

**POTENTIAL DRAFT REGULATORY LANGUAGE:**

***This document provides draft regulatory language for rulemaking governing autonomous vehicles. This document is intended only to encourage public feedback and is not a formal regulatory proposal. Proposed regulations will be made available for public comment at a later date pursuant to the formal Administrative Procedure Act process.***

Article 3.8. Deployment of Autonomous Vehicles

Express Terms

§ 228.00. Purpose.

In the National Traffic and Motor Vehicle Safety Act of 1966 (49 U.S.C. section 30101 et seq.; “Safety Act”), Congress directed the U.S. Department of Transportation to prescribe motor vehicle safety standards. The National Highway Traffic Safety Administration is vested with the authority to develop Federal Motor Vehicle Safety Standards (49 C.F.R. Part 501, section 501.3). Under the Safety Act, no motor vehicle can be sold for use on public roads in the United States unless the vehicle manufacturer certifies that the vehicle meets the performance requirements specified in the Federal Motor Vehicle Safety Standards adopted by the National Highway Traffic Safety Administration, or the manufacturer has received the appropriate exemption from the National Highway Safety Administration.

(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 the deployment of autonomous vehicles on public roads in California consistent with the Federal Motor Vehicle Safety Standards.

(b) An autonomous vehicle shall not be deployed on public roads in California except as permitted under Vehicle Code section 38750 and the regulations in this article.

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

§ 228.02. Definitions.

As used in this article the following definitions apply:

(a) “Affiliate” means any person, as defined in Vehicle Code section 470, who directly or indirectly through one or more intermediaries, controls, is controlled by, or is under the common direction and control with, the manufacturer.

~~(a)~~(b) “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)~~ “Autonomous vehicle” means any vehicle equipped with technology that is a combination of both hardware and software that has the capability of performing the dynamic driving task without the active physical control or monitoring of a natural person, excluding vehicles equipped with one or more systems that enhance safety or provide driver assistance but are not capable of driving or operating the vehicle without the active physical control or monitoring of a human. For the purposes of this article an “autonomous vehicle” meets the definition of levels 3, 4, or 5 of the 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.

(c) ~~(d)~~ “Deployment” means the operation of an autonomous vehicle on public roads by members of the public who are not employees, contractors, or designees of a manufacturer or for purposes of sale, lease, providing transportation services or transporting property for a fee, or otherwise making commercially available outside of a testing program authorized by the department pursuant to Article 3.7 of this Chapter.

(d) “Deployment Permit” means a Permit to Deploy Autonomous Vehicles on Public Streets, that is issued by the department to a manufacturer.

(e) “Deployment Permit Application” means an Application for a Permit to Deploy Autonomous Vehicles on Public Streets, form OL 321 (Rev. 9/2023), 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.

(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, whether or not the automated driving system issued a request to intervene, and 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) “Operator” means the natural person who is seated in the driver’s seat, or, if there is no natural person in the driver’s seat, who causes the automated driving system to engage.

~~(d)~~ (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, both those that require a driver physically located in the driver's seat of ~~inside~~ the vehicle and those that do not require a driver physically located in the driver's seat of ~~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 (REV ~~6/2014~~20), which is hereby incorporated by reference.

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

(4) A proof of self-insurance shall meet the requirements of, and be governed by, Section 227.12 of Article 3.7 and shall be 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 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 for Remote Drivers and Remote Assistants.

A manufacturer or affiliate that provides remote support to an autonomous vehicle authorized for deployment shall ensure the following:

(a) Each remote driver is capable of taking over immediate physical control of the vehicle and each remote assistant is actively monitoring the vehicle's operations and capable of providing remote support to the vehicle.

(b) Each remote driver and remote assistant that provides remote support to an autonomous vehicle has completed training from the manufacturer consistent with the requirements of section 228.10. Such training shall address the limitations of the vehicle's automated driving system and a remote driver or remote assistant may be certified only when capable of safely operating the vehicle in all conditions under which the vehicle is operated on public roads. A manufacturer or affiliate shall provide to the department the date each remote assistant or remote driver completed this training.

(c) Each remote driver and remote assistant shall at all times obey all provisions of the Vehicle Code, California Code of Regulations, and local regulation 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.

§ 228.08. Qualifications for Remote Drivers and Remote Assistants.

(a) Only a manufacturer or affiliate may perform remote operations for the autonomous vehicle. A manufacturer or affiliate shall not allow any person to act as a remote driver or remote assistant supporting operation of an autonomous vehicle on public roads unless all of the following have been met:

(b) The manufacturer or affiliate has identified each remote driver and remote assistant to the department, providing the true full name and the driver's license number and jurisdiction of issuance of the license for the remote driver or remote assistant, the remote driver has been issued a Remote Assistant / Remote Driver Permit, form OL 314A (Rev. 9/2023), and the remote assistant has been issued a Remote Assistant / Remote Driver Permit, form OL 314A (Rev. 9/2023), which are incorporated by reference.

(c) The manufacturer or affiliate has certified to the department, for each remote driver and remote assistant permitted by the manufacturer to provide remote support to an autonomous vehicle on public roads, that the natural person meets all of the following requirements:

(1) Each remote driver and remote assistant has maintained a valid license for the type of motor vehicle being driven or operated for the three years immediately preceding application to the department; and, at that time each remote driver and remote assistant:

(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) Each remote driver and remote assistant has completed the manufacturer's remote driver training program or remote assistant training program and the date the program was completed.

