed. Upon satisfaction that the alleged deficiencies have been addressed, the department shall lift any associated revocation, suspension, or operational restriction.

(d) Upon suspension, revocation, or imposed operational restriction of a Deployment Permit, form OL 321A (Rev. 12/2024) which is hereby incorporated by reference, a manufacturer shall notify all owners of affected autonomous vehicles that the manufacturer's Deployment Permit, form OL 321A (Rev. 12/2024) which is hereby incorporated by reference has been suspended, revoked, or restricted by the department and the reason for the suspension, ~~or~~ revocation, or restriction.

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

§ 228.26. Administrative Procedures for a Suspension, Revocation, or Restriction of Permit.

(a) A manufacturer that has received an order of suspension, revocation, or restriction from the department may request in writing a hearing on the matter as specified in Section 228.20. Any hearing shall be conducted by the director or by a hearing officer appointed by the director from the officers or employees of the department.

(1) If a manufacturer wishes to have a hearing before the effective date of the order of suspension, revocation, or restriction pursuant to section 228.24, subsection (a), the request for hearing shall be made within ten days of the receipt of the order of suspension or revocation. The hearing shall be held at a time and place designated by the department.

(2) The department shall hold the hearing before the effective date of the order of suspension or revocation if the request for hearing is received by the department on or before ten days after the manufacturer's receipt of the order of suspension or revocation. Nothing herein shall prevent issuance or enforcement of an immediate suspension, restriction, or revocation order pursuant to section 228.24, subsection (b).

(3) The only issues at the hearing on an order of suspension, restriction, or revocation shall be those listed in subsections (a) and (b) of Section 228.24.

(4) Upon conclusion of the hearing the director or the hearing officer shall make findings and render a determination of behalf of the department and shall notify the manufacturer. The decision shall take effect as stated in the order of suspension, restriction, or revocation.

(5) A request for hearing does not stay the order of suspension, restriction, or revocation. If the department does not conduct a hearing and make a determination before the effective date of the suspension, restriction, or revocation, the department shall stay the effective date of the order pending the determination.

(b) If a suspension, revocation, or restriction is effective immediately as specified in subsection (b) of Section 228.24 or subsection (c) of Section 228.22, the manufacturer may request a hearing within five days of receipt of the order of suspension, restriction, or revocation. The department shall provide for a hearing within a reasonable time not to exceed 21 days after a written request for hearing is filed with the department. A request for hearing does not stay the suspension, revocation, or restriction.

(c) All matters in a hearing not covered by this section shall be governed, as far as applicable, by 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 38750, Vehicle Code.

§ 228.28. Information Privacy.

(a) The manufacturer shall either:

(1) Provide a written disclosure to the driver of an autonomous vehicle, and for vehicles that do not require a driver, the passengers of the vehicle, that describes the personal information collected by the automated driving system that is not necessary for the safe operation of the vehicle and how it will be used; or,

(2) Anonymize information that is not necessary for the safe operation of the vehicle.

(b) With respect to a vehicle the manufacturer sells or leases to an end user, if the information is not anonymized, the manufacturer shall obtain the written approval of the end user to collect any personal information by the automated driving system that is not necessary for the safe operation of the vehicle.

(c) A manufacturer shall not deny use of an autonomous vehicle to any person on the basis that they do not provide the written approval specified in subsection (b) of this section.

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

§ 228.30. Registration of Autonomous Vehicles.

(a) In addition to the requirements set forth in Vehicle Code section 4453 (a), a registration card for an autonomous vehicle shall identify the vehicle as autonomous.

(b) In addition to the requirements of Vehicle Code section 4451, the certificate of ownership for an autonomous vehicle shall identify the vehicle as autonomous.

(c) Autonomous heavy-duty commercial motor vehicles entering California shall be a make and model listed on an approved Deployment Permit, form OL 321A (Rev. 12/2024) which is hereby incorporated by reference. Vehicles shall have documentation from the manufacturer indicating that the make and model is approved for use on public roads in California.

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

§ 228.32. Statements About Autonomous Technology.

