

## **Appendix A**

### **Proposed Regulation for Auxiliary Diesel Engines and Diesel-Electric Engines Operated on Ocean-Going Vessels within California Waters and 24 Nautical Miles of the California Baseline**

## PROPOSED REGULATION ORDER

### EMISSION LIMITS AND REQUIREMENTS FOR AUXILIARY DIESEL ENGINES AND DIESEL-ELECTRIC ENGINES OPERATED ON OCEAN-GOING VESSELS WITHIN CALIFORNIA WATERS AND 24 NAUTICAL MILES OF THE CALIFORNIA BASELINE

Adopt new section 2299.1, title 13, California Code of Regulations (CCR), to read as follows:

#### **13 CCR, section 2299.1. Emission Limits and Requirements for Auxiliary Diesel Engines and Diesel-Electric Engines Operated on Ocean-going Vessels within California Waters and 24 Nautical Miles of the California Baseline.**

##### **(a) Purpose**

The purpose of this section is to reduce emissions of diesel particulate matter (PM), nitrogen oxides, and sulfur oxides from the use of auxiliary diesel engines and diesel-electric engines operated on ocean-going vessels located within any of the waters subject to this regulation ("Regulated California Waters"), which includes all California inland waters; all California estuarine waters; and all waters, except as otherwise specified in this section, within 24 nautical miles, inclusive, of the California baseline, including but not limited to, the Territorial Sea, the Contiguous Zone, and any California port, roadstead or terminal facility.

##### **(b) Applicability**

- (1) Except as provided in subsection (c), this section applies to any person who owns, operates, charters, rents, or leases an ocean-going vessel, including foreign-flagged vessels, within any of the Regulated California Waters, which include all California inland waters; all California estuarine waters; and all waters, except as otherwise specified in this section, within 24 nautical miles, inclusive, of the California baseline, including but not limited to, the Territorial Sea, the Contiguous Zone, and any California port, roadstead, or terminal facility.
- (2) Nothing in this section shall be construed to amend, repeal, modify, or change in any way any applicable U.S. Coast Guard requirements. Any person subject to this section shall be responsible for ensuring compliance with both U.S. Coast Guard regulations and the requirements of this section, including but not limited to, obtaining any necessary approvals, exemptions, or orders from the U.S. Coast Guard.

### **(c) Exemptions**

- (1) The requirements of this section do not apply to oceangoing vessels while in innocent passage, as defined in subsection (d), through the Territorial Sea or the Contiguous Zone.
- (2) The requirements of this section do not apply to slow-speed two-stroke diesel engines as defined in subsection (d).
- (3) The requirements of this section do not apply to auxiliary engines onboard oceangoing military vessels.
- (4) The requirements of this section do not apply to auxiliary engines while operating on liquefied natural gas or compressed natural gas.

### **(d) Definitions**

For purposes of this section, the following definitions apply:

- (1) "ASTM" means ASTM International
- (2) "Auxiliary engine" means an engine on an oceangoing vessel designed primarily to provide power for uses other than propulsion, except that all diesel-electric engines shall be considered "auxiliary diesel engines" for purposes of this regulation.
- (3) "Baseline" means the mean lower low water line along the California coast, as shown on the following National Oceanic and Atmospheric Administration (NOAA) Nautical Charts as authored by the NOAA Office of Coast Survey, which are incorporated herein by reference:
  - (A) Chart 18600, Trinidad Head to Cape Blanco (January 2002);
  - (B) Chart 18620, Point Arena to Trinidad Head (June 2002);
  - (C) Chart 18640, San Francisco to Point Arena (July 2000);
  - (D) Chart 18680, Point Sur to San Francisco (March 2001);
  - (E) Chart 18700, Point Conception to Point Sur (July 2003);
  - (F) Chart 18720, Point Dume to Purisima Point (January 2005); and
  - (G) Chart 18740, San Diego to Santa Rosa Island (August 2003).
- (4) "Contiguous Zone" means the maritime zone adjacent to the territorial sea and extending to 24 nautical miles from the baseline of California, determined in accordance with international law as specified in Presidential Proclamation No. 7219 of August 2, 1999, 64 F.R. 48701 (September 8, 1999).
- (5) "Diesel Engine" means an internal combustion, compression-ignition (CI) engine with operating characteristics significantly similar to the theoretical diesel combustion cycle. The regulation of power by controlling fuel supply in lieu of a throttle is indicative of a compression ignition engine.