(3) Each remote driver and remote assistant 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 remote driver and remote assistant who no longer meets the eligibility requirements in this article. The person may not be reinstated to the Autonomous Vehicle Program until the manufacturer or affiliate has verified the person now meets the eligibility requirements in this article.

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

(A) Each remote driver and remote assistant that provides remote support to an autonomous 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 remote driver and remote assistant that provides remote support to an autonomous 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 set forth in Title 49, Code of Federal Regulations, Part 382, and shall comply with Vehicle Code section 34520.

(C) Each remote driver and remote assistant that provides remote support to an autonomous 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 or affiliate shall immediately remove any remote driver or remote assistant 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.

§ 228.10. Remote Driver Training Program and Remote Assistant Training Program.

A manufacturer or affiliate that provides remote support to an autonomous vehicle authorized for deployment shall maintain a training program for its remote drivers and remote assistants and shall provide the department with a course outline and description of the training program. Within 10 days of the adoption of any modifications to the remote driver training program and/or remote assistant training program, the manufacturer or affiliate shall provide the department with the modified version of the course outline and description of the training program, including a summary of the modifications made. The remote driver training program and remote assistant training program shall include, but not be limited to, the following:

(a) Instruction on the automated driving system used 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 system(s).

For purposes of this section, an "experienced driver" is one who has met the qualifications provided in section 228.08, subsections (a) and (b) (1), and through training and experience has developed skill and knowledge in the operation of the automated driving system.

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

(c) Instruction on how to communicate and interact with law enforcement, including during traffic stops or vehicle inspections.

(d) Instruction on how to, upon request by law enforcement, provide evidence of the Remote Assistant / Remote Driver Permit issued to the remote driver and/or remote assistant providing remote support to the vehicle on public roads.

(e) Instruction on how the remote assistant or remote driver will be notified to perform the dynamic driving task when the automated driving system issues a request to intervene to the fallback-ready user.

(f) The results of human fatigue assessment, the maximum number of vehicles that each remote driver and remote assistant will be assigned at any one time per shift, and a description of how the manufacturer or affiliate determines this acceptable limit and how it will reduce or prevent human fatigue, error, or other adverse effects of working beyond this limit.

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

(h) A manufacturer submitting an application for renewal of a Deployment Permit shall provide the department with the course outline, and description of the manufacturer's refresher training program, and certify that each remote driver and remote assistant has successfully completed a refresher training program at least annually.

~~§ 228.06.~~ § 228.12. Application for a Permit for Post-Testing Deployment of Autonomous Vehicles on Public Roads.

(a) Except for testing as provided in Sections ~~227.3028~~ and 227.38 of Article 3.7, an autonomous vehicle, or a vehicle equipped with an automated driving system service, shall not be deployed on any public road in California until the manufacturer has submitted and the department has approved an Deployment Permit Application for a Permit to Deploy Autonomous Vehicles on Public Streets, form OL 321 (Rev. 7/2020 9/2023), which is hereby ~~incorporated by reference.~~ A manufacturer submitting an original, amendment, or renewal of the Deployment Permit Application may also choose to submit the form electronically via the department's web portal.

(1) Prior to applying for a Deployment Permit to deploy an autonomous vehicle that requires a driver physically located in the driver's seat of the vehicle, a manufacturer, except a manufacturer of autonomous commercial motor vehicles as described in (2), for at least X months prior to the date of application, is required to conduct at least X total miles of autonomous vehicle testing with a valid Drivered Testing Permit on public roads throughout the operational design domain and in all conditions under which the subject automated driving system is intended to operate, and in all conditions that can reasonably be expected to be encountered. Prior to applying for a Deployment Permit to deploy an autonomous vehicle that does not require a driver, a manufacturer must, for at least X months prior to the date of the application, conduct autonomous vehicle testing for at least X total miles with a valid Driverless Testing Permit on public roads throughout the operational design domain and in all conditions under which the subject automated driving system is intended to operate.

(A) At the time of application for a Deployment Permit, the manufacturer must provide the department with the results of an assessment, representing at least X months of operational data with the required testing permit under the testing parameters described in this subsection, which demonstrates evidence supporting all the manufacturer's safety claims in the Safety Case for the subject automated driving system to operate throughout the intended operational design domain. At all times, a valid Testing Permit is a condition for maintenance of a Deployment Permit.

(2) Prior to applying for a Deployment Permit to deploy an autonomous commercial motor vehicle that requires a driver physically located in the driver's seat of the vehicle, a manufacturer, for at least X months prior to the date of application, is required to conduct at least X total miles of autonomous vehicle testing with a valid Drivered Testing Permit on public roads throughout the operational design domain and in all conditions under which the subject automated driving system is intended to operate, and all conditions that can reasonably be expected to be encountered.

(3) Prior to applying for a Deployment Permit to deploy an autonomous commercial motor vehicle that does not require a driver, a manufacturer, for at least X months prior to the date of the application, is required to conduct at least X total miles of autonomous vehicle testing with a valid Driverless Testing Permit on public roads throughout the operational design domain and in all conditions under which the subject automated driving system is intended to operate, and all conditions that can reasonably be expected to be encountered.