(a) No manufacturer or its agents shall represent in any advertising for the sale or lease of a vehicle that a vehicle is autonomous unless it meets all of the following requirements:

(1) The vehicle meets the definition of an autonomous vehicle specified in Vehicle Code section 38750 and section 227.02(h) of Article 3.7.

(2) The vehicle was manufactured by a manufacturer licensed pursuant to Vehicle Code section 11701 also holding a valid autonomous vehicle manufacturer's permit issued pursuant to this Article at the time of the vehicle's manufacture.

(b) The use of terms to describe the performance of a vehicle that is known, or by the exercise of reasonable care should be known, will likely induce a reasonably prudent person to believe a vehicle is autonomous, as defined in Vehicle Code section 38750 and 227.02(h) of Article 3.7, constitute an advertisement that the vehicle is autonomous for the purposes of this section and Vehicle Code section 11713.

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

§ 228.34. Reporting Collisions.

A manufacturer authorized to operate an autonomous vehicle on public roads in deployment, or a manufacturer providing an automated driving system service, shall provide to the department the full National Highway Traffic Safety Administration Standing General Order 2021-01 (June 2025) crash report for crashes occurring within the State of California, including full content of report, within the timeframes specified pursuant to the National Highway Traffic Safety Administration Standing General Order 2021-01 (June 2025), which is hereby incorporated by reference, or the equivalent if such a requirement is revised. If the Standing General Order 2021-01 is rescinded, then reporting requirements from the National Highway Traffic Safety Administration Standing General Order 2021-01 (June 2025) shall apply. The report shall be submitted using the electronic Collision Reporting Template (Rev. 2/2025) which is hereby incorporated by reference, provided by the department. The manufacturer shall submit the report electronically in .csv format via the department's web page or portal.

(a) The department may require supplemental information relevant to assessing the safety performance of an autonomous vehicle from the manufacturer in connection with a collision report. This may include, but is not limited to, technical information, images, video and depictions about the status and

operation of the vehicle's sensors recorded 30 seconds prior to the time of the collision, including, but not limited to, plots of the distance and the speed difference relative to the relevant targets in the collision path, the speed and acceleration of the subject vehicle and the acceleration, braking and steering commands that were issued by the automated driving system, and camera footage with target tracking representations.

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

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

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

§ 228.36 Reporting Vehicle Immobilizations.

(a) A manufacturer authorized to operate an SAE International's Level 4 or 5 autonomous vehicle on public roads in deployment, or a manufacturer providing an automated driving system service, after receipt of notice of a vehicle immobilization shall prepare and submit to the department a quarterly report summarizing occurrences. Manufacturers that provide privately owned vehicles for non-commercial use shall report each instance of an immobilization, but are not required to provide the date and time of the occurrence, the longitude and latitude, or vehicle identification number.

Reports shall be provided on the following dates: March 31st; June 30th; September 30th; December 31st. The first report is due for the first full calendar quarter after the effective date of the regulations. The report shall be submitted using the electronic Vehicle Immobilization Reporting Template (Rev. 2/2025), provided by the department, which is hereby incorporated by reference. The manufacturer shall submit the report electronically in .csv format via the department's web page or portal. If no vehicle immobilization occurred during the reporting period, the manufacturer shall report such to the department.

(b) The report shall include the requirements described in Section 227.58 of Article 3.7.

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

§ 228.38 Reporting Dynamic Driving Task Performance Relevant System Failures.

(a) A manufacturer authorized to operate an SAE International's Level 3 autonomous vehicle on public roads in deployment, or a manufacturer providing an automated driving system service after receipt of notice shall report each instance in which a fallback ready user took over performance of the dynamic driving task, or performed the dynamic driving task fallback, in response to a dynamic driving task performance relevant system failure. Manufacturers that provide privately owned vehicles for non-commercial use shall report each instance of a dynamic driving task performance relevant system failure but are not required to provide the date and time of the occurrence, the longitude and latitude, or vehicle identification number.

