

APPENDIX A

PROPOSED REGULATION ORDER

Amend title 13, division 3, chapter 5.1, section 2299.3; and title 17, division 3, chapter 1, subchapter 7.5, section 93118.3; California Code of Regulations (CCR), and

Adopt new title 17, division 3, chapter 1, subchapter 7.5, sections 93130-93130.20, CCR, to read as follows:

(Note: The proposed amendments to title 13, section 2299.3 and title 17, section 93118.3 are shown in underline to indicate additions and ~~strikeout~~ to indicate deletions from the existing regulatory text. The symbol “***” means that intervening text not amended is not shown. The entire text of sections 93130 through 93130.20 set forth below is new language in “normal type” proposed to be added to title 17, CCR.)

Section 2299.3. Airborne Toxic Control Measure for Auxiliary Diesel Engines Operated on Ocean-Going Vessels At-Berth in a California Port.

(c) On January 1, 2021, section 93118.3 of title 17 of the California Code of Regulations shall be superseded by sections 93130 through 93130.20 of title 17 of the California Code of Regulations, as specified in section 93130. However, if sections 93130 through 93130.20 collectively are repealed or deemed invalid in their entirety by a final court decision, the requirements of section 93118.3 of title 17 of the California Code of Regulations shall again become operative. This subsection shall not be construed as expanding or limiting either the application or requirements of sections 93130 through 93130.20, title 17, CCR, but is intended to alert affected persons of the requirements regarding the operation of auxiliary diesel engines on ocean-going vessels at-berth in a California port and other provisions in that section.

Note: Authority cited: Sections 38560, 38562, 39600, 39601, 39658, 39659, 39666, 43013, and 41511, Health and Safety Code. Reference: Sections 38510, 38530, 38562, 38566, 38580, 39600, 39650, 39658, 39659, 39666, 41510 and 41511, Health and Safety Code.

Section 93118.3. Airborne Toxic Control Measure for Auxiliary Diesel Engines Operated on Ocean-Going Vessels At-Berth in a California Port.

(b) Applicability and General Exemptions.

(4) On January 1, 2021, this section 93118.3, and section 2299.3 of title 13 of the California Code of Regulations, shall be superseded by sections 93130 through 93130.20 of title 17 of the California Code of Regulations, as specified in section 93130. However, if sections 93130 through 93130.20 collectively are repealed or deemed invalid in their entirety by a final court decision, the requirements of section 93118.3 of title 17 and section 2299.3 of title 13 of the California Code of Regulations shall again become operative. This section shall not be construed as expanding or limiting either the application or requirements of sections 93130 through 93130.20, title 17, CCR, but is intended to alert affected persons of the state's requirements regarding ocean-going vessels, ports, terminals, berths, and emission control strategies for ocean-going vessels.

Note: Authority cited: Sections 38560, 38562, 39600, 39601, 39658, 39659, 39666, 43013, and 41511, Health and Safety Code. Reference: Sections 38510, 38530, 38562, 38566, 38580, 39600, 39650, 39658, 39659, 39666, 41510 and 41511, Health and Safety Code.

Section 93130. Control Measure for Ocean-Going Vessels At Berth.

The Control Measure for Ocean-Going Vessels At Berth is set forth in sections 93130 through 93130.20, title 17, California Code of Regulations, and is referenced as the "Control Measure" within those sections.

On January 1, 2021, the requirements of this Control Measure shall supersede the requirements of section 93118.3 of title 17 and section 2299.3 of title 13 of the California Code of Regulations. However, the reporting and recordkeeping requirements of section 93118.3 (g) of title 17 shall remain in effect for compliance years through 2020. The annual statements of compliance for 2020 in section 93118.3 (g)(1)(A)(2) and (g)(2)(A)(3) are still due to the Executive Officer on March 1, 2021. Annual wharfinger data from the ports under section 93118.3 (g)(3) is still due to the Executive Officer on April 1, 2021. Compliance records in section 93118.3 (g)(1)(B), (g)(2)(B), and (g)(3)(B) are still required to be maintained for 5 years, through December 31, 2025.

As specified in section 93130.20, the individual provisions in this Control Measure are severable. However, if sections 93130 through 93130.20 collectively are repealed or deemed invalid in their entirety by a final court decision, the requirements of section 93118.3 of title 17 and section 2299.3 of title 13 of the California Code of Regulations shall again become operative.

Note: Authority cited: Sections 38560, 38562, 39600, 39601, 39658, 39659, 39666, 43013, and 41511, Health and Safety Code. Reference: Sections 38510, 38530, 38562, 38566, 38580, 39600, 39650, 39658, 39659, 39666, 41510 and 41511, Health and Safety Code.

Section 93130.1. Purpose and Intent.

The purpose of this Control Measure is to reduce oxides of nitrogen (NOx), reactive organic gasses (ROG), particulate matter (PM), diesel particulate matter (DPM), and greenhouse gas (GHG) emissions from ocean-going vessels while docked at berth at California ports. This Control Measure also ensures that

ocean-going vessels do not create excess visible emissions. California’s ocean-going vessel operations are largely situated in and around at-risk communities that directly benefit from localized reductions of NOx and PM. This contributes to meeting community health goals set forth in Assembly Bill 617 (Garcia, Stats. 2017, ch. 136). Furthermore, NOx and PM emission reductions contribute to meeting California’s State Implementation Plan obligations for attainment, and further CARB’s obligations under sections 39660 et seq. and 43013 et seq. of the Health & Safety Code. Additionally, reductions from shore power have a benefit of reducing GHG emissions. This contributes to meeting California’s GHG emission reduction targets established in Assembly Bill 32 (Nunez, Stats. 2006, ch. 488) and Senate Bill 32 (Pavley, Stats. 2016, ch. 249).

The intent of this Control Measure is to ensure that emissions from ocean-going vessels are reduced using a California Air Resources Board (CARB) approved emission control strategy to control PM, NOx, and ROG emissions at berth without increasing overall GHG emissions from this Control Measure, and that every ocean-going vessel meets visible emission standards at berth and at anchor. All parties necessary to achieving emission reductions from ocean-going vessels at berth have responsibilities and requirements under this Control Measure including but not limited to vessel operators, terminal operators, ports, and operators of CARB approved emission control strategies.

Note: Authority cited: Sections 38560, 38562, 39600, 39601, 39658, 39659, 39666, 43013, and 41511, Health and Safety Code. Reference: Sections 38510, 38530, 38562, 38566, 38580, 39600, 39650, 39658, 39659, 39666, 41510 and 41511, Health and Safety Code.

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(b) Definitions.

The definitions in Health and Safety Code sections 39010 through 39060 shall apply to this Control Measure, except as otherwise specified in this section.

- (1) “Alternative Control Technologies” means technologies, techniques, or measures that reduce the emissions of NOx, PM, ROG, or GHG from an auxiliary engine and/or tanker auxiliary boiler other than shutting it down and operating on shore power.
- (2) “Anchorage” means a vessel’s allotted place to moor in place or drop anchor in California waters.
- (3) “Applicant” means any person who requests an approval from CARB for an emission control strategy.
- (4) “Application” means a formal request from an applicant using the process outlined in section 93130.5 of this Control Measure.
- (5) “Articulated Tug Barge” means a tanker barge that is mechanically linked with a paired tug that functions as one vessel. For the purposes of this Control Measure, articulated tug barges are not considered ocean-going vessels.
- (6) “Auxiliary Boiler” means a steam generator on an ocean-going vessel designed primarily to provide steam for uses other than propulsion or pumping cargo.

- (7) "Auxiliary Engine" means an engine on an ocean-going vessel designed primarily to provide power for uses other than propulsion, except that all diesel-electric engines shall be considered "auxiliary engines".
- (8) "Berth" means a vessel's allotted place at a wharf, pier, or dock. This does not include anchorages such as at the off-shore tanker terminal at El Segundo, or where passenger vessels tender at anchor such as at Santa Barbara, or Catalina.
- (9) "Bulk Vessel" means a self-propelled ocean-going vessel constructed or adapted primarily to carry unpackaged dry bulk cargo. A bulk vessel may use vessel-based or shore-based equipment for loading and discharging of cargo.
- (10) "Calendar Year" means the time period beginning on January 1 through December 31 of a single year.
- (11) "California Ports (Ports)" means any port or independent marine terminal in California that receives an ocean-going vessel including:
 - (A) Landlord ports where the port owns the wharves which it rents or leases to a terminal operator;
 - (B) Operational ports where the port functions as a terminal operator; and
 - (C) Independent marine terminals.
- (12) "California time aggregate method" means the California State Implementation Plan method of calculating opacity emissions. The California time aggregate method is virtually identical to United States Environmental Protection Agency method 9 in the procedures the observer follows, but most notably differs in that the data is analyzed by counting the readings that exceeded the limit, rather than averaging all readings in a set.
- (13) "CARB" means the California Air Resources Board.
- (14) "CARB Approved Emission Control Strategy (CAECS)" means a method of reducing emissions from an ocean-going vessel at berth to a satisfactory level for compliance with the Control Measure and is verified and approved by CARB.
- (15) "CARB Approved Emission Control Strategy Operator" means any party who operates a CARB approved emission control strategy to reduce emissions for compliance with this Control Measure.
- (16) "Charter" or "Charter Agreement" means an agreement or contract where one person rents, leases, hires, or uses ocean-going vessels from another person to convey or transport goods or passengers to one or more designated locations.

- (17) "Charter Company" means any person that is in the business of leasing, renting, or lending ocean-going vessel(s) to other companies or persons to convey or transport goods or passengers to one or more designated locations.
- (18) "Commissioned Shore Power Vessel" means a shore power equipped vessel that visits a compatible shore power berth at a terminal and has completed vessel commissioning at that terminal.
- (19) "Container Vessel" means a self-propelled ocean-going vessel constructed or adapted primarily to carry uniformly sized ocean freight containers.
- (20) "Diesel-Electric Engine" means a diesel engine connected to a generator that is used as a source of electricity for propulsion or other uses.
- (21) "Diesel Engine" means an internal combustion, compression-ignition engine with operating characteristics substantially similar to the theoretical diesel combustion cycle. Regulating power by controlling fuel supply in lieu of a throttle indicates a compression ignition engine.
- (22) "Diesel Particulate Matter (DPM)" means the particles found in the exhaust of diesel engines, which may agglomerate and adsorb other species to form structures of complex physical and chemical properties.
- (23) "Distributed Generation" means electrical generation technologies that produce electricity near the place of use.
- (24) "Docked at Berth (at berth)" means the state of being secured to a berth.
- (25) "Executive Officer" means the Executive Officer of CARB, or his or her designee.
- (26) "Excess Emissions" means air pollution emitted by a vessel at berth during a time period when the vessel operator is required to reduce emissions, but does not achieve the full required reductions.
- (27) "Exception" means a situation that results in a compliant visit with or without emission reductions.
- (28) "First Line" means the time when a vessel's line is first attached to a berth in the process berthing the vessel.
- (29) "Fleet" means a group of vessels of the same vessel type that have agreed to utilize their combined Vessel Incident Events (VIEs) at a port or marine terminal. Vessel operators designate their fleet in the vessel visit reporting.
- (30) "Foreign-flag Vessel" means any vessel of foreign registry including vessels owned by United States citizen(s) but registered in a nation other than the United States.