(A) At the time of application for a Deployment Permit, the manufacturer of autonomous commercial motor vehicles must provide the department with the results of an assessment, representing at least X months of operational data from at least X total miles of testing with the required testing permit under the testing parameters described in this subsection, which demonstrates evidence supporting all the manufacturer's safety claims in the Safety Case for the subject automated driving system to operate throughout the intended operational design domain. At all times, a valid Testing Permit is a condition for maintenance of a Deployment Permit.

(B) Manufacturers of autonomous commercial motor vehicles are limited to deploying in an operational design domain that only allows operation on frontage streets or roads and on roads where the posted speed limit is 50 miles per hour or greater.



~~(1)~~ (4) The manufacturer shall identify in the Deployment Permit aApplication 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 ~~in areas~~ outside of the identified ~~disclosed~~ operational design domain.

~~(2)~~ (5) The manufacturer shall identify any commonly-occurring or restricted conditions, including, but not limited to: inclement weather conditions and the specific measurement thresholds (e.g., snow, fog, black ice, wet road surfaces, rain, sleet, hail, etc.), traffic, roadway characteristics, and other known domain constraints, and geofencing 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.

~~(3)~~ (6) The manufacturer shall ~~or~~ state the mechanism for safely disengaging out of autonomous mode in the event the autonomous vehicle ~~of experiences~~ ing conditions outside of its operational design domain.

~~(3)~~ (7) The manufacturer shall describe how the ~~vehicle~~ automated driving system is designed to react when ~~it~~ the vehicle is outside of its operational design domain or encounters the commonly-occurring or restricted conditions disclosed on the Deployment Permit aApplication. Such reactions can include, but are not limited to, measures such as ~~notifying and transitioning control to~~ the driver, remote driver, and/or remote assistant 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 transitioning to a minimal risk condition, the automated driving system automatically performs a dynamic driving condition fallback to achieve a minimal risk condition, moving 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 complete controlled stop and will not pose any risk to public safety.

~~(4)~~ (8) The manufacturer shall submit the fee of ~~three thousand two hundred and seventy-five dollars (\$3,275)~~ TBD for the processing of the Deployment Permit aApplication.

~~(5)~~ (9) The manufacturer must provide on the Deployment Permit aApplication the number of the Manufacturer's License issued by the department pursuant to Vehicle Code section 11701.

~~(6)~~ (10) The manufacturer shall certify in the Deployment Permit Application that the autonomous vehicles are equipped with an autonomous technology data recorder that captures and stores autonomous technology sensor data for all vehicle functions that are controlled by the ~~autonomous technology~~ automated driving system at least 30 seconds before a collision with another vehicle, person, or other object while the vehicle is operating in autonomous mode. The data must be captured and stored by the autonomous technology data recorder, in a read only format and, must be capable of being accessed and retrieved by a commercially available tool.

~~(7)~~ (11) The manufacturer shall certify that the relevant 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.

~~(8)~~ (12) The manufacturer shall certify that the ~~autonomous technology~~ 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).

(13) A manufacturer shall submit to the department, upon original or renewal Deployment Permit Application, the vehicle identification number and software version number associated with each vehicle equipped with an automated driving system.

~~(9)~~ (14) The manufacturer shall certify that the ~~autonomous technology~~ automated driving system is designed to detect and respond to roadway situations in compliance with all provisions of the California Vehicle Code and local regulation 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 road users.

(A) The manufacturer shall also certify that, when necessary, it will make ~~available~~ updates pertaining to the autonomous technology automated driving system of any deployed vehicle at least annually and, in any event, or as necessary to improve safety and by the effective date of any changes in the California Vehicle Code and local regulation applicable to the operation of motor vehicles in the operational design domain 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~~ therein.

(B) The manufacturer shall also certify that it will make ~~available~~ updates ~~pertaining~~ to location and mapping information utilized or referenced by the ~~autonomous technology~~ 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, vehicle's sensors, publicly available information, or any other information source.

(C) The manufacturer shall notify the operator, ~~or~~ registered owner, or lessee 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 to operate on public roads until available updates pursuant to (A) and (B) above or other safety-related or safety-critical software updates are enabled.

~~(10)~~ (15) A certification 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.

~~(11)~~ (16) ~~A certification that the manufacturer shall describe the has conducted test and validation methods and is satisfied, based on the results of the tests and validations used to determine,~~ that the subject autonomous vehicles are is safe for deployment on public roads in California in the intended operational design domain.

(17) A manufacturer shall provide the Safety Case for the subject autonomous vehicle for deployment on public roads in the intended operational design domain. Within 10 days of the adoption of any modifications to the Safety Case, the manufacturer shall provide the department with the modified version, including a summary of the modifications made.

(18) A manufacturer shall provide the total number of miles each autonomous vehicle, equipped with the equivalent software version as the autonomous vehicle intended for deployment on public roads, was tested in autonomous mode on public roads in every jurisdiction within the United States where the autonomous vehicle is authorized to operate for testing.