- (6) "Diesel Particulate Matter" 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.
- (7) "Diesel-electric engine" means a diesel engine connected to a generator that is used as a source of electricity for propulsion or other uses.
- (8) "Emission Control Strategy" means any device, system, or strategy employed with a diesel engine that is intended to reduce emissions, including, but not limited to, utilization of shore-side electrical power, diesel oxidation catalysts, selective catalytic reduction systems, fuel additives, diesel particulate filters, alternative diesel fuels, water emulsified fuels, lower sulfur fuels, and any combination of the above.
- (9) "Estuarine Waters" means an arm of the sea or ocean that extends inland to meet the mouth of a river.
- (10) "Executive Officer" means the executive officer of the Air Resources Board, or his or her designee.
- (11) "Hydrocarbon (HC)" means the sum of all hydrocarbon air pollutants.
- (12) "Inland Waterways" means any navigable river or waterway within the State of California.
- (13) "IMO" means the International Maritime Organization.
- (14) "Innocent Passage" means the continuous and expeditious navigation through Territorial Sea or the Contiguous Zone for the purpose of traversing such bodies of water without entering internal California waters or calling at a port, roadstead, or terminal facility. "Innocent passage" does not include passage of an oceangoing vessel if that vessel engages in any of the prejudicial activities specified in United Nations Convention on the Law of the Seas (UNCLOS) 1982, Article 19, subpart 2. For the purposes of this definition, "continuous and expeditious navigation" includes stopping and anchoring only to the extent such stopping and anchoring are documented as required by the U.S. Coast Guard; rendered necessary by force majeure or distress; or made for the purpose of rendering assistance to persons, ships, or aircraft in danger or distress. Notwithstanding any Coast Guard mandated stops or stops due to force majeure or the rendering of assistance, a vessel is not in innocent passage if the vessel was otherwise scheduled or intended to enter internal California waters or call at a port, roadstead or terminal facility.
- (15) "ISO" means the International Organization for Standardization.
- (16) "Marine Diesel Oil" means any fuel that meets all the specifications for DMB grades as defined in Table I of International Standard ISO 8217, as revised in 1996, which is incorporated herein by reference.

- (17) "Marine Gas Oil" 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 in 1996, which is incorporated herein by reference.
- (18) "Military Vessel" means any ship, boat, watercraft, or other contrivance used for any purpose on water, and owned or operated by the armed services.
- (19) "Nitrogen Oxides (NO<sub>x</sub>)" means compounds of nitric oxide (NO), nitrogen dioxide (NO<sub>2</sub>), and other oxides of nitrogen, which are typically created during combustion processes and are major contributors to smog formation and acid deposition.
- (20) "Non-Methane Hydrocarbons (NMHC)" means the sum of all hydrocarbon air pollutants except methane.
- (21) "Oceangoing Vessel" means a commercial, government, or military vessel meeting any one of the following criteria:
- (A) a vessel with a "registry" (foreign trade) endorsement on its United States Coast Guard certificate of documentation, or a vessel that is registered under the flag of a country other than the United States;
  - (B) a vessel greater than or equal to 400 feet in length overall (LOA) as defined in 50 CFR § 679.2, as adopted June 19, 1996;
  - (C) a vessel greater than or equal to 10,000 gross tons (GT ITC) per the convention measurement (international system) as defined in 46 CFR 69.51-.61, as adopted September 12, 1989; or
  - (D) a vessel propelled by a marine compression ignition engine with a per-cylinder displacement of greater than or equal to 30 liters.
- (22) "Operate" means steering the vessel while underway.
- (23) "Own" means having all the incidents of ownership, including the legal title, of a vessel whether or not that person lends, rents, or pledges the vessel; having or being entitled to the possession of a vessel as the purchaser under a conditional sale contract; or being the mortgagor of a vessel.
- (24) "Particulate Matter" 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).
- (25) "Person" includes all of the following:
- (A) any person, firm, association, organization, partnership, business trust, corporation, limited liability company, or company;
  - (B) any state or local governmental agency or public district, or any officer or employee thereof;
  - (C) the United States or its agencies, to the extent authorized by federal law.

- (26) "Regulated California Waters" means all California inland waters; all California estuarine waters; and any portion of the Territorial Sea, the Contiguous Zone, and any California port, roadstead, or terminal facility located:
- (A) within the area between the California baseline and 24 nautical miles seaward, inclusive, starting at the California-Oregon border to 34.43 degrees North, 121.12 degrees West; and
  - (B) within the area 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 32.48 degrees North, 117.67 degrees West; and ending at the California-Mexican border at the Pacific Ocean.
- (27) "Roadstead" means any facility, located anywhere within the bodies of water specified in subsection (b), that is used for the loading, unloading, and anchoring of ships.
- (28) "Slow Speed Engine" means an engine with a rated speed of 150 revolutions per minute or less.
- (29) "Sulfur Oxides" means compounds of sulfur dioxide (SO<sub>2</sub>), and other oxides of sulfur, which are typically created during combustion of sulfur containing fuels.
- (30) "Territorial Sea" means the maritime zone extending to 12 nautical miles from the California baseline, determined in accordance with international law as specified in Presidential Proclamation No. 5928 of December 27, 1988, 54 F.R. 777 (January 9, 1989).
- (31) "Two-stroke Engine" means an internal combustion engine which operates on a two stroke cycle where the cycle of operation completes in one revolution of the crankshaft.
- (32) "Vessel" means any tugboat, tanker, freighter, passenger ship, barge, or other boat, ship, or watercraft, except those used primarily for recreation and any of the following:
- (A) A seaplane on the water;
  - (B) A watercraft specifically designed to operate on a permanently fixed course, the movement of which is restricted to a fixed track or arm to which the watercraft is attached or by which the watercraft is controlled.