- (31) "General Cargo Vessel" means a self-propelled ocean-going vessel constructed or adapted primarily to carry cargo that must be loaded individually, and that may or may not be in uniform-sized ocean freight containers. May use vessel-based or shore-based equipment for loading and discharging of cargo.
- (32) "Government or Military Vessel" means vessels operated by any branch of local, state, federal government military service, or by a foreign government, when such vessels are operated on government or military non-commercial service. This definition includes Coast Guard vessels. A commercial vessel that also carries some military cargo is not a government or military vessel unless the military is the vessel operator.
- (33) "Greenhouse Gas" (GHG) means carbon dioxide (CO₂), methane (CH₄), nitrogen trifluoride (NF₃), nitrous oxide (N₂O), sulfur hexafluoride (SF₆), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and other fluorinated greenhouse gases.
- (34) "Grid-neutral" means emitting no more GHG emissions than if the strategy were powered by the California grid as represented in the most recent eGRID Summary Table for State Output Emission Rates as the California CO₂e emissions rate.
- (35) "Independent Marine Terminal" means a terminal that operates independently from a port or port authority. An Independent Marine Terminal has all the responsibilities of a terminal and a port.
- (36) "Last line" means when the time when the vessel is untied from the berth and the last line from the berth to the vessel is released.
- (37) "Lease" means a contract where one person conveys property or services to another person for a specific duration.
- (38) "Low Activity Terminal" means a terminal that has not previously exceeded the terminal thresholds in section 93130.10(a) of this Control Measure.
- (39) "Marine Gas Oil (MGO)" means any fuel that meets all the specifications for DMX or DMA grades as defined in Table I of International Standard ISO 8217, as revised on November 1, 2005, which is incorporated herein by reference, or DMX, DMA, or DMZ grades as defined in Table I of International Standard ISO 8217, as revised on June 15, 2010, which is incorporated herein by reference.
- (40) "Master" means the person who operates an ocean-going vessel or is otherwise in charge of the vessel's operations.
- (41) "Malfunction" means any sudden and unavoidable failure to operate in a normal manner by air pollution control equipment that is not caused in any way by poor maintenance, negligent operation, or any other reasonably preventable upset condition or equipment breakdown.

- (42) “Ocean-Going Vessel” means a commercial, government, or military vessel, excluding articulated tug barges, meeting any of these criteria:
- (A) A vessel greater than or equal to 400 feet in length overall as defined in 50 CFR § 679.2, as adopted June 19, 1996;
 - (B) A vessel greater than or equal to 10,000 gross tons under the convention measurement (international system) as defined in 46 CFR § 69.51-.61, as adopted September 12, 1989; or
 - (C) A vessel propelled by a marine compression ignition engine with a per-cylinder displacement of greater than or equal to 30 liters.
- (43) “Own” means having the incidents of ownership, including the legal title whether or not that person lends, or pledges an item; having or being entitled to the possession of the item as the purchaser under a conditional sale contract; or being the mortgagor of an item.
- (44) “Oxides of Nitrogen (NO_x)” means compounds of nitric oxide (NO), nitrogen dioxide (NO₂), and other oxides of nitrogen, which are typically created during combustion processes and are major contributors to smog formation and acid deposition.
- (45) “Particulate Matter (PM)” means any airborne finely divided material, except uncombined water, which exists as a liquid or solid at standard conditions (e.g., dust, smoke, mist, fumes, or smog).
- (46) “Particulate Matter 2.5 (PM_{2.5})” means any particulate matter with a diameter of less than 2.5 micrometers.
- (47) “Passenger Vessel” means a self-propelled vessel constructed or adapted primarily to carry people.
- (48) “Person” has the same meaning as set California Code, Health and Safety Code section 39047.
- (49) “Physical Constraint” at a terminal means an unavoidable barrier to provide a service due to the layout of a terminal or waterway where a state or federal public agency with jurisdiction over the resources effected by this Control Measure has made a safety determination that prevents the use of a CARB approved control strategy.
- (50) “Pilot on Board” means the vessel’s pilot has boarded the vessel to assume navigational control to prepare for vessel departure.
- (51) “Port” see California Port.
- (52) “Previously Unregulated Vessels” means container, refrigerated cargo, or passenger vessels that were part of a fleet before January 1, 2021 where the fleet did not exceed the annual visit thresholds specified in California Code of Regulations, title 17, section 93118.(b)(3)(E) for any year between 2014 and 2020 or the vessel is a steamship.

- (53) "Privately Owned United States Flag Commercial Vessel" means a vessel:
- (A) registered and operated under the laws of the United States,
 - (B) used in commercial trade of the United States,
 - (C) owned and operated by United States citizens, including a vessel under voyage or time charter to the Government, and
 - (D) a Government-owned vessel under bareboat charter to, and operated by, United States citizens.
- (54) "Reactive Organic Gases (ROG)" has the same meaning as set forth in subsection (a)(23) of section 2752 of title 13 of the California Code of Regulations.
- (55) "Ready to Work" means that the vessel is tied to the berth, the gangway has been lowered with netting down, and the United States Coast Guard, United States Customs and Border Protection, and other government authorities have cleared the vessel.
- (56) "Refrigerated Cargo Vessel" (commonly known as "reefer") means a self-propelled vessel constructed or adapted primarily to carry refrigerated cargo. Refrigerated cargo vessels include vessels where the cargo may be stored in large refrigerated rooms within the vessel or vessels that primarily carry refrigerated cargo containers.
- (57) "Regulated California Waters" means any and all of the following:
- (A) All California internal waters;
 - (B) All California estuarine waters;
 - (C) All California ports, roadsteads, and terminal facilities (collectively "ports");
 - (D) All waters within 3 nautical miles of the California baseline, starting at the California-Oregon border and ending at the California-Mexico border at the Pacific Ocean, inclusive;
 - (E) All waters within 12 nautical miles of the California baseline, starting at the California-Oregon border and ending at the California-Mexico border at the Pacific Ocean, inclusive;
 - (F) All waters within 24 nautical miles of the California baseline, starting at the California-Oregon border to 34.43 degrees North, 121.12 degrees West; inclusive; and
 - (G) All waters within the area, not including any islands, between the California baseline and a line starting at 34.43 degrees North, 121.12 degrees West; thence to 33.50 degrees North, 118.58 degrees West; thence to 32.65 degrees North, 117.81 degrees West; and ending at the California-Mexico border at the Pacific Ocean, inclusive.

- (58) "Remediation Fund" means an account established by a CARB-approved fund administrator under the terms of a Memorandum of Understanding with CARB to provide incentive monies to activities that achieve emission reductions, not otherwise required by law or regulation, in communities impacted by excess emissions from vessels at berth.
- (59) "Responsible Official" means any person(s) with the authority to determine the existence of emergency and safety events, and to substantiate that a vessel, terminal, port, or control equipment complies with requirements of this Control Measure.
- (60) "Responsible Party" means any person with an obligation under this Control Measure.
- (61) "Roll-On/Roll-Off Vessel" (commonly known as "ro-ro", "auto", or "vehicle carrier") means a self-propelled vessel constructed or adapted primarily to carry wheeled cargo that can be rolled on and off. Ro-ro vessels may carry exclusively automobiles (commonly known as a "pure car carrier") and/or a mixture of bulk equipment on wheels.
- (62) "Safety and Emergency Events" means an event where a responsible official reasonably determines that compliance with this Control Measure would endanger the safety of the vessel, crew, cargo, passengers, terminal, or terminal staff because of severe weather conditions, a utility event, or other extraordinary reasons beyond the control of the terminal operator or vessel operator.
- (63) "Selective Catalytic Reduction (SCR)" means an emission control system that reduces NOx emissions through the catalytic reduction of NOx in diesel exhaust by injecting nitrogen-containing compounds into the exhaust stream, such as ammonia or urea.
- (64) "Shore Power" refers to electrical power being provided by either the local utility or by distributed generation to a vessel at berth.
- (65) "Tanker Auxiliary Boiler" means a steam generator on a tanker vessel used to offload liquid product.
- (66) "Tanker Vessel" means a self-propelled vessel constructed or adapted primarily to carry liquid bulk cargo. Tanker vessels may carry petroleum crude, petroleum products, or non-petroleum based products, and are classified as either non-edible and dangerous or edible and non-dangerous.
- (67) "Terminal" means a terminal operator's facility consisting of adjacent wharves, piers, docks, other berthing locations and storage, which are used primarily for loading and unloading of passengers, cargo or material from vessels or for the temporary storage of this cargo or material on-site. Operational ports that rent a berth to vessel operators rather than lease to terminal operators shall treat that berth as a terminal.

- (68) “Terminal Incident Event (TIE)” is an exception provided to terminal operators to allow for a limited number of incidents where a vessel does not reduce emissions as required during a visit.
- (69) “Terminal Operator” means a person who leases terminal property from a port to load and unload passengers, cargo or material from vessels or for the temporary storage of this cargo or material on-site. Operational ports that use a single berth to service an individual customer are the terminal operator and the customer’s berth is a terminal.
- (70) “This Control Measure” means the Control Measure for Ocean-Going Vessels At Berth, California Code of Regulations, title 17, sections 93130-93130.20.
- (71) “Utility” shall have the same meaning and be used interchangeably with the term “Electric Utility” and means any person engage in or, or authorized to engage in, generating, transmitting, or distributing electric power by any facilities, including, but not limited to, any such person who is subject to the regulation of the Public Utilities Commission. Pub. Resource Code, section 25108 as it read on January 7, 1975.
- (72) “Utility Event” means the period of time during which any of the following events occurs; the utility event begins when such an event begins and ends when the event is over:
- (A) The utility serving the port or terminal cannot provide electrical power to the port because of a failure of equipment owned and maintained by the utility, a transmission emergency, distribution emergency, a California Independent System Operator (CAISO) or Los Angeles Department of Water and Power (LADWP) Stage 3 emergency, or the utility needs to reduce power to the port and/or terminal because of a sudden and reasonably unforeseeable natural disaster, such as, but not limited to, an earthquake, flood, or fire; or
 - (B) When the utility providing electrical power notifies the terminal operator(s) to reduce the use of grid-based electrical power in response to a transmission or distribution emergency, a CAISO or LADWP Stage 3 emergency, or to avoid a Stage 3 emergency if one is anticipated. The emergency event ends when CAISO or LADWP cancels the Stage 3 emergency or the utility notifies the terminal operator(s) that reduction in the use of grid-based electrical power is no longer necessary. The port may contact the terminal operator(s) on behalf of the utility if such an agreement exists between the utility and the port.
- (73) “United States flag Vessel” when used independently means either a United States government vessel or a privately owned United States flag commercial vessel.

- (74) “Vessel” means watercraft used, or capable of being used, as a means of transportation. For the purposes of this Control Measure, “vessel” is used interchangeably with the term “ocean-going vessel.”
- (75) “Vessel Arrival” means the date and time that a vessel is initially tied to a berth with first line.
- (76) “Vessel Commissioning” means the process undertaken by the vessel operator and terminal operator to ensure that the shore power equipment on the vessel is compatible with the shore power equipment on the terminal and that there are no safety issues for both the equipment and the personnel handling the connection.
- (77) “Vessel Departure” means the date and time that the a vessel casts off the last line.
- (78) “Vessel Incident Event (VIE)” is an exception provided to vessel fleets to allow for a limited number of incidents where a vessel operator does not reduce emissions as required during a vessel visit.
- (79) “Vessel Operator” means any person who decides where a vessel is to call or who is in direct control of the vessel. The party in direct control of the vessel may be a third-party hired to carry cargo or passengers for the person under a charter agreement to operate the vessel. Direct control does not include the vessel master or any other member of the vessel crew, unless the vessel master or crew member is also the owner of the vessel or decides where a vessel is to call.
- (80) “Vessel Owner” means any party with an ownership interest in the vessel. The owner may be an individual or multiple parties.
- (81) “Vessel Type” means a categorization of ocean-going vessels distinguished by the main cargo the vessel carries into the following types: bulk/general cargo, container, passenger, refrigerated cargo, ro-ro, and tanker vessels.
- (82) “Visible Emissions” means any particulate or gaseous matter which can be detected by the human eye.
- (83) “Visit” means the time period from when the vessel is “Ready to Work” to “Pilot on Board”.