(b) In addition to the requirements specified in subsection (a), for vehicles that do not require a driver physically located in the driver's seat of the vehicle, the manufacturer shall also certify that the vehicle complies with all of the following:

(1) A communication link between the vehicle and the remote ~~operator~~ assistant and/or remote driver, if any, to provide information on the vehicle's location and status and allow two-way communication between the remote ~~operator~~ assistant and/or remote driver and any passengers, if applicable, should the vehicle experience any failures that would endanger the safety of the vehicle's passengers or other road users while operating without a driver physically located in the driver's seat of the vehicle. The certification shall include:

(A) That the manufacturer or affiliate will utilize a communications network dedicated to continuously monitoring the status 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 or affiliate 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 are in place to ensure the remote assistant and/or remote driver will be able to continuously monitor the status and provide remote support to the vehicle in the event there is a loss or degradation of the communication link.

(D) A description of how the manufacturer or affiliate will support the vehicle in the event the automated driving system executes an automated fallback to a minimal risk condition, including, but not 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 input devices the remote driver and/or remote assistant will use to continuously monitor the status of the vehicle and the communication link.

(F) A description of the displays or indicator that is visible and interpretable to law enforcement that identifies when the vehicle is operating in autonomous mode.

(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 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 Deployment Permit ~~a~~Application all of the following:

(1) For autonomous vehicles, or vehicles equipped with automated driving system service to be sold or leased to persons other than the manufacturer, a consumer or end user education plan, which covers the operational design domain of the ~~vehicle~~ automated driving system, and ~~which~~ 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 ~~The identification of~~ any and all capabilities and restrictions of the ~~autonomous technology~~ automated driving system feature(s) in the autonomous vehicles and shall explain ~~an explanation of~~ the educational materials that will be provided to end users of the autonomous vehicles or software and/or hardware produced by the manufacturer.

(B) Notification to the operator, registered owner, or lessee 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.).

~~(B)~~ (C) A copy of the sections of the vehicle owner's manual, or an equivalent ~~vehicle operator manual~~, instruction guide, or pamphlet for the operator of the engaged automated driving system feature(s) that provides information on the following:

(i) The mechanism to engage and disengage the ~~autonomous technology~~ 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 ~~autonomous technology~~ automated driving system feature(s) is engaged.

(iii) The operator of the engaged automated driving system feature(s) and manufacturer's responsibilities with respect to the operation of the autonomous vehicles.

~~(C)~~ (D) An explanation description of how end users will receive education after purchasing a previously-owned autonomous vehicle, or a vehicle equipped with activated software to make the vehicle capable of operation that meets the definition of an automated driving system service.

~~(D) The internet web site address where copies of the end user education plan may be accessed shall be provided at no cost to law enforcement and emergency response agencies in the vicinity of the operational design domain of the vehicles and shall be provided to the California Highway Patrol at the E-mail address provided in Section 227.38 (e) (3) of Article 3.7.~~

(E) An explanation of the vehicle registration requirements to commercially operate autonomous vehicles on public roads in California.

(F) An explanation that the use of autonomous vehicles, or vehicles equipped with automated driving system service, is subject to the manufacturer of the automated driving system possessing and maintaining a valid Deployment Permit.

(G) An explanation of the law enforcement interaction plan and, in the case of commercial autonomous vehicles, a description of inspection and maintenance procedures.

~~D)~~ (2) The manufacturer shall provide an internet web site address where copies of the end user education plan may be accessed and shall be provided at no cost to law enforcement and emergency response agencies in the vicinity 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 227.38 (e)(h) of Article 3.7.

~~(2)~~ (3) A description of how a vehicle that meets the Society of Automotive Engineers' SAE International's definition of a level 4 or level 5 vehicle, or for vehicles that meet the Society of Automotive Engineers' SAE International's definition of a level 3 vehicle and the driver does not or is unable to take manual control of the vehicle, will safely come to a complete controlled stop when there is an autonomous technology 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 in a manner that does not pose any risk to public safety.

(B) Activation of systems that will allow the vehicle to continue operation until the vehicle has reached a location where it can come to a ~~complete~~ controlled stop and does not pose any risk to public safety.

~~(3)~~ (4) A copy of a law enforcement interaction plan that meets all of the requirements of ~~specified in~~ Section 227.38 ~~(e)~~(h) of Article 3.7.

(5) For a SAE International level 3 automated driving system that requires the presence of a fallback-ready user in the driver's seat, the following components shall be provided to law enforcement in the vicinity of the intended operational design domain:

(A) A description of the display(s) or indicator(s) that is visible and interpretable to law enforcement which identifies 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.

~~(4)~~ (6) A copy of the written disclosure required by Section 228.2432.

~~(5)~~ (7) A certification that the subject autonomous vehicle satisfies each requirement of Vehicle Code section 38750, subsection (c)(1).

~~(6)~~ (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.

~~(7)~~ (9) A summary of the ~~manufacturer's~~ autonomous ~~technology~~ testing conducted with a valid Drivered Testing Permit and/or valid Driverless Testing Permit on public roads in an the operational design domain that is the same or comparable to that in which the subject autonomous vehicles are designed to operate will be deployed. The summary shall describe all locations where the vehicle has been tested and shall include:

(A) The total number of ~~vehicle test~~ miles each autonomous vehicle tested driven in autonomous mode on public roads per month, ~~on test tracks, or other private roads in autonomous mode~~ with a valid Driverless Testing Permit in the X months prior to the date of application in the operational design domain that is the same or comparable to that which is intended for operation of the subject vehicle. The total number of disengagements that occurred in autonomous mode per month in the X months 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.