(b) Every manufacturer with an authorized Deployment Permit, form OL 321A (Rev. 12/2024), shall prepare and submit to the department a quarterly report summarizing occurrences of dynamic driving task performance relevant system failures. Reports shall be provided on the following dates: March 31st; June 30th; September 30th; December 31st. The first report is due for the first full calendar quarter after the effective date of the regulations. If no dynamic driving task performance relevant system failure occurred during the reporting period, the manufacturer shall report such to the department.

(c) The report shall include requirements described in section 227.56 (c) of Article 3.7. The report shall be submitted using the electronic Dynamic Driving Task Performance Relevant System Failure Reporting Template (Rev. 2/2025), provided by the department, which is hereby incorporated by reference. The manufacturer shall submit the report electronically in .csv format via the department's web page or portal.

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

§ 228.40. Reporting Vehicle Miles Traveled.

(a) Every manufacturer with an authorized Deployment Permit shall prepare and submit to the department a quarterly report summarizing total number of vehicle miles traveled while operating on public roads. The report shall specify the total number of miles each autonomous vehicle operated in autonomous

mode on public roads. Reports shall be provided on the following dates: March 31st; June 30th; September 30th; December 31st. The first report is due for the first full calendar quarter after the effective date of the regulations. Manufacturers that provide privately owned vehicles for non-commercial use shall provide a report summarizing the total number of vehicle miles traveled, but are not required to provide the vehicle identification number. The report shall be submitted using the electronic Vehicle Miles Traveled Reporting Template (Rev. 2/2025), provided by the department, which is hereby incorporated by reference. The manufacturer shall submit the report electronically in .csv format via the department's web page or portal. If no operation in autonomous mode occurred on public roads during the reporting period, the manufacturer shall report such to the department.

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

§ 228.42. Notice of Autonomous Vehicle Noncompliance.

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

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

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

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

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

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

(1) Confirmation that the autonomous technology was engaged.

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

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

(4) The time the alleged violation occurred.

(5) The location the alleged violation occurred.

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

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

(h) Nothing in this section relieves any person from compliance with any other applicable reporting requirements pursuant to California statutes or regulations.

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

§ 228.44. Preliminary Information Notice.

(a) The manufacturer shall respond to a Preliminary Information Notice by making a good faith effort to respond to the request within a reasonable time that is informed by the nature of the issue underlying the Notice and the scope of the Notice. In circumstances where the department believes an imminent hazard may exist, the department may require the manufacturer to provide information reasonably available within a more limited timeframe. Incidents requiring a response within a more limited timeframe may include, but are not limited to, collisions involving a fatality or serious injury, unsafe driving behaviors (e.g., running through a red light), or any other incidents indicating an imminent hazard or that the operation of autonomous vehicles on public roads in California poses an unreasonable risk of injury or exacerbating injury. 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 the California Code of Regulations, Title 13, Division 1, Chapter 1, Article 3.7 and Article 3.8.

(2) Operation in a manner that was not approved by the department under the authorized Deployment Permit, form OL 321A (Rev. 12/2024).

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

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

(5) Receipt of a Notice of Autonomous Vehicle Noncompliance, form OL 325 (Rev. 12/2024) which is hereby incorporated by reference.

(6) Operation of autonomous vehicles on public roads in California posing an unreasonable risk of accident, death, injury, or exacerbation of injury.

(7) 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 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; description of the incident(s), including any 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.

§ 228.46. Request for Information.

(a) The manufacturer shall respond to a Request for Information by making a good faith effort to respond to the request within a reasonable time that is informed by the nature of the issue underlying the Request and the scope of the Request The department may issue a Request for Information to the manufacturer to obtain specific information on incidents involving operation of an autonomous vehicle on public roads that led to or caused, but is not limited to, the following:

(1) Violation of the Vehicle Code or the requirements of the California Code of Regulations, Title 13, Division 1, Chapter 1, Article 3.7, and Article 3.8.

(2) Operation in a manner that was not approved by the department under the authorized Deployment Permit, form OL 321A (Rev. 12/2024) which is hereby incorporated by reference.

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

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

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

users involved; measures taken to resolve the incident; and any remediation to mitigate risk of any future occurrence of the incident.

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