Note: Authority cited: Sections 38560, 38562, 39600, 39601, 39658, 39659, 39666, 43013, and 41511, Health and Safety Code. Reference: Sections 38510, 38530, 38562, 38566, 38580, 39600, 39650, 39658, 39659, 39666, 41510 and 41511, Health and Safety Code.

Section 93130.3. Applicability.

- (a) General applicability.

Except as provided in section 93130.4 Exceptions, this Control Measure applies to:

- (1) any person who owns, operates, charters, or leases any United States or foreign-flag ocean-going vessel that visits a California port, terminal, or berth;
- (2) any person who owns, operates, or leases a port, terminal, or berth located where ocean-going vessels visit; and
- (3) any person who owns, operates, or leases CARB approved emission control strategy for ocean-going vessel auxiliary engines or tanker auxiliary boilers.

All responsible parties may be held jointly and severally liable.

(b) Federal requirements.

Nothing in this Control Measure shall be construed to amend, repeal, modify, or change any applicable federal regulations, including any United States Coast Guard regulations or requirements. Any person subject to this Control Measure shall ensure compliance with both federal regulations (including any United States Coast Guard regulations) and the requirements of this Control Measure, including but not limited to, where applicable, obtaining any necessary approvals, exceptions, or orders from the United States Coast Guard. To the extent any requirements in this Control Measure conflict with any applicable federal regulation, the requirements of the federal regulation shall prevail.

Note: Authority cited: Sections 38560, 38562, 39600, 39601, 39658, 39659, 39666, 43013, and 41511, Health and Safety Code. Reference: Sections 38510, 38530, 38562, 38566, 38580, 39600, 39650, 39658, 39659, 39666, 41510 and 41511, Health and Safety Code.

Section 93130.4. Exceptions.

The requirements of this Control Measure do not apply to:

(a) Non-stop voyages.

- (1) Ocean-going vessel voyages that do not stop at a California port, terminal, or berth including:
 - (A) Stopping and anchoring required by the United States Coast Guard;
 - (B) Stopping necessary due to force majeure or distress as defined in the “Responsibility of States for Internationally Wrongful Acts (2001)”, which is incorporated herein by reference; or
 - (C) A stop made solely to render assistance to persons, vessel, or aircraft in danger or distress.
- (2) The following voyages are considered a “stop” and do not qualify for the exemption:

- (A) Innocent passage of an ocean-going vessel that engages in any of the prejudicial activities specified in United Nations Convention on the Law of the Seas 1982, Article 19, subpart 2 as it read on November 16, 1994; or
- (B) The passage of vessel(s) that are otherwise scheduled or intended to call at a port or terminal facility for any reasons other than the three enumerated reasons listed in subsection (a)(1).

(b) Government and military vessels.

The requirements of this Control Measure do not apply to government or military vessels. However, government or military vessels are encouraged to act in a manner consistent, as far as is reasonable and practicable, with this section.

Note: Authority cited: Sections 38560, 38562, 39600, 39601, 39658, 39659, 39666, 43013, and 41511, Health and Safety Code. Reference: Sections 38510, 38530, 38562, 38566, 38580, 39600, 39650, 39658, 39659, 39666, 41510 and 41511, Health and Safety Code.

Section 93130.5. CARB Approved Emission Control Strategy.

(a) Executive Order requirement.

No person may operate an emissions control strategy, other than shore power, at a port or terminal for compliance with this Control Measure unless it receives approval by CARB through an Executive Order. The Executive Order shall provide compliance instructions for each emission control strategy and include requirements that each responsible party must follow in order to use that strategy.

(b) Requirement to reduce emissions.

The emission control strategy must reduce emissions for vessel visits, unless:

- (1) The visit is subject to an exception in sections 93130.4, 93130.8, or 93130.10 of this Control Measure; or
- (2) The person uses a TIE or a VIE for the visit as provided in section 93130.11 of this Control Measure; or
- (3) The person pays the remediation fund payments for the visit or portion of a visit as provided in section 93130.15 of this Control Measure.

(c) Shore power.

Shore power is a CARB approved emission control strategy. If distributed generation is used to supply shore power, the electricity generated must meet the following emissions standards:

- (1) NO_x emissions no greater than 0.03 gram per kilowatt-hour (g/kW-hr);

- (2) PM emissions equivalent to the combustion of natural gas with a fuel sulfur content of no more than 1 grain per 100 standard cubic foot;
 - (3) Distributed generation GHG emissions must be grid-neutral; and
 - (4) Ammonia emissions no greater than five parts per million on a dry volume basis (ppmdv), if selective catalytic reduction (SCR) is used.
- (d) Requirements for CARB approval of an emission control strategy.

(1) Emission Reductions.

To receive CARB approval, a person must demonstrate that the emission controls strategy achieves emission rates less than 2.8 g/kW-hr for NO_x, 0.03 g/kW-hr for PM_{2.5}, and 0.1 g/kW-hr for ROG for auxiliary engines. Additionally, for strategies approved after 2020, GHG emissions from the strategy must be grid-neutral for the year that the technology is granted an Executive Order. Default emission rates of auxiliary engines on ocean-going vessels are 13.8 g/kW-hr for NO_x, 0.17 g/kW-hr for PM_{2.5}, and 0.52 g/kW-hr for ROG.

(2) Tanker Vessels.

For tanker vessels with steam driven pumps, unless the tanker is using shore power to reduce emissions from auxiliary engines, a person must demonstrate that the CARB approved emission control strategy achieves emission rates less than 0.4 g/kW-hr for NO_x, 0.03 g/kW-hr for PM_{2.5}, and 0.02 g/kW-hr for ROG for tanker auxiliary boilers. Default emission rates of tanker auxiliary boilers on ocean-going vessels are 2.0 g/kW-hr for NO_x, 0.17 g/kW-hr for PM_{2.5}, and 0.11 g/kW-hr for ROG.

(3) Already approved strategies.

Where CARB has already issued an Executive Order for strategies under California Code of Regulations, title 17, section 93118 (e)(4), these are approved as a CARB approved emission control strategy. These strategies can operate under their Executive Order until 2025 before a person needs to apply for an extension in section 93130.5 (i)(1) of this Control Measure and demonstrate the strategies ability to meet all the requirements of this section including being grid neutral.

(4) SCR Strategy.

Emission control strategy utilizing SCR shall have ammonia slip no greater than 5 ppmdv, and shall continuously test ammonia slip and NO_x.

(5) Warranty.

The applicant must provide a warranty that meets the following:

- (A) The manufacturer of each emission control strategy shall warrant for 10 years when a unit is purchased that the strategy is:
 - i. Designed, built, and equipped to conform, at the time of sale, with this Control Measure; and

- ii. Free from defects in materials and workmanship which cause the failure of a warranted part to no longer be identical in all material respects to that part as described in the manufacturer's application for certification.
- (B) The applicant of the emission control strategy system shall provide the end user with maintenance practices set forth by the manufacturer.
- (6) When a person sells or leases a unit, the person must conduct in-use compliance testing of the strategy to demonstrate that the expected percentage of emissions reductions being achieved. The person must report the results to the Executive Officer within 30 days. If testing shows the unit does not meet the emission requirements set forth in section 93130.5 (d)(1) the unit cannot be used to satisfy the emission requirements of this regulation.
- (e) Application process.
 - (1) Before submitting an application requesting approval from CARB for an emission control strategy, an applicant shall submit a test plan to the Executive Officer for conducting the emissions reduction testing, durability testing, and a timeline for testing.
 - (2) The applicant shall submit an application that includes all source test data only after the applicant receives CARB approval for the test plan.
 - (3) If the Executive Officer approves of the application, the applicant's strategy will be considered a "CARB approved emission control strategy" and shall become a compliance option for the type(s) of vessel visits for which the emission control strategy is approved, when used in a manner that is consistent in accordance with all the conditions of the approval.
- (f) Test plan requirements.
 - (1) A test plan shall include:
 - (A) The contact persons, phone numbers, names, and addresses of person submitting the test plan.
 - (B) Description of the emission control strategy's principles of operation. A schematic depiction of the components and operation must be included. It is the responsibility of the applicant to demonstrate that the qualifying strategy relies on sound principles of science and engineering to achieve emission reductions.
 - (C) Description of testing to be conducted to demonstrate emission reductions and durability.

(D) Timeline for all emissions reduction testing and durability testing, including an estimate for the testing's duration and the number of vessel visits needed to complete proposed testing.

(2) Durability.

The applicant of an emission control strategy shall demonstrate, to the satisfaction of the Executive Officer, the durability of the applicant's emission control strategy through an actual field demonstration. If the applicant has demonstrated the durability of the equipment (identical in design and components) in a prior verification or has demonstrated durability through field experience, the applicant may request that the Executive Officer accept the previous demonstration in fulfillment of this requirement. In evaluating such a request, the Executive Officer may consider all relevant information including, but not limited to, the similarity of baseline emissions and application duty cycles, the relationship between the emission control group used in previous testing and the current emission control group, the number of engines tested, evidence of successful operation and user acceptance, and published reports.

(3) Test plan disapproval.

If, after reviewing the test plan, the Executive Officer determines that the applicant has not made a satisfactory demonstration that its strategy relies on sound principles of science and engineering to achieve emission reductions at the rates required for certification or if the test plan is incomplete, the Executive Officer shall notify the applicant of the disapproval in writing within 30 calendar days of receiving the test plan. The applicant may choose to withdraw from the application process or submit additional materials and clarifications.

(4) Test plan approval.

Within 45 calendar days after determining the test plan is satisfactory, the Executive Officer shall issue a test plan approval letter to the applicant.

(g) Source testing.

A person shall use source testing to demonstrate that a proposed emission control strategy achieves the performance standards in section 93130.5 (d) of this Control Measure. Testing must be done by certified third party source testers specified in the test plan. Alternative test methods or emission verifications may be used when specified in the test plan upon written approval from the Executive Officer. The following requirements shall apply to source testing conducted under this Control Measure:

- (1) NO_x, N₂O, CO₂, CO, CH₄, and Diesel PM or PM₁₀, shall be measured using ISO 8178 Test Procedures: ISO 8178-1: August 15, 1996(E) ("ISO 8178 Part 1"); ISO 8178-2: August 15, 1996(E) ("ISO 8178 Part 2"); and ISO 8178-4: August 15, 1996(E)

(“ISO 8178 Part 4” August 15, 1996), respectively, all of which are incorporated herein by reference;

- (2) PM_{2.5} is calculated using the factor of weight fraction of PM_{2.5}/TPM based on CARB's speciation data for PM size fractions (“PMPROF REF (Excel) - Reference number for PM profiles,” July 8, 2019, incorporated herein by reference). For MGO, the factor is 0.92;
 - (3) ROG shall be calculated as a fraction of the TOG, set forth in CARB's Off-Road Diesel HC to Rog/Tog Ratio (“FRAC (Excel) - Fraction data for source categories,” February 21, 2019, incorporated herein by reference). For MGO, the factor is 0.856 for internal combustion engines and 0.946 for boilers. TOG shall be measured using Method 25A (40 CFR Pt. 60, App. A-7, Method 25A, December 23, 1971), which is incorporated herein by reference;
 - (4) CO₂E for a control system shall be calculated as follows $\text{lbs CO}_2\text{E} = (\text{lbs CO}_2 + 25 * \text{lbs CH}_4 + 298 * \text{lbs N}_2\text{O})$. CO₂, CH₄ and N₂O shall be measured before and after the control strategy, and include any uncontrolled auxiliary sources for the control strategy using the test methods specified in section 93130.5(g)(1) and 93130.5(g)(3) in this Control Measure. Strategies that use a fuel with a CARB Low Carbon Fuel Standard certified pathway may apply a reduction to CO₂E by the factor of the carbon intensity of the fuel to the carbon intensity of the standard fuel;
 - (5) Grid-neutral shall be determined by calculating the ratio of the CO₂E to the measured MWh of the control system which value must be lower than the state output emission rate;
 - (6) Ammonia slip shall be measured using the Bay Area Air Quality Management District Source Test Procedure ST-1B, Ammonia Integrated Sampling, dated January 20, 1982, which is incorporated herein by reference, or other equivalent CARB or district approved test method(s);
 - (7) The sulfur content of fuels shall be determined pursuant to International Standard ISO 8754 (as adopted on July 15, 2003), which is incorporated herein by reference;
 - (8) Exhaust Flow Rate shall be measured using CARB Method 100, Procedures for Continuous Gaseous Emission Stack Sampling (as amended July 28, 1997), which is incorporated herein by reference; and
 - (9) Engine Work shall be determined by measuring the total power output in MWh of the control strategy's generators electrical output during the test periods.
- (h) Application Submittals to CARB.