(B) A description of the ~~testing~~ methods used to test and validate the safety and performance of the subject autonomous vehicles for deployment on public roads in California in the intended operational design domain.

(C) ~~The number of~~ Any traffic collisions originating from the operation of the an autonomous test vehicles in autonomous mode on public roads that resulted resulting in damage of property to ~~any one person~~ in excess of one thousand dollars (\$1,000), or bodily injury or death to any one person, and a full description of all contributing factors that led to or the caused of each collision and measures taken to remediate the cause of each collision, where applicable.

(D) Any braking event, as defined in the California Code of Regulations, Title 13, Division 1, Chapter 1, Article 3.8, section 227.58, subsection (a) occurring in the X months preceding the date of the Deployment Permit Application for Permit to Autonomous Vehicles on Public Streets, occurring during the operation of an autonomous vehicle in autonomous mode on public roads, 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.

(10) In addition to the requirements of section 228.12, subsection (9), a manufacturer submitting a Deployment Permit Application shall submit all unredacted reports made pursuant to National Highway Traffic Safety Administration Standing General Order (MAY2023) for any traffic collision involving an autonomous vehicle, including for any incident occurring in any state prior to the date of application, and a full description of the cause of each collision and measures taken to remediate the cause of each collision, where applicable.

(d) In addition to the requirements of section 228.12, subsection (10), a manufacturer submitting a Deployment Permit Application to deploy an autonomous commercial motor vehicle, or any motor carrier operating an autonomous commercial motor vehicle authorized to deploy on public roads in California shall adhere to all of the following:



(1) Compliance with required inspections pursuant to Vehicle Code sections 2800, 2813, and 21461, subdivision (a). Autonomous 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 the periodic vehicle inspection requirements in Vehicle Code section 34505.5.

(3) Applicable safety requirements contained in Title 13, Division 2, including, but not limited, to inspections conducted by the California Highway Patrol pursuant to Chapter 6.5, Article 1, Section 1202, subsection (a), notwithstanding the terminal inspection selection criteria contained in the Vehicle Code section 34501.12, subdivision (c) (2).

(4) Vehicle Code section 34505.5 for all vehicles subject to the Basic Inspection of Terminals Program.

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

~~(e)~~ (f) The requirements identified in subsections (b), (c), and ~~(d)~~ (e) 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, 11701 and 38750, Vehicle Code; and Title 49 Code of Federal Regulations, Part 571.

~~§ 228.08.~~ § 228.14. Review of Application.

(a) The department shall review the applications submitted pursuant to Section 228.1206 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(f).~~

(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 228.1206; and,

(2) based on the submitted information and certifications, conducted testing necessary to satisfy the department that operation of the subject autonomous vehicles on public roads does not pose an unreasonable risk to public safety ~~are safe to operate on public roads.~~

(f) An application submitted under section 228.0612(b) will not be approved until 30 days after the department has provided the public notice required by Vehicle Code Section 38750(f).

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

~~§ 228.10.~~ § 228.16. Amendment of Application.

(a) Within ~~ten (10)~~ days of any change to the contact information or the name of the manufacturer provided on the Deployment Permit Application ~~for a Permit to Deploy Autonomous Vehicles on Public Streets~~, 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.

(b) A manufacturer shall submit an amended application for public deployment prior to implementing changes that:

(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) 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 permit deployment of autonomous vehicles, or release any software update to vehicles, with the changes specified in this section until the amended application has been approved by the department.

(d) Any amendment to the Deployment Permit during the term of the permit to implement changes as defined in section 228.16, subsection (b) shall be accomplished by submitting a revised Deployment Permit Application and submitting the additional fee of [TBD] dollars (TBD) for the processing of the modification.

(e) Any other amendments to the Deployment Permit during the term of the permit that are not included in section 228.16, subsection (b) shall be accomplished by submitting a revised Deployment Permit Application and submitting the additional fee of [TBD] dollars (TBD) for the processing of the amendment.

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

~~§ 228.12.~~ § 228.18. Reporting Safety Defects.

A manufacturer who identifies a safety-related defect in their ~~autonomous~~ automated driving system technology that creates an unreasonable risk to safety shall, within the timeframe specified therein, shall submit to the department a copy of the report prepared in compliance with the timeframe and requirements specified in pursuant to Part 573, Title 49 of the Code of Federal Regulations.

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

~~§ 228.14.~~ § 228.20. Conditions Related to the Term of Permit.

Every Deployment Permit to Deploy Autonomous Vehicles on Public Streets issued under this article shall be valid for a period of one year from midnight of the last day of the month of issuance, or until such time that it is suspended or revoked by the department pursuant to section 228.2230 or surrendered by the manufacturer.

Any application for renewal of a Deployment Permit 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 [TBD] dollars (TBD) annual renewal fee.

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

~~§ 228.16.~~ § 228.22. Refusal Denial of an Application for a Permit to Deploy.

The department may ~~refuse deny an~~ Deployment Permit Application ~~for a Permit to Deploy Autonomous Vehicles on Public Streets~~ for any of the following:

- (a) If a manufacturer violates any provision of Vehicle Code section 38750, subsection (c), or this Article.
- (b) For any act or omission of the manufacturer or one of its agents, employees, contractors, or designees which the department determines creates a safety risk to the public.
- (c) The department shall provide a written notice of a ~~refusal~~ denial to issue a Permit to Deploy Autonomous Vehicles on Public Streets 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.

~~§ 228.18.~~ § 228.24. Demand for Hearing on ~~Refusal~~ Denial of Permit.

(a) Upon ~~refusal by the department to issue~~ denial of a Deployment Permit to Deploy Autonomous Vehicles on Public Streets, 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 denial 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 of the conclusion of the hearing.

(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.

~~§ 228.20.~~ § 228.26. Suspension or Revocation of Permit.

(a) The department ~~shall will~~ provide a 30-day written notice, under the procedures specified in Government Code section 11505, to the manufacturer before suspending or revoking ~~a the~~ Deployment Permit to Deploy Autonomous Vehicles on Public Streets pursuant to this subsection. The department may suspend or revoke a Deployment Permit to Deploy Autonomous Vehicles on Public Streets 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 submitted incorrect or misleading information in the Deployment Permit Application for a Permit to Deploy Autonomous Vehicles on Public Streets, or any other submission to the department.

(3) The manufacturer fails to report to the department any change to the information or certifications required and provided in the application under Section 228.1016 within 10 days of the date of the change.

(4) The manufacturer fails to comply with any of the provisions of this article, or any other applicable law or regulation, related to the deployment of autonomous vehicles.

(5) 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 manner specified.

(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 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 Vehicle Code section 34623.

(8) For any other reason giving the department cause to find deployment of autonomous vehicles pursuant to the manufacturer's permit poses an unreasonable risk to public safety.

(b) The department may immediately suspend the Permit to Deploy Autonomous Vehicles on Public Streets 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, ~~or software, or hardware equipped~~ integrated with autonomous vehicle functions that were not disclosed in the manufacturer's Deployment Permit Application ~~for a Permit to Deploy Autonomous Vehicles on Public Streets.~~

(3) If the manufacturer has misrepresented to the department or other regulatory authority any information related to safety of the autonomous technology of its vehicles.

(4) If the National Highway Traffic Safety Administration determines that the ~~autonomous~~ automated driving system technology 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 autonomous automated driving system technology. Such immediate suspension shall apply only to those vehicles the National Highway Traffic Safety Administration has deemed subject to the open recall.

(6) ~~Based upon the performance of the vehicles, t~~The department determines deployment of autonomous vehicles pursuant to the manufacturer's permit poses an unreasonable risk to public safety ~~the manufacturer's vehicles are not safe for the public's operation.~~

(c) Upon suspension or revocation ~~by the department~~ of a Deployment Permit to Deploy Autonomous Vehicles on Public Streets, a manufacturer shall cease all further deployments of affected autonomous vehicles, or automated driving system features, ~~with the affected autonomous technology feature enabled on public roads streets until the department has verified~~determines that the manufacturer has taken appropriate action to correct the deficiencies or complied with the National Highway Traffic Safety Administration recall that led to the suspension, and lifts the revocation or suspension ~~or revocation and the suspension has been lifted or the revocation withdrawn by the department.~~

(d) Upon suspension or revocation ~~by the department~~ of a Deployment Permit to Deploy Autonomous Vehicles on Public Streets, a manufacturer shall ~~also~~ notify all owners of affected its autonomous vehicles that the manufacturer's Deployment Permit to Deploy has been suspended or revoked by the department and the reason for the suspension or revocation.

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

#### 228.28. Restriction of Autonomous Vehicles Deployment Permit.

(a) The department may restrict a Deployment Permit if the manufacturer or affiliate fails to meet any of the following requirements:

(1) The manufacturer or affiliate shall ensure that within 60 seconds from the time the automated driving system executes a dynamic driving task fallback maneuver to transition the autonomous vehicle to achieve a minimal risk condition, the vehicle shall achieve a minimal risk condition in a safe location whereby the travel lane is sufficiently cleared to allow traffic to pass through unimpeded in 95% of incidents.

(A) If clearing the autonomous vehicle from the travel lane within 60 seconds is not possible because doing so (i) poses an unreasonable risk to the safety of people in or outside the vehicle, (ii) will violate state or local laws, or (iii) first responders have directed the vehicle to remain stopped, then these safety-related circumstances may be taken into consideration when determining a manufacturer's or affiliate's compliance with the 95% threshold.

(B) Manufacturers or affiliates shall notify the relevant local authorities or make notifications consistent with the law enforcement interaction plan for autonomous vehicles that do not require a driver physically located in the driver's seat in situations where the vehicle is unable to clear the travel lane. Alternatively, if the circumstances preventing movement are resolved, the manufacturer or affiliate shall remove the vehicle from the travel lane.

(C) If the department determines that a manufacturer or affiliate has not met the 95% threshold or has not notified the relevant local authorities under circumstances when this threshold was unable to be met, the department may issue an immediate restriction on the permit, which shall be in place for a minimum of 30 days and until the manufacturer or affiliate demonstrates that this threshold has been met during this period. Restrictions may include, but are not limited to, a requirement that the manufacturer or affiliate ensures a driver is present in all vehicles during all trips.