- (1) All applications, correspondence, and reports relating to source testing shall be submitted to CARB addressed to:

CHIEF, TRANSPORTATION AND TOXICS DIVISION
CALIFORNIA AIR RESOURCES BOARD
1001 I STREET
SACRAMENTO, CA 95814

- (2) Verbal submissions do not constitute acceptable application formats.
 - (3) Supporting data in electronic format may be accepted as part of the application at the discretion of the Executive Officer.
 - (4) Applications shall follow the format and include the contents described in CARB's Recommended Emissions Testing Guidelines for Ocean-Going Vessels (dated June 20, 2012), which is incorporated herein by reference.
 - (5) CARB may allow electronic or e-mail submittal with instructions on the CARB website.
 - (6) The Executive Officer shall determine whether the application is complete. If incomplete, the Executive Officer will notify the applicant within 30 calendar days requesting additional information required to complete the application.
- (i) CARB approval of the control strategy.

Within 90 calendar days after an application has been deemed complete, the Executive Officer shall act to approve or disapprove the application. The Executive Officer shall notify the applicant of the decision in writing and identify any terms and conditions that are necessary for any party to use the CARB approved emission control strategy. The approval of an emission control strategy is valid for 5 years, unless it is revoked by CARB as set forth in section 93130.5 (i)(3).

- (1) Extensions of CARB approved emission control strategy.

If the applicant wishes to extend an approval of a CARB approved emission control strategy, it must apply to do so within 6 months of the end date of the approval to ensure the Executive Order does not lapse. The applicant may apply for an extension by submitting an extension application to the Executive Officer asserting that the strategy has not changed and is still effective, following to the requirements specified in subsection (h) above.

- (2) Modifications to a CARB approved emission control strategy.

(A) Proposed modifications to the design or operation of a CARB approved emission control strategy that have any potential to affect the emissions control effectiveness or operational

performance must be reviewed and approved by the Executive Officer before they are implemented.

- (B) Failure to obtain Executive Officer approval before modifying the design or operation of a CARB approved emission control strategy is a violation, and may also be grounds for revocation of CARB's approval, as set forth in subsection 93130.5 (i)(3).
- (C) The applicant shall describe in detail the design modification along with an explanation of how the modification will change the operation and performance of the strategy. The applicant shall submit additional test data, durability data, engineering justification and analysis, or any other information deemed necessary by the Executive Officer to address the differences between the modified and original designs, and to ensure that the strategy's reductions are maintained.
- (D) A modification includes, but is not limited to:
 - i. Any change of materials used in, or specifications of, the control strategy;
 - ii. Any change to the components, component design, composition, materials, or reagent usage;
 - iii. Any change to the sensors, part sizes, or sizing methodology;
 - iv. Any change to the monitoring and notification system control; logic, algorithms, operating parameters; or
 - v. Any proposed change to a portion of the approval.
- (E) The Executive Officer will reissue the approval with updates to reflect the modifications if he or she determines that the modifications have no material effect on the control strategy, or if the modifications are found to affect the control strategy but the strategy's emission reductions still meet the requirements in section 93130.5(d) of this Control Measure.

(3) Revoking a CARB approved emission control strategy.

If an applicant modifies the design or operation of a CARB approved emission control strategy without review and approval pursuant to subsection (2) above, the Executive Officer may revoke its approval of the emission control strategy. To resume compliance using the strategy, the applicant must re-submit an application and receive a new approval.

(j) Review of CARB approved emission control strategy.

- (1) At a minimum, emission control technologies shall be tested annually to demonstrate that the expected percentage of emissions reductions being achieved.

- (2) The applicant shall provide the results of such testing to the Executive Officer by December 31, annually.
- (3) The Executive Officer may modify the testing frequency as he or she deems appropriate.
- (4) The Executive Officer may request that the owner or operator of a CARB approved emission control strategy conduct periodic emission source testing or other types of monitoring to verify the proper operation of alternative control technologies or distributed generation equipment, or to verify the emission rate of an auxiliary engine.

(k) Records Retention

- (1) Records made pursuant to Section 93130.5 shall be kept for a minimum of five years. This information shall be supplied to the Executive Officer within 30 days of a request from CARB staff.

Note: Authority cited: Sections 38560, 38562, 39600, 39601, 39658, 39659, 39666, 43013, and 41511, Health and Safety Code. Reference: Sections 38510, 38530, 38562, 38566, 38580, 39600, 39650, 39658, 39659, 39666, 41510 and 41511, Health and Safety Code.

Section 93130.6. Opacity Requirement.

- (a) No person shall discharge or cause the discharge from any ocean-going vessel at berth and at anchor, into the atmosphere, any visible emissions of any air pollutant, for a period of periods aggregating three minutes in any 1 hour from any operation on the vessel that is:
 - (1) As dark as the Ringelmann 2, as published by the United States Bureau of Mines (May 1967), which is incorporated by reference; or
 - (2) Of such opacity as to obscure an observer's view to a degree equal to or greater than the Ringelmann 2.
- (b) The California time aggregate method and the United States Environmental Protection Agency Opacity Test Method 9 (40 CFR Pt. 60, App. A-4, December 23, 2017), which is incorporated herein by reference will be used to analyze the readings to determine compliance.

Note: Authority cited: Sections 38560, 38562, 39600, 39601, 39658, 39659, 39666, 43013, and 41511, Health and Safety Code. Reference: Sections 38510, 38530, 38562, 38566, 38580, 39600, 39650, 39658, 39659, 39666, 41510, 41511, and 41701, Health and Safety Code.

Section 93130.7. Vessel Operator Requirements.

Vessel operators that visit a berth or terminal in California shall meet the following requirements. Any failure to perform any specific items in this section shall constitute a separate violation for each day that the failure occurs.

- (a) Shore power requirements for at berth emission reductions.

Vessel operators with commissioned shore power vessels shall plug in to shore power on each and every visit to a compatible shore power berth.

(b) Requirements for vessel auxiliary engines.

Vessel operators shall reduce auxiliary engine emissions to the performance standards set forth in section 93130.5(d)(1) of this Control Measure through use of a CARB approved emission control strategy while at berth by the date specified for each vessel type in this section unless the visit qualifies for an exception identified in sections 93130.4, 93130.8, or 93130.10 of this Control Measure. A summary of responsibilities is provided in section 93130.17 of this Control Measure.

| Table 1: Compliance Start Dates by Vessel Type | |
|---|--|
| January 1, 2021 | Container and refrigerated cargo vessels |
| January 1, 2021 | Passenger vessels |
| January 1, 2025 | Roll-on roll-off vessels |
| January 1, 2027 | Tanker vessels that visit the ports of Los Angeles or Long Beach |
| January 1, 2029 | All remaining tanker vessels |

(c) Requirements for tanker auxiliary boilers on tanker vessels with steam driven product pumps.

Vessel operators shall reduce boiler emissions to the performance standards set forth in section 93130.5(d)(2) of this Control Measure through use of a CARB approved emission control strategy while at berth by the date specified for each vessel type in this section unless the visit qualifies for an exceptions identified in sections 93130.4, 93130.8, or 93130.10 of this Control Measure. A summary of responsibilities is provided in section 93130.17 of this Control Measure.

| Table 2: Compliance Start Dates for Tanker Vessels with Steam Driven Product Pumps | |
|---|--|
| January 1, 2027 | Tanker vessels with steam driven product pumps that visit the ports of Los Angeles or Long Beach |
| January 1, 2029 | All remaining tanker vessels with steam driven product pumps |

(d) Visits by vessels with on-board control strategies.

If the CARB approved emission control strategy is operated solely on the vessel, vessel operators shall confirm in writing with terminal operator that the equipment is operational and will be used, prior to the vessel's arrival at a California berth.

(e) Vessel compliance checklists.

Vessel operators shall complete all items in the checklist to ensure compliance under the Control Measure:

- (1) At least 7 calendar days before arrival, the vessel operator shall communicate in writing with the terminal operator and operator of the CARB approved emission control strategy to coordinate the use of a CARB approved emission control strategy and do all of the following if the vessel operator is using a CARB approved emission control strategy:
 - (A) Request use of a CARB approved emission control strategy; and
 - (B) Supply the terminal operator and the operator of the CARB approved emission control strategy with information about the compatibility of the vessel with the intended CARB approved emission control strategy.
- (2) Ensure the vessel is commissioned as required by the terminal operator.
- (3) Use shore power or another CARB approved emission control strategy during the vessel visit.
 - (A) Begin using shore power or another CARB approved emission control strategy within 1 hour after “Ready to Work”.
 - (B) Cease using shore power or another CARB approved emission control strategy no sooner than 1 hour before “Pilot on Board.”
- (4) Report the following visit information to CARB electronically within 7 calendar days of departure, using local time for all dates and times:
 - (A) Vessel name;
 - (B) Vessel IMO number;
 - (C) Vessel type;
 - (D) Vessel operator contact information, including fleet, name, address, email address, and telephone number;
 - (E) Port, terminal, and berth visited;
 - (F) Vessel arrival time and vessel departure time;
 - (G) Vessel shift to another berth (must be reported as a separate visit), where applicable;
 - (H) Type of CARB approved emission control strategy used, where applicable;
 - (I) Date and time when vessel declared as “Ready to Work”;

- (J) date and time when a CARB approved emission control strategy begins reducing emissions and date and time when a CARB approved emission control strategy stops reducing emissions, where applicable;
 - (K) Type of fuel used in auxiliary engine(s) and auxiliary boiler(s);
 - (L) Sulfur content of fuel used in auxiliary engine(s) and auxiliary boiler(s), where applicable;
 - (M) Amount of fuel used in auxiliary engine(s) and boiler(s), during vessel visit, where applicable;
 - (N) Date and time pilot on-board in preparation for departure;
 - (O) Information specified in the approved compliance strategy's Executive Order compliance instructions;
 - (P) Information if a vessel uses an exception, including the type of exception, a detailed description, including dates and times, and any relevant correspondence (e.g. emails) documenting the visit exception;
 - (Q) Information if a vessel uses the remediation fund, including detailed description of the allowed circumstance outlined in section 93130.15 of this Control Measure, the number of days/hours the event took place, and the tier rating of the auxiliary engine; and
 - (R) Information if a TIE or VIE is used for the visit including the person who authorized the use of the TIE or VIE.
- (f) Send accurate and complete reporting to CARB.
- (1) Vessel compliance information submitted to CARB shall:
 - (A) Be written in the English language;
 - (B) Attest that the information submitted is true, accurate and complete, signed by the Responsible Official under penalty of perjury; and
 - (C) Be submitted to CARB in writing to:

CHIEF, TRANSPORTATION AND TOXICS DIVISION
CALIFORNIA AIR RESOURCES BOARD
1001 I STREET
SACRAMENTO, CA 95814
 - (2) CARB may also allow online submittal to a CARB reporting system or e-mail with instructions on the CARB website.
- (g) Records Retention

- (1) Records made pursuant to Section 93130.7 shall be kept for a minimum of five years. This information shall be supplied to the Executive Officer within 30 days of a request from CARB staff.