(D) In order to lift the restriction, the manufacturer or affiliate must provide to the department data spanning at least 30 consecutive days demonstrating that at least 95% of minimal risk condition incidents have been cleared within 60 seconds.

(2) The manufacturer or affiliate shall complete 90% of retrieval events occurring on public roads with a posted speed limit of 55 miles per hour or below within 20 minutes from the time when the vehicle stopped in the travel lane and 100% within 30 minutes. The manufacturer or affiliate shall complete 90% of retrieval events occurring on public roads with a posted speed limit of greater than 55 miles per hour within 60 minutes and 100% within 90 minutes. A retrieval event means removing a disabled vehicle from the public road.

(A) If completing the retrieval event within the above thresholds is not possible because doing so (i) poses an unreasonable risk to the safety of people in or outside the vehicle, (ii) will violate state or local laws, or (iii) first responders have directed the vehicle to remain stopped, then these safety-related circumstances may be taken into consideration when determining a manufacturer's or affiliate's compliance with the 90% and 100% thresholds.

(B) If a manufacturer or affiliate is unable to reach the vehicle on public roads with a posted speed limit of 55 miles per hour or below within 20 minutes, the manufacturer or affiliate shall notify the relevant local authorities or make notifications consistent with the law enforcement interaction plan for autonomous vehicles that do not require a driver physically located in the driver's seat.



(C) If a manufacturer is unable to reach the vehicle on public roads with a posted speed limit greater than 55 miles per hour within 60 minutes, the manufacturer shall notify the relevant local authorities or make notifications consistent with the law enforcement interaction plan for autonomous vehicles.

(D) If the department determines that a manufacturer or affiliate does not meet either the 90% or 100% threshold or has not notified the relevant local authorities under circumstances when these thresholds were unable to be met, the department may issue a notice of immediate restriction on the permit, which shall be in place for a minimum of 30 days and until retrieval time thresholds are met during this period.

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

(1) Up to 50% 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 a Fallback-ready User be present in the vehicle under certain conditions.

(c) In order to lift the restriction, the manufacturer or affiliate shall submit information to the department describing the manufacturer's or affiliate's operational improvements, and data spanning at least 30 consecutive days demonstrating an ability to meet the applicable retrieval event thresholds.

(d) In addition to the bases for restriction identified above, the department may impose restrictions upon a deployment permit for any other reason giving the department cause to find deployment of autonomous vehicles pursuant to the initial scope of the manufacturer's permit poses an unreasonable risk to public safety.

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

~~§ 228.22.~~ § 228.30. Administrative Procedures for a Suspension, Restriction or Revocation of Permit.

(a) A manufacturer that has received an order of suspension, ~~or~~ revocation, or restriction from the department may request in writing a hearing on the matter as specified in Section ~~228.1824.~~ 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 or revocation pursuant to section 228.26, 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 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 order pursuant to section 228.26, subsection (b).

(3) The only issues at the hearing on an order of suspension of revocation shall be those listed in subsections (a) and (b) of Section 228.~~2026~~.

(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 or revocation.~~

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

(b) If a suspension, ~~or revocation,~~ or restriction is effective immediately as specified in subsection (b) of Section 228.~~2026~~ or subsection (a) (3) of Section 228.28, the manufacturer may request a hearing within five days of receipt of the order of restriction, suspension, 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 effective date of the suspension, or revocation,~~ restriction.

~~(1) If the order is for a suspension of a permit, at the hearing the manufacturer shall show cause why the suspension should not be continued. Following the hearing the department may terminate the suspension or continue the suspension in effect.~~

~~(2) If the order is for a revocation of a permit, at the hearing the manufacturer shall show cause why the permit should not be revoked. Following the hearing the department may sustain the revocation or determine that the permit should be suspended.~~

(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.

~~§ 228.24.~~ § 228.32. Information Privacy.

(a) The manufacturer or affiliate 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 ~~autonomous~~ automated driving system technology that is not necessary for the safe operation of the vehicle and how it will be used; or,

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

(b) With respect to a vehicle the manufacturer sells or leases ~~to a customer~~, if the information is not anonymized, the manufacturer shall obtain the written approval of the registered owner or lessee ~~of an autonomous vehicle~~ to collection of any personal information by the ~~autonomous~~ automated driving system technology that is not necessary for the safe operation of the vehicle.

(c) A manufacturer or affiliate 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.

~~§ 228.26.~~ § 228.34. 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) The manufacturer shall not activate an automated driving system service on a vehicle that has been deemed salvage, unless the manufacturer provides the department with a completed Statement of Facts, REG 256 form (REV. 8/2008), signed by the manufacturer or designee, certifying that the automated driving system is capable of operating as designed in the intended operational design domain.

(d) Autonomous commercial motor vehicles entering California shall be a make and model listed on an approved Deployment Permit. 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.

~~§ 228.28.~~ § 228.36. Statements About Autonomous Technology Marketing Autonomous Vehicles.

(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 ~~228.02(b)~~ 227.02(g) of ~~Article 3.8~~ 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 ~~are~~ is known, ~~or by the exercise of reasonable care~~ or should be known, will likely induce a ~~reasonably prudent~~ reasonable person to believe a vehicle is autonomous, as defined in Vehicle Code section 38750 and ~~228.02(b)~~ 227.02(g) of ~~Article 3.8~~ Article 3.7, constitutes 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.

§ 228.38. Reporting Collisions.

(a) A manufacturer or affiliate authorized to operate an autonomous vehicle on public roads in deployment, or a manufacturer providing an automated driving system service, upon being made aware of a collision, shall provide to the department the full National Highway Traffic Safety Administration Standing General Order crash report, including full content of report, within the timeframes specified pursuant to the National Highway Traffic Safety Administration Standing General Order (MAY 2023), which is hereby incorporated by reference, or the equivalent if such a requirement is revised.

(b) The department may request supplemental information at any time from the manufacturer or affiliate in connection with the collision report. This may include, but is not limited to, technical information 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.

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

§ 228.40. Reporting Disengagement of Autonomous Mode.

(a) A manufacturer or affiliate authorized to operate an autonomous vehicle in deployment, and a manufacturer authorized to provide an automated driving system service, upon the beginning of on road deployment operations shall commence retaining data related to the disengagement of the autonomous mode. A manufacturer providing an automated driving system service shall provide reporting described in this section upon being made aware of the disengagement. All disengagements shall be reported, irrespective of the results of simulations that predict the likelihood of crashes. If no disengagement occurred during the reporting period, the manufacturer shall report such to the department.

(1) For the purposes of an autonomous vehicle that operates in deployment and an autonomous vehicle equipped with an automated driving system service that requires a driver physically located in the driver's seat of the vehicle, "disengagement" includes any of the following occurrences, which shall be classified by the following categories:

(A) A deactivation of the autonomous mode when an anomalous behavior of the automated driving system is detected by the automated driving system, the driver, or any natural person who actively monitors the performance of the autonomous vehicle; or

(B) A deactivation of the autonomous mode when the driver or any natural person who actively monitors the autonomous vehicle's performance determines it to be appropriate to avoid a collision or interference with the movement of other road users; 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

(E) A deactivation of the autonomous mode for some other reason.

(2) For the purposes of an autonomous vehicle that operates in deployment and an autonomous vehicle equipped with an automated driving system service that is capable of operating without a driver physically located in the driver's seat of the vehicle, "disengagement" includes any of the following occurrences, which shall be classified by the following categories:

(A) 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

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

(C) The remote driver or remote assistant requests that the automated driving system achieves a minimal risk condition; or

(D) The remote driver or remote assistant responds to a request from the automated driving system to intervene in the performance of the dynamic driving task; or

(E) 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 or affiliate authorized under this article to deploy autonomous vehicles on public roads and to provide an automated driving system service shall prepare and submit to the department a monthly report summarizing the information compiled pursuant to subsection (a) by the tenth day of the following month.

(1) The first report shall be submitted on the tenth day of the month following issuance of the Deployment Permit and cover all operations conducted on public roads up to that time.

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

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

(A) The circumstances at the time the disengagement was initiated, including:

(i) The date and time of the occurrence.

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

(iii) The party that initiated the disengagement: automated driving system, driver, remote driver, passenger, law enforcement, or other.

(iv) 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 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 location where the vehicle stopped: in an active traffic lane, in a parking lane or on a road shoulder, in a parking site off the road surface, in a bicycle lane, in a bus or taxi lane, in the path of a rail crossing, in an other special-use roadway lane.

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

(ee) 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 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.

(iv) Remediation implemented to mitigate risk of any future occurrences: software update, training, change to operating procedures, or other measures taken.)

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



(c) The monthly report shall be submitted to the department on the Monthly Report of Autonomous Vehicle Disengagements, form OL 311R (Rev. 9/2023), 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 request supplemental information in connection with a disengagement from the manufacturer 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.

#### § 228.42. Reporting Braking Events.

(a) Any manufacturer or affiliate authorized to operate an autonomous vehicle in deployment, and any manufacturer providing an automated driving system service, shall report to the department any automated driving system or human-initiated braking event exceeding 0.5 g occurring during the operation of an autonomous vehicle in autonomous mode on public roads. The report shall include the latitude and longitude coordinates, magnitude and duration of the braking event, and description of all contributing factors that led to or caused each braking event. 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 Deployment Permit.

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

(b) A manufacturer providing an automated driving system service shall provide reporting described in this section upon being made aware of the hard braking event.

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 in a manner that provides all information solicited by the department within 72 hours from the time the Notice is transmitted. When appropriate, the department may request the manufacturer provide information within 24 hours. Incidents requiring a response within 24 hours 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 a potential safety risk. 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 and 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 Permit to Deploy Autonomous Vehicles on Public Streets.

(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) Traffic collision as defined in the California Code of Regulations, Title 13, Division 1, Chapter 1, Article 3.8, section 228.38.

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

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

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

(9) Operation at, near the vicinity, or in the direction of travel of an active emergency response scene, avoidance zone or any other roadway 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.

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

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 in a manner that provides all information solicited by the department within 10 days of the date the Request for Information is transmitted by email. 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 and 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 Permit to Deploy Autonomous Vehicles on Public Streets.

(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).violation

(5) Traffic collision as defined in the California Code of Regulations, Title 13, Division 1, Chapter 1, Article 3.8, section 228.38.

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

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

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

(9) Operation at, near the vicinity, or in the direction of travel of an active emergency response scene, avoidance zone or any other roadway 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.

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

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