Note: Authority cited: Sections 38560, 38562, 39600, 39601, 39658, 39659, 39666, 43013, and 41511, Health and Safety Code. Reference: Sections 38510, 38530, 38562, 38566, 38580, 39600, 39650, 39658, 39659, 39666, 41510 and 41511, Health and Safety Code.

Section 93130.8. Vessel Visit Exceptions.

Vessel operators are exempt from the operational requirements in section 93130.7 of this Control Measure if any of the following occurs.

- (a) Vessel safety and emergency events.

The emission reduction requirements of section 93130.7 and section 93130.9 of this Control Measure do not apply during a portion of the visit that a responsible official reasonably determines that compliance with section 93130.7 would endanger the safety of the vessel, its crew, its cargo or its passengers because of severe weather conditions, a utility event or other extraordinary reasons beyond the master's reasonable control. All safety and emergency events are subject to review and audit by the Executive Officer. This exception applies if approved and only as long as the event occurs and only to the extent necessary to secure the safety of the vessel, its crew, its cargo, or its passengers and provided that the master:

- (1) Take all reasonable precautions after the conditions necessitating the exception have ended to avoid or minimize repeated claims of exception under this subsection; and
- (2) Include with the reporting requirement of section 93130.7(e)(4) of this Control Measure all documentation necessary to establish the conditions necessitating the safety exception and the date(s), local time, and location. All required documentation must be in the English language.

- (b) Bulk and general cargo vessels.

Bulk and general cargo vessels are not subject to the vessel auxiliary engine requirements in sections 93130.7(b) of this Control Measure, and are only required to report their vessel visit activity under section 93130.7(e)(4) of this Control Measure starting January 1, 2021.

- (c) Vessel commissioning.

The first vessel commissioning visit made by a vessel to a terminal may be an exception as long as the vessel was able to successfully connect to shore power during that visit. Documentation of a successful vessel commissioning

must be submitted with the vessel visit reporting requirements of section 93130.7(e)(4) of this Control Measure. Additional vessel commissioning visits may qualify for exception if approved by CARB in writing where the vessel operator demonstrates:

- (1) The commissioning process could not be accomplished in a single visit; or
- (2) The terminal requires that the vessel be recommissioned.

(d) Research.

Vessel visits that participate in testing of an alternative technology may be an exception provided that the vessel operator:

- (1) Receives a CARB approved test plan for the alternative technology prior to arrival;
- (2) Participates in testing in accordance with the approved test plan;
- (3) Keeps a copy of the approved test plan on the vessel at all times;
- (4) Provides a copy of the approved test plan to CARB staff upon request; and
- (5) Reports all information including the use of the research exception pursuant to section 93130.7(e)(4) of this Control Measure.

(e) Previously unregulated vessels.

- (1) Until January 1, 2023, previously unregulated vessels are not subject to the vessel auxiliary engine requirements in sections 93130.7(b) of this Control Measure.
- (2) Vessel operators are required to report their vessel visit activity under section 93130.7(e)(4) of this Control Measure.

(f) Vessels visiting a low activity terminal.

- (1) The specific requirements for vessel categories in section 93130.7 and section 93130.9 of this Control Measure do not apply to vessel visits to low activity terminals as specified in section 93130.10(a) of this Control Measure.
- (2) Vessel operators are required to report their vessel visit activity under section 93130.7(e)(4) of this Control Measure starting on January 1, 2021.

(g) Vessel incident event (VIE) and terminal incident event (TIE).

- (1) The requirements of section 93130.7 and 93130.9 of this Control Measure do not apply during a visit if the fleet operator uses a VIE or terminal operator uses a TIE as specified in section 93130.11 of this Control Measure.

- (2) Vessel operators are required to report their vessel visit activity under section 93130.7(e)(4) of this Control Measure.
- (h) Remediation.
 - (1) The requirements of this Control Measure do not apply during a visit that qualifies and uses the remediation fund option in section 93130.15 of this Control Measure.
 - (2) Vessel operators are required to report their vessel visit activity under section 93130.7(e)(4) of this Control Measure.

Note: Authority cited: Sections 38560, 38562, 39600, 39601, 39658, 39659, 39666, 43013, and 41511, Health and Safety Code. Reference: Sections 38510, 38530, 38562, 38566, 38580, 39600, 39650, 39658, 39659, 39666, 41510 and 41511, Health and Safety Code.

Section 93130.9. Terminal Operator Requirements.

Terminal operators that receive ocean-going vessels in California shall meet the following requirements. Any failure to perform any specific items in this section shall constitute a separate violation for each day that the failure occurs.

- (a) Shore power requirements for at berth emission reductions.
 - (1) Operators of terminals with berths equipped to receive compatible shore power vessels must connect these vessels to shore power when visited by a commissioned shore power vessel.
 - (2) The terminal operator is responsible for commissioning vessels equipped with compatible shore power.
 - (3) If the commissioned shore power vessel is berthed in a way that prevents it from connecting to shore power, the terminal may use a TIE or must provide an alternative CARB approved emission control strategy compatible with the vessel.
- (b) Visits to terminals without shore power.

Terminals without shore power are responsible for arranging a CARB approved emission control strategy for each visit by vessels with requirements for auxiliary engines or tanker auxiliary boilers in section 93130.7 (b) or 93130.7 (c) of this Control Measure. If neither the vessel nor the terminal has shore power, then it is the shared responsibility of both parties to arrange a CARB approved emission control strategy for this visit.

- (c) Visits by vessels with on-board control strategies.

If the CARB approved emission control strategy is operated solely on the vessel, terminal operators are required to confirm with vessel operators that the equipment is operational and will be used, prior to the vessel's arrival at a California berth.

(d) Terminal operator compliance checklist.

Terminal operators shall complete the following items in this checklist to ensure compliance under the Control Measure:

- (1) At least 7 calendar days before arrival, the terminal operator shall communicate with the vessel operator and operator of the CARB approved emission control strategy in writing to coordinate the use of a CARB approved emission control strategy. If the vessel operator is using a CARB approved emission control strategy, the terminal operator shall supply the vessel operator with information about the terminal's compatibility with the intended CARB approved emission control strategy.
- (2) For shore power:
 - (A) Ensure shore power vessels are commissioned for shore power at the terminal they are visiting or notify vessel operator if commissioning is required.
 - (B) Position vessel appropriately to enable use of shore power or the CARB approved emission control strategy.
 - (C) Record power meter reading before starting shore power;
 - (D) Plug in vessel within 1 hour of vessel "Ready to Work";
 - (E) Disconnect shore power no more than 1 hour before "Pilot on Board"; and
 - (F) Record power meter reading after disconnecting from shore power.
- (3) Report the following vessel visit information within 7 calendar days of the vessel's departure, using local time for all dates and times:
 - (A) Vessel name;
 - (B) Vessel IMO number;
 - (C) Port, terminal and berth visited;
 - (D) Terminal operator contact information, including name, address, email address, and telephone number;
 - (E) Arrival date and time;
 - (F) Departure date and time;
 - (G) CARB approved emission control strategy used;
 - (H) If CARB approved emission control strategy was provided by the terminal, or terminal and vessel shared arrangement responsibility, start and end date and time of emission control;

- (I) For shore power visits, the terminal must report the power meter readings at the time of shore power connection and after disconnection;
 - (J) Information specified in the approved compliance strategy's compliance instructions;
 - (K) Information relating to any exception claimed by the terminal during the visit, including a detailed description of the exception and documentation detailing the exception, and any relevant correspondence (e.g. emails) documenting the visit exception;
 - (L) Information if a terminal uses the remediation fund, including detailed description of the allowed circumstance outlined in section 93130.15 of this Control Measure, the number of days/hours the event took place, and the tier rating of the vessel's engine; and
 - (M) Information if a TIE or VIE is used for the visit including the person who authorized and if a TIE or VIE was used.
- (e) Send accurate and complete reporting to CARB.
- (1) Terminal compliance information submitted to CARB shall:
 - (A) Be written in the English language;
 - (B) Attest that the information is true, accurate and complete, signed by the Responsible Official under penalty of perjury, and
 - (C) Be submitted to CARB in writing to:

CHIEF, TRANSPORTATION AND TOXICS DIVISION
CALIFORNIA AIR RESOURCES BOARD
1001 I STREET
SACRAMENTO, CA 95814
 - (2) CARB may also allow online submittal to a CARB reporting system or e-mail with instructions on the CARB website.
- (f) Construction or repair.
- The terminal operator is responsible for providing an alternative CARB approved emission control strategy for vessels to reduce emissions if the CARB approved emission control strategy for the berth is unavailable due to construction or repair. Terminals also have the option of using a TIE or remediation fund for construction or repair.
- (g) Records Retention
- (1) Records made pursuant to Section 93130.9 shall be kept for a minimum of five years. This information shall be supplied to the Executive Officer within 30 days of a request from CARB staff.

Note: Authority cited: Sections 38560, 38562, 39600, 39601, 39658, 39659, 39666, 43013, and 41511, Health and Safety Code. Reference: Sections 38510, 38530, 38562, 38566, 38580, 39600, 39650, 39658, 39659, 39666, 41510 and 41511, Health and Safety Code.

Section 93130.10. Terminal Exceptions.

The terminal-related requirements of this Control Measure in section 93130.9 are subject to certain exceptions, set forth in this section.

(a) Vessel visits to a low activity terminal.

- (1) The at berth emission reduction requirements of section 93130.7 and section 93130.9 of this Control Measure do not apply during a visit if the vessel visits a low activity terminal.
- (2) For each vessel type listed in section 93130.7(b), a terminal that receives fewer than 20 visits in both 2019 and 2020 is initially considered a low activity terminal for that vessel type.
- (3) A low activity terminal that receives 20 or more visits per year for two consecutive calendar years from a vessel type no longer qualifies for the low activity terminal exception for that vessel type and is required to reduce emissions starting January 1 of the following year.
- (4) Terminal operators shall report vessel visit information under section 93130.9 (d)(3) of this Control Measure.

(b) Bulk and general cargo vessels.

Terminals that receive bulk and general cargo vessels are not required to arrange for CARB approved emission control strategies for their visits. Terminals are only required to report the vessel visit information for bulk and general cargo vessels under section 93130.9 (d)(3) of this Control Measure starting January 1, 2021.

(c) Terminal safety and emergency events.

The at berth emission reduction requirements of section 93130.7 and section 93130.9 of this Control Measure do not apply during a visit if a responsible official reasonably determines that compliance with this section would endanger the safety of the terminal, or its staff because of severe weather conditions, a utility event, or other extraordinary reasons beyond the terminal's reasonable control. All safety and emergency events are subject to review and audit by the Executive Officer. This exception applies if approved and only as long as the event occurs provided that the terminal operator:

- (1) Take all reasonable precautions after the conditions necessitating the exception have ended to avoid or minimize repeated claims of exception under this subsection; and

- (2) Include with the reporting requirements of section 93130.9(d)(3) of this Control Measure all documentation necessary to establish the conditions necessitating the terminal safety exception and the date(s), local time, and location. All required documentation must be in English.

(d) Research.

Vessel visits that participate in testing of an alternative technology may be excluded from the at berth emission reduction requirements in section 93130.7 and section 93130.9 of this Control Measure. Research visits are subject to reporting requirements 93130.9(d)(3) of this Control Measure. To qualify for a research exception, the following conditions must apply:

- (1) A research visit to a terminal must have a CARB approved research exception prior to arrival;
- (2) A terminal must confirm and record a visit's research exception status with CARB prior to arrival; and
- (3) Any testing must be conducted in accordance with the approved test plan.

(e) Terminal incident event (TIE) and vessel incident event (VIE).

The at berth emission reduction requirements of section 93130.7 and section 93130.9 of this Control Measure do not apply during a visit if the vessel fleet uses a VIE or the terminal operator uses a TIE specified in section 93130.11 of this Control Measure. Terminal operators shall report vessel visit information under section 93130.9 (d)(3) of this Control Measure.

(f) Remediation.

The at berth emission reduction requirements of section 93130.7 and section 93130.9 of this Control Measure do not apply during the portion of a visit that qualifies and uses the remediation fund option in section 93130.15 of this Control Measure. Terminal operators shall report vessel visit information under section 93130.9(d)(3) of this Control Measure.

Note: Authority cited: Sections 38560, 38562, 39600, 39601, 39658, 39659, 39666, 43013, and 41511, Health and Safety Code. Reference: Sections 38510, 38530, 38562, 38566, 38580, 39600, 39650, 39658, 39659, 39666, 41510 and 41511, Health and Safety Code.

Section 93130.11. Vessel Incident Events (VIE) and Terminal Incident Events (TIE).

A VIE or a TIE accommodates a limited number of situations where a vessel does not reduce emissions during a visit.

(a) Granting VIEs and TIEs.

- (1) The fleet that is designated in a vessel’s visit report will be granted VIEs based on a percentage of fleet vessel visits to a California port between January 1 and December 31 in the previous year. The terminal operator that is designated in a vessel’s visit report will be granted TIEs based on a percentage of vessel visits to the terminal between January 1 and December 31 in the previous year. In 2021, VIEs and TIEs will be granted by CARB staff by January 1, 2021. Each year after, VIEs and TIEs will be granted by CARB staff on February 1 of that year.
 - (2) These percentages are listed in the table in section 93130.11(b) of this Control Measure. The number of VIEs and TIEs granted is rounded to the nearest whole number. Since visit information is not available initially, in 2021, VIEs and TIEs will be determined by the fleet 2019 recordkeeping requirements in California Code of Regulations, title 17, section 93118.3(g)(1)(B) and wharfinger data in section 93118.3(g)(3)(A) of the previous at berth regulation.
 - (3) The fleet operator will be able to assign each received VIE to a visit made by a vessel in the fleet. The terminal operator will be able to assign each received TIE to a visit made by a vessel to the terminal.
- (b) Table of VIEs and TIEs rates.

| Table 3: VIEs and TIEs Rates by Vessel Type per Year | | | | | | | | | | | |
|---|--------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|
| | | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030+ |
| TIEs | All Terminals | 15% | 15% | 15% | 15% | 5% | 5% | 5% | 5% | 5% | 5% |
| VIEs | Container/ Reefer | 5% | 5% | 5% | 5% | 5% | 5% | 5% | 5% | 5% | 5% |
| | Passenger | 5% | 5% | 5% | 5% | 5% | 5% | 5% | 5% | 5% | 5% |
| | Ro-ro | | | | | 5% | 5% | 5% | 5% | 5% | 5% |
| | LA/LB Tankers | | | | | | | 5% | 5% | 5% | 5% |
| | Other Tankers | | | | | | | | | 5% | 5% |

(c) Expiring VIEs and TIEs.

VIEs and TIEs expire on January 31 of the year after they are granted. VIEs can only be used at the port for which they are granted and by the fleet they are granted to and TIEs can only be used at the terminal for which they are granted.

(d) Retiring VIEs and TIEs.

VIEs and TIEs are limited in number and can be used for infrequent situations listed in section 93130.17 of this Control Measure. Fleet operators and terminal operators must report the use of a VIE or TIE with the vessel visit report in sections 93130.7(e) and 93130.9(d) of this Control Measure. VIEs and TIEs cannot be traded with other fleets, terminals, or any other entity.

Note: Authority cited: Sections 38560, 38562, 39600, 39601, 39658, 39659, 39666, 43013, and 41511, Health and Safety Code. Reference: Sections 38510, 38530, 38562, 38566, 38580, 39600, 39650, 39658, 39659, 39666, 41510 and 41511, Health and Safety Code.

Section 93130.12. CARB Approved Emission Control Strategy Operator Requirements.

CARB approved emission control strategy operators shall fulfill the following responsibilities:

- (a) Maintain subcontractor services and agreements.
 - (1) Maintain a list of all subcontracted service providers and the services performed by each, maintaining copies of all agreements with service providers.
 - (2) Provide copies to CARB upon request of any agreement with service providers.
- (b) CARB approved emission control strategy checklist.

CARB approved emission control strategy operators shall complete all of the following items in this checklist for each vessel visit to ensure compliance under the Control Measure. Any failure to perform any specific items in this section shall constitute a separate violation for each day that the failure occurs.

- (1) Notification. At least 7 calendar days before a vessel's arrival, the operator of the CARB approved emission control strategy must coordinate in writing with the vessel operator and terminal operator for the use of the strategy and supply the vessel operator with information about the compatibility with the vessel and terminal of the CARB approved emission control strategy.

- (2) Operational. During the visit, the operator of the CARB approved emission control strategy shall:
 - (A) Begin use of control strategy within 1 hour of vessel “Ready to Work”;
 - (B) Record inlet and outlet levels of emissions during the visit; and
 - (C) Continue using control strategy until at least 1 hour before “Pilot on Board”.
 - (D) Ensure vessels are operating on CARB compliant distillate marine fuel.

- (3) Reporting. The operator of the CARB approved emission control strategy shall report the following information regarding the vessel visit within 7 calendar days of vessel departure, using local time for all dates and times:
 - (A) Vessel name;
 - (B) Vessel IMO number;
 - (C) Vessel type;
 - (D) Port, terminal and berth visited;
 - (E) Vessel operator contact information, including name, address, email address, and telephone number;
 - (F) Terminal operator contact information, including name, address, email address, and telephone number;
 - (G) Arrival date and time of the vessel;
 - (H) Departure date and time of the vessel;
 - (I) Dates and times when a CARB approved emission control strategy starts controlling emissions and finishes controlling emissions; and
 - (J) Vessel emissions while control strategy operated for the following categories:
 - i. NO_x emissions in g/kW hr;
 - ii. PM_{2.5} emissions in g/kW hr; and
 - iii. ROG emissions in g/kW hr.

(4) Malfunction Reporting.

The operator of the CARB approved emission control strategy shall report within 24 hours to CARB by electronic means, the following information regarding any malfunction that is expected to create emissions in excess of any applicable emissions limitation for a period greater than 1 hour. If electronic notification is not immediately possible, telephone notification or

notification at the beginning of the next working day is acceptable. The notification must include the following information:

- (A) Identification of the equipment causing the emissions in excess of any applicable emissions limitation;
- (B) Magnitude, nature, and cause of the excess emissions;
- (C) To the extent known, time and duration of the excess emissions;
- (D) Description of the corrective actions taken or expected to be taken to remedy the malfunction and to limit the excess emissions;
- (E) Information sufficient to demonstrate, to CARB's Executive Officer's reasonable satisfaction, that the malfunction was not caused in any way by poor maintenance, negligent operation, or any other reasonably preventable upset condition or equipment breakdown; and
- (F) Readings from any continuous emission monitor used in the emission control strategy and readings from any ambient monitors nearby.

(5) Corrective Action Report.

Within 7 calendar days after a malfunction has been corrected, the operator of the CARB approved emission control strategy shall submit a written report to CARB that includes:

- (A) A statement that the malfunction has been corrected, the date of correction, and proof of compliance with all applicable CARB approval requirements;
- (B) The specific cause of the malfunction;
- (C) A description of any preventive measures taken and/or to be taken; and
- (D) A statement affirming under penalty of perjury that the malfunction was not caused entirely or in part by poor maintenance, careless operation, poor design, or any other preventable condition or preventable equipment breakdown.

(6) Records Retention

- (A) Records made pursuant to Section 93130.12 shall be kept for a minimum of five years. This information shall be supplied to the Executive Officer within 30 days of a request from CARB staff.

(7) All information submitted to CARB shall:

- (A) Be written in the English language;
- (B) Attest that it is true, accurate, and complete, signed by the Responsible Official under penalty of perjury; and

(C) Be submitted to CARB in writing to:
CHIEF, TRANSPORTATION AND TOXICS DIVISION
CALIFORNIA AIR RESOURCES BOARD
1001 I STREET
SACRAMENTO, CA 95814

(D) CARB may also allow online submittal to a CARB reporting system or e-mail with instructions on the CARB website.

Note: Authority cited: Sections 38560, 38562, 39600, 39601, 39658, 39659, 39666, 43013, and 41511, Health and Safety Code. Reference: Sections 38510, 38530, 38562, 38566, 38580, 39600, 39650, 39658, 39659, 39666, 41510 and 41511, Health and Safety Code.

Section 93130.13. Port Requirements.

(a) Port infrastructure.

Ports with terminals not excluded under the thresholds set forth in section 93130.10(a) Terminal Exceptions of this Control Measure, shall provide equipment or necessary infrastructure that is outside of terminal operators' contractual ability to provide and which will enable a terminal to comply with this Control Measure including but not limited to necessary underground infrastructure, conduit, cabling, ducting, and shore power vaults.

(b) Cessation of obligation.

If a terminal operator and/or vessel operator elects to purchase and use CARB approved emissions control equipment that does not need port assistance or infrastructure to operate in compliance with this Control Measure, then the port has no additional responsibility for that equipment.

(c) Wharfinger data.

All operators of a public or private California port or independent marine terminal shall provide wharfinger data to the Executive Office of CARB annually by January 31st of the following calendar year, regardless of visit activity. At a minimum, the wharfinger information shall include for each visit to the port:

- (1) Name of the vessel;
- (2) Vessel type;
- (3) Name, address, email and telephone number for Company operating the vessel;
- (4) IMO number for each vessel;
- (5) Berth used by the vessel; and

- (6) Date(s) and time the vessel was initially tied to the berth and subsequently released from the berth.
- (d) Send accurate and complete reporting to CARB.

Port reports and wharfinger information submitted to CARB shall:

- (1) Be written in the English language;
- (2) Attest that it is true, accurate, and complete, signed by the Responsible Official under penalty of perjury; and
- (3) Be submitted to CARB in writing to:
CHIEF, TRANSPORTATION AND TOXICS DIVISION
CALIFORNIA AIR RESOURCES BOARD
1001 I STREET
SACRAMENTO, CA 95814
- (4) If available, CARB may also allow electronic or e-mail submittal with instructions on the CARB website.

Note: Authority cited: Sections 38560, 38562, 39600, 39601, 39658, 39659, 39666, 43013, and 41511, Health and Safety Code. Reference: Sections 38510, 38530, 38562, 38566, 38580, 39600, 39650, 39658, 39659, 39666, 41510 and 41511, Health and Safety Code.

Section 93130.14. Terminal and Port Plans and Interim Evaluation.

- (a) Terminal plans.

- (1) Terminal plan requirements.

Beginning in 2021, terminal operators shall submit a terminal plan that discusses how the terminal will comply with the requirements for ocean-going vessels visiting each berth. For vessel categories with compliance dates after 2021, the terminal operator shall submit plans with the most likely control strategy. As an alternative, Ports may submit plans for their terminal operators.

- (2) Terminal plan submission dates.

Terminal operators shall submit terminal plans to CARB by the following dates:

- (A) Container, refrigerated cargo, passenger terminals: July 1, 2021;
- (B) Ro-ro terminals: December 1, 2021;
- (C) LA/LB tanker terminals: December 1, 2021;
- (D) All other tanker terminals: December 1, 2021; and
- (E) Low-use terminals that exceeds the terminal threshold shall submit a terminal plan by July 1 the following year.

- (F) Ro-ro and tanker terminals shall revise and resubmit terminal plan on the following schedule, which must reflect any changes to the terminal since the initial plan:
 - i. Ro-ro terminals: February 1, 2024;
 - ii. LA/LB tanker terminals: February 1, 2026; and
 - iii. All other tanker terminals: February 1, 2028.

(3) Terminal plan information.

The terminal plan shall include discussion of necessary infrastructure modifications needed to reduce emissions from ocean-going vessels at a terminal. For each strategy implemented at a terminal, the terminal plan shall include:

- (A) Identification and description of all necessary equipment, including whether it will be located on the vessel, wharf, shore, or elsewhere;
- (B) Number of vessels expected to visit the terminal using the strategy;
- (C) List of each berth with geographic boundary coordinates;
- (D) Identity of berth(s) where equipment will be used;
- (E) Terminal/port specific berthing restrictions;
- (F) Schedule for implementing equipment; and
- (G) Division of responsibilities between the terminal operator and the port, including contractual limitations applicable to the terminal, relevant to enacting the infrastructure required by each terminal's plan; and
- (H) A terminal claiming that a physical and/or operational constraint will delay its ability to implement its preferred CARB-approved control strategy to achieve emission reductions from vessels at berth according to the requirements of section 93130 et seq, must also include with its terminal plan a technical feasibility study evaluating if there are any other emission control options that could be implemented more quickly at the terminal.

- (4) All terminal plans shall be signed by the applicable terminal's Responsible Official under penalty of perjury and are subject to verification by enforcement staff.

(b) Port plans.

(1) Port plan requirements.

Ports operators shall submit a plan showing proof that the necessary terminal infrastructure modifications are being developed or have been completed and/or report any modifications still required in order for all of

the Port's terminals with control requirements to reduce emissions of vessels at berth. Ports should use terminal plans as basis for developing port plans, and may submit terminal plans on behalf of one or more of the port's terminal operators.

(2) Port plan submission dates

Port operators shall submit port plans to CARB by the following dates:

- (A) Container, refrigerated cargo, passenger terminals: July 1, 2021;
- (B) Ro-ro terminals: December 1, 2021;
- (C) LA/LB tanker terminals: December 1, 2021;
- (D) Non-LA/LB tanker terminals: December 1, 2021;
- (E) Updated plan by July 1 the following year after any new terminal at the port exceeds the annual visit threshold.

(3) Port plan information.

The port operator shall include in its port plan a discussion of necessary infrastructure modifications needed to reduce emissions from ocean-going vessels at a terminal. For each strategy implemented at a berth, the plan must include all of the following:

- (A) Identification and description of which strategy each applicable terminal will use for compliance;
- (B) Identify any equipment purchases and/or construction that are in progress or must still be completed to reduce emissions;
- (C) Provide schedule for installing equipment and/or any necessary construction projects;
- (D) Identify terminals where equipment will be used;
- (E) Listing of each terminal with geographic boundary coordinates;
- (F) Specify any port specific berthing restrictions; and
- (G) List the division of responsibilities between the terminal and the ports for enacting the infrastructure required by each terminal's plan.

- (4) All port plans shall be signed by the applicable port's Responsible Official under penalty of perjury and are subject to verification by enforcement staff. If port plan schedules are not met, they are subject to enforcement actions.

(c) Approval of terminal or port plan plans.

Within 90 calendar days following submittal of a terminal plan under section 93130.14(a) or a port plan under section 93130.14(b), CARB shall notify the applicable terminal operator or port of any deficiencies in the contents of the plan (as set forth in sections 93130.14(a) and (b) respectively), and/or in the

plan's demonstration that the terminal or port is making good faith efforts to facilitate use of a CARB-approved control strategy at each berth. If CARB does not notify the applicable terminal operator or port of any such deficiencies, the plan shall be deemed acceptable on the 90th day following submittal.

- (d) Interim evaluation for tanker and ro-ro technology.

CARB staff will assess the progress made in adopting control technologies for use with tanker and ro-ro vessels, as well as the status of landside infrastructure improvements that may be needed to support emission reductions at ro-ro and tanker terminals. By July 1, 2023, staff will publish analysis and findings in a report and make it available for public review at least 30 calendar days prior to presenting the report to the Board at a public meeting. If staff finds that the compliance deadlines for ro-ro or tanker vessels need to be extended, the report will include recommendations to initiate staff's development of potential formal regulatory amendments.

Note: Authority cited: Sections 38560, 38562, 39600, 39601, 39658, 39659, 39666, 43013, and 41511, Health and Safety Code. Reference: Sections 38510, 38530, 38562, 38566, 38580, 39600, 39650, 39658, 39659, 39666, 41510 and 41511, Health and Safety Code.

Section 93130.15. Remediation Fund Use

This section sets forth an additional compliance option which may be used under limited circumstances where vessels and/or terminal operators have made certain enforceable commitments to controlling emissions at berth. Even if the emissions are not controlled for all or part of a vessel visit, under certain circumstances, a vessel may qualify to remediate emissions, as set forth in this section.

- (a) For a vessel or terminal operator to utilize the remediation fund, a remediation fund administrator must be established with a Memorandum of Understanding executed with CARB under section 93130.16 of this Control Measure to manage the funds generated at that port or independent marine terminal.
- (b) Vessel operators, terminal operators, and ports may request to use the remediation fund option in the following circumstances, if the request is supported by compelling documentation that demonstrates the eligibility of the request, consistent with the criteria in this section, as determined by CARB.
 - (1) Terminal equipment repairs – a terminal has invested in shoreside control equipment, and maintains that equipment according to manufacturer recommendations, but that equipment has failed and is being repaired, or new or replacement equipment has been ordered in a timely manner, but has not been received.

- (2) Vessel equipment repairs -- a vessel operator has invested in shore power or other on-board control equipment, and maintains that equipment according to manufacturer recommendations, but that equipment has failed and is being repaired, or new or replacement equipment has been ordered in a timely manner, but has not been received.
 - (3) Delays with operation of existing control strategy – a vessel visits a berth and all parties have taken the required actions to use a CARB-approved control strategy, but the visit fails to achieve the full emission reductions required under section 93130.5 of this Control Measure due to a delay or interruption in controlling emissions. If CARB-approved emission control strategy operator is under contract to reduce emissions from that vessel visit and a malfunction causes or contributes to a delay or interruption in emissions control, that operator must have notified CARB of the malfunction according to the provisions of section 93130.12(b)(4) of this Control Measure for that visit to be eligible to use the remediation fund for the uncontrolled hours of the visit.
 - (4) Terminal construction project – a terminal has invested in shoreside control equipment, and maintains that equipment according to the manufacturer recommendations, but takes that equipment out of service to allow a planned terminal upgrade or construction project that cannot safely be performed with the terminal side control equipment operating.
 - (5) A terminal plan deemed acceptable under section 93130.14(c) of this Control Measure identifies a physical and/or operational constraint that is delaying the implementation of a CARB-approved emission control strategy at the terminal.
- (c) For excess vessel emissions that are otherwise required to be reduced under section 93130.5 of this Control Measure, the vessel operator, terminal operator, or port may elect to request use of the remediation fund option for each hour of uncontrolled emissions during a vessel visit if all of the criteria in this section 93130.15 of this Control Measure are met. Such request shall be submitted to CARB electronically within 7 calendar days of the vessel's departure, according to the requirements of section 93130.7(e) for vessel operators, section 93130.9(d) for terminal operators, and section 93130.13 for ports.
 - (d) For each request to use the remediation fund option, CARB shall evaluate the request to determine if the requirements of this section have been met and the request is eligible. If the party requesting use of the remediation fund option fails to adequately support its eligibility for that option based on the criteria in subsection (c), above, to CARB's satisfaction, then CARB may deny that request. Within 30 calendar days of receipt of each request, CARB shall notify the requestor whether the visit or visits are eligible to use the remediation fund option. Ineligible requests to use the remediation fund

for a vessel visit shall result in that visit being considered non-compliant with this regulation.

- (e) Within 30 calendar days of CARB’s determination of eligibility, the requestor shall transfer a sum equal to the number of hours of excess emissions times the applicable hourly payment to the CARB-approved fund administrator, according to the specific payment provisions established by that administrator in its Memorandum of Understanding with CARB. Each partial hour of excess emissions shall be counted as full hour for the purpose of calculating the payment. These payments are intended to cover the administrator’s cost to achieve emission reductions through incentive activities in the communities exposed to the excess emissions, including 10 percent for administration expenses.
- (f) Remediation fund hourly amount.

| Table 4: Remediation Fund Hourly Amount | | |
|--|--|----------------------|
| Vessel Type | Hourly Remediation Payment Beginning in 2021* | |
| | Normal Rate | Tier III Rate |
| Container, Reefer, Ro-ro | \$1,900 | \$1,100 |
| Tanker with electric pumps | \$1,600 | \$1,000 |
| Tanker with steam driven pumps | \$3,400 | \$2,700 |
| Passenger vessels with capacity under 1,500 combined passengers and crew | \$5,300 | \$3,200 |
| Passenger vessels with capacity of 1,500 or more combined passengers and crew | \$12,000 | \$7,100 |
| * Remediation payments used by vessel operators shall be reduced by 20 percent for IMO Tier III tanker vessels with steam driven pumps, and 40 percent for all other IMO Tier III vessels. | | |

- (g) Prior to the beginning of each odd numbered calendar year, the hourly remediation payment amounts set forth in this section shall be adjusted by considering the current Consumer Price Index values published by the Bureau of Labor Statistics relative to 2019, to determine the hourly remediation payment amounts for that calendar year and the subsequent year. CARB shall post any updates to the hourly remediation payment on its website.
- (h) For requests to use the remediation fund option for multiple vessel visits over an extended time period, the requestor may seek a prospective eligibility determination from CARB before the relevant visit occurs. Upon CARB’s determination of eligibility, the requestor shall report data on each

vessel visit within the required 7 days, and shall make payments at least monthly to the remediation fund administrator until the equipment is operational again and payments have been made for all uncontrolled vessel visits.

Note: Authority cited: Sections 38560, 38562, 39600, 39601, 39658, 39659, 39666, 43013, and 41511, Health and Safety Code. Reference: Sections 38510, 38530, 38562, 38566, 38580, 39600, 39650, 39658, 39659, 39666, 41510 and 41511, Health and Safety Code.

Section 93130.16. Remediation Fund Administration.

This section sets forth the criteria for CARB approval of an entity to administer a remediation fund for individual ports and independent marine terminals, and the requirements for approved administrators to manage those funds. The intent of the remediation fund is to mitigate the community impact of the excess emissions from vessel visits that did not reduce emissions at berth to the required levels, as set forth under section 93130.15. It is CARB's intention that the monies from the remediation fund achieve emission reductions not otherwise required by law or regulation by funding incentive activities that comply with adopted CARB guidelines on existing incentive programs.

- (a) CARB staff shall notify, in writing, the local air quality management districts and air pollution control districts with jurisdiction in the communities adjacent to covered ports and independent marine terminals of the opportunity to apply to administer the remediation funds.
- (b) Each district may elect to submit a written application, within 120 calendar days of notification, to the Executive Officer to administer remediation funds for that district's geographic area.
- (c) Applications shall include the following information:
 - (1) Description of the applicant's experience implementing incentive programs for heavy-duty diesel vehicles and off-road equipment, with a focus on the Carl Moyer Program, Proposition 1B Program, or Community Air Protection Incentives, or similar programs for mobile and/or stationary sources of air pollution.
 - (2) Technical knowledge of engines, vehicles, equipment, and/or stationary air pollution sources that would be eligible for incentives.
 - (3) Remediation activity types and applicable CARB incentive program guidelines the fund administrator will use to recruit, evaluate, select, fund and track incentive activities.
 - (4) Demonstration of the applicant's capacity to administer the fund, including: personnel resources; operating budgets; accounting and legal support; activity tracking, emission reduction quantification, reporting mechanisms, and outreach experience.

- (5) The ability to establish a separate account, and track deposits and payments, solely for the remediation fund.
 - (6) The proposed timeline for recruiting and funding incentive activities, and for those activities becoming operational to reduce emissions, once remediation funds are deposited into the applicant's separate account. For efficiency, these milestones may be aligned with existing solicitations, obligation, and liquidation deadlines for other incentive programs.
- (d) CARB shall review submitted applications to determine whether the applicant is eligible and all required information is included in the application. CARB shall verify that:
- (1) The applicant is eligible to administer a remediation fund based on the criteria in subsection (c) above;
 - (2) The application is complete, the responses demonstrate the applicant's capacity to successfully administer the remediation fund to the satisfaction of CARB; and
 - (3) The application includes a resolution from the applicant's governing board authorizing the applicant to participate in the remediation fund program.
- (e) If CARB determines that the conditions in subsection (d) above have been met, CARB will notify the applicant and execute a Memorandum of Understanding with the applicant to enable the applicant to serve as the remediation fund administrator for ports and independent marine terminals in that air district's geographic area.
- (f) If the air district with jurisdiction in the region that includes a covered port or independent marine terminal does not execute a Memorandum of Understanding with CARB to administer the remediation fund, CARB may invite non-profit organizations in the region with the demonstrated capacity and substantial experience administering incentive programs to apply. Any invited organization that wishes to participate must demonstrate no conflict of interest with the intended purpose of the remediation fund. CARB may approve a non-profit organization as the remediation fund administrator following the procedures and requirements of this section.
- (g) CARB will post executed Memoranda of Understanding, and each successful applicant's application, on its public website.
- (h) Each Memorandum of Understanding shall include the following minimum elements:
- (1) Parties, contact information, effective date and term.
 - (2) Environmental justice: The fund administrator agrees to conduct its programs in a manner that ensures the fair treatment of all people in the State.

- (3) Emission reductions: The fund administrator agrees to use remediation funds for incentive activities that directly benefit communities impacted by excess emissions from the port or independent marine terminal, and achieve emission reductions consistent with CARB's most recent applicable incentive program guidelines for: Carl Moyer Program, Proposition 1B: Goods Movement Emission Reduction Program, or Community Air Protection Incentives. Fund administrators shall seek to prioritize eligible activities in communities that are also identified by CARB under the AB 617 Community Air Protection Program or disadvantaged communities as defined by the Secretary for Environmental Protection. While at berth remediation funds can be administered as part of an existing incentive program, the remediation funds cannot be used in place of any required match funding.
- (4) Incentive activity types and applicable guidelines: The fund administrator agrees to recruit, evaluate, select, fund and track incentive activities in conformance with the requirements of the applicable guidelines for the incentive program or programs identified in the application.
- (5) Schedule: The fund administrator will identify anticipated major milestones for implementing emission reduction projects once remediation monies have been received by the administrator.
- (6) Reporting requirements: The fund administrator is responsible for submitting to CARB semi-annual reports covering fiscal activity and remediation activities funded, including, but not limited to, recipient, type, location, and estimated emission reductions achieved.
- (7) Recordkeeping requirements: The fund administrator agrees to retain fund records, e.g., solicitations, applications, invoices, contracts, and correspondence, for 3 years after activity completion.
- (8) Oversight: The fund administrator agrees to allow ongoing evaluations, reviews, and fiscal audits by CARB, other State agencies, or their designees.
- (9) Records access: The fund administrator agrees to allow CARB or its designees access to evaluate or audit fund records.
- (10) Enforcement: The fund administrator authorizes CARB or its designee to inspect incentive activities to ensure compliance with CARB requirements.
- (11) Administration expenses: The fund administrator may retain up to 10% of the remediation funds collected for its direct and reasonable expenses incurred to implement the incentive program.
- (12) Earned interest: The fund administrator agrees to maintain records and report on interest earned on remediation funds, and to expend earned interest according to the provisions of the MOU.

- (13) Non-performance provisions: The fund administrator agrees that the following is a non-exhaustive list of the circumstances that constitute non-performance under this MOU. These circumstances include, but are not limited to:
- (A) Failure to comply with the provisions of this Control Measure for remediation fund administrators or the CARB-approved guidelines of the applicable incentive programs.
 - (B) Failure to obligate or expend remediation funds within established timelines, or to show timely interim progress to meet these timelines.
 - (C) Insufficient performance or widespread deficiencies with remediation fund oversight, enforcement, record keeping, contracting provisions, inspections, or any other fund element as determined by CARB.
 - (D) Misuse of remediation funds.
 - (E) Funding of ineligible incentive activities or other items.
 - (F) Exceeding administration fund allotment.
 - (G) Insufficient, incomplete, or faulty incentive activity documentation.
 - (H) Failure to provide required documentation or reports requested from CARB, or other State agencies, in a timely manner.
 - (I) Poor performance as determined by a review or fiscal audit.
- (14) Remedies: The fund administrator agrees to provisions to remedy non-performance, including:
- (A) A corrective action plan.
 - (B) Transfer of collected remediation monies to an alternative fund administrator identified by CARB.
 - (C) Constraints on opportunity to administer future remediation funds.
 - (D) Termination of the Memorandum of Understanding.
- (15) Indemnification: The fund administrator agrees to indemnify and hold harmless the State for any liability arising out of the performance by the fund administrator.
- (16) Entitlements: The fund administrator agrees to comply with all laws, ordinances, regulations, and standards in administering remediation activities, including by obtaining any permits or approvals necessary to undertake the activities funded by the remediation fund, and complying with all environmental review requirements associated with such activities.
- (17) Severability: The remaining provisions of an agreement continue in effect even if a court holds a specific provision invalid.

- (18) Force majeure: CARB and fund administrator are not liable for any delay or failure in performance resulting from war, natural disasters, and other acts beyond their control.
- (19) Amendments: The amendments shall only occur by mutual agreement in writing and signed by all parties.

Note: Authority cited: Sections 38560, 38562, 39600, 39601, 39658, 39659, 39666, 43013, and 41511, Health and Safety Code. Reference: Sections 38510, 38530, 38562, 38566, 38580, 39600, 39650, 39658, 39659, 39666, 41510 and 41511, Health and Safety Code.

Section 93130.17. Summary of Responsibilities.

This Control Measure has shared responsibilities between all parties involved in reducing emissions from ocean-going vessels. The following table outlines a summary of responsibilities and how the terminal or vessel operator can apply exceptions, VIEs, TIEs, and remediation fund.

| Table 5: Summary of Responsibilities | | | | |
|--|------------------|----------------|-------------------------|----------------------------|
| Circumstances that may qualify for a VIE/TIE or remediation | | | | |
| Circumstances | Exception | VIE/TIE | Remediation Fund | Responsible Parties |
| Safety/emergency, research, or vessel commissioning | X | | | |
| Visits without reductions | | X | * | Terminal, Vessel |
| Vessel control equipment repair | | X | X | Vessel |
| Terminal control equipment repair | | X | X | Terminal, Port |
| Terminal upgrades/construction | | X | X | Terminal, Port |
| Delays, but reduction occur | | X | X | Terminal, Vessel |
| CAECS failure | | X | X | Vessel, CAECS operator |
| *In general, all visits may use a VIE or TIE if available, but not all visits qualify for remediation. See section 93130.15(b) of this Control Measure | | | | |

| Table 5: Summary of Responsibilities (Continued) | | |
|--|--|----------------------------|
| Circumstances that will be evaluated for non-compliance | | |
| Circumstances | | Responsible Parties |
| Berth | Vessel | |
| Has shore power | Does not have shore power | Vessel |
| No shore power, but has other CAECS | Has shore power | Terminal, Port |
| No shore power, but has other CAECS | Does not have shore power | Terminal, Port, Vessel |
| Has other CAECS | No shore power, but doesn't allow CAECS | Vessel |

Note: Authority cited: Sections 38560, 38562, 39600, 39601, 39658, 39659, 39666, 43013, and 41511, Health and Safety Code. Reference: Sections 38510, 38530, 38562, 38566, 38580, 39600, 39650, 39658, 39659, 39666, 41510 and 41511, Health and Safety Code.

Section 93130.18. Violations.

- (a) Any person subject to this Control Measure who fails to comply with any provision, prohibition, limit, standard, criteria, or requirement in this Control Measure is subject to the penalties, injunctive relief, and other remedies specified in Health and Safety Code sections 38580, 39764, 42400 et seq., 43016, other applicable sections in the Health and Safety Code, and other applicable provisions as provided under California law for each violation. Nothing in this Control Measure shall be construed to limit or otherwise affect any penalties or other remedies available under federal law.
- (b) Any failure to meet any provision, prohibition, limit, standard, duty, criteria, or requirement in this Control Measure shall constitute a single, separate violation of this Control Measure for each day that a vessel operates without using a CARB approved emission control strategy.
- (c) Violating the recordkeeping or reporting requirements in this Control Measure shall constitute a single, separate violation of this section for each day that the applicable recordkeeping or reporting requirement has not been met.

Note: Authority cited: Sections 38560, 38562, 39600, 39601, 39658, 39659, 39666, 43013, and 41511, Health and Safety Code. Reference: Sections 38510, 38530, 38562, 38566, 38580, 39600, 39650, 39658, 39659, 39666, 39674, 41510, 41511, and 43016, Health and Safety Code.

Section 93130.19. Sunset.

The requirements specified in this Control Measure shall cease to apply if the United States adopts and enforces requirements that will achieve emissions reductions within the Regulated California Waters equivalent to those achieved by this Control Measure. Equivalent requirements may be from IMO regulations adopted and enforced by the United States, or may be contained in regulations adopted or enforced by the United States Environmental Protection Agency. This Control Measure shall remain in effect until the Executive Officer issues written findings that federal requirements are in place that will achieve equivalent emissions reductions within the Regulated California Waters and are being enforced within the Regulated California Waters.

Note: Authority cited: Sections 38560, 38562, 39600, 39601, 39658, 39659, 39666, 43013, and 41511, Health and Safety Code. Reference: Sections 38510, 38530, 38562, 38566, 38580, 39600, 39650, 39658, 39659, 39666, 41510 and 41511, Health and Safety Code.

Section 93130.20. Severability.

If any section, paragraph, subparagraph, sentence, clause, phrase, or portion of this Control Measure is held invalid, unconstitutional, or unenforceable by any court of competent jurisdiction, such portion shall be deemed as a separate, distinct, and independent provision, and such holding shall not affect the validity of the remaining portions of the Control Measure.

Note: Authority cited: Sections 38560, 38562, 39600, 39601, 39658, 39659, 39666, 43013, and 41511, Health and Safety Code. Reference: Sections 38510, 38530, 38562, 38566, 38580, 39600, 39650, 39658, 39659, 39666, 41510 and 41511, Health and Safety Code.