## **(e) Requirements**

### **(1) Emission Limits**

Except as provided in subsections (c), (f), (g) and (h), no person subject to this section shall operate any auxiliary diesel engine, while the vessel is operating in any of the Regulated California Waters, which emits levels of diesel PM, NO<sub>x</sub>, or SO<sub>x</sub> in exceedance of the emission rates of those pollutants that would result had the engine used the following fuels:

- (A) Beginning January 1, 2007:
  - 1. marine gas oil, as defined in subsection (d); or
  - 2. marine diesel oil, as defined in subsection (d), with a sulfur content of no more than 0.5 percent by weight;
- (B) Beginning January 1, 2010: marine gas oil with a sulfur content of no more than 0.1 percent by weight.
- (C) Compliance with the emission rate limits specified in subsection (e)(1) is presumed if the person operates the regulated engine(s) with the fuels as specified in subsection (e)(1)(A) and (e)(1)(B), or as otherwise permitted in subsection (g).

## (2) Recordkeeping, Reporting, and Monitoring Requirements

### (A) Recordkeeping

Beginning January 1, 2007, any person subject to this section shall retain and maintain records in English that contain the following information for at least three years following the date when the records were made:

- 1. The date, local time, and position (longitude and latitude) of the vessel for each entry into and departure from the Contiguous Zone, excluding any voyages comprised solely of innocent passage as defined in subsection (d);
- 2. The date, local time, and position (longitude and latitude) of the vessel at the initiation and completion of any fuel switching procedures used to comply with subsection (e)(1) prior to entry into any of the Regulated California Waters;
- 3. The date, local time, and position (longitude and latitude) of the vessel at the initiation and completion of any fuel switching procedures within any of the Regulated California Waters;
- 4. Completion of fuel switching procedures is the moment at which a given engine (or engines) has completely transitioned from operation on one fuel to another fuel;
- 5. The type of each fuel used (e.g. marine gas oil) in each auxiliary engine operated in any of the Regulated California Waters; and
- 6. The types, amounts, and the actual percent by weight sulfur content of all fuels purchased for use on the vessel during the calendar year, as reported by the fuel supplier or a fuel testing firm.

### (B) Reporting and Monitoring

1. Any person subject to this section shall provide in writing the information specified in subsection (e)(2)(A) to the Executive Officer upon request, either within 24 hours or a mutually agreed time approved by the Executive Officer. To the extent the person already collects the information specified in subsection (e)(2)(A) to comply with other regulatory requirements or standard practices, the person may provide the requested information in a format consistent with those other regulatory requirements or standard practices.
2. Any person subject to this section shall provide to the Executive Officer upon request additional information the Executive Officer determines to be necessary to determine compliance with this section including, but not limited to:
  - a. the make, model, rated power, and serial numbers of all auxiliary engines subject to subsection (e)(1);
  - b. the capacity and locations of all fuel tanks on the vessel; and
  - c. piping diagrams and specifications for mixing tanks or other fuel handling equipment applicable to auxiliary engines.
3. Any person subject to this section shall provide to the Executive Officer access to the vessel for the purpose of determining compliance with this section, including but not limited to, access to and review of records and information required under subsection (e)(2)(A) or (e)(2)(B)2, and for the purpose of collecting fuel samples for testing and analysis.

**(f) [Reserved for future use]**

**(g) Alternative Compliance Plan (ACP) In Lieu of Meeting Subsection (e)(1)**

**(1) Requirements**

- (A) The purpose of this subsection is to allow any person (“person” or “applicant”) subject to this regulation the option of complying with the requirements of this subsection (g) in lieu of the requirements of subsection (e)(1). Under this subsection (g), alternative emission control strategies can be implemented in lieu of meeting the requirements of subsection (e)(1), provided they result in no greater emissions, expressed in pounds, of diesel PM, NO<sub>x</sub>, and SO<sub>x</sub>, emissions from the auxiliary diesel engines, over the applicable calendar year, relative to the emissions that would have occurred under subsection (e)(1).
- (B) An applicant wishing to participate in an ACP may include one or more vessels in the alternative compliance plan, but the applicant shall only include vessels that the person owns or operates under their direct control.



- (C) An applicant for an ACP shall submit information to the Executive Officer that demonstrates that the alternative emission control strategies under the proposed ACP will result in no greater emissions, expressed in pounds, of diesel PM, NO<sub>x</sub>, and SO<sub>x</sub> emissions from the auxiliary diesel engines, over the applicable calendar year, relative to the emissions that would have occurred under subsection (e)(1).
- (D) Alternative emission control strategies may include, but are not limited to:
1. utilization of shore-side electrical power in lieu of onboard generators,
  2. auxiliary engine modifications,
  3. exhaust treatment control, and
  4. use of alternative fuels or fuel additives.
- (E) The ACP application demonstrating compliance with this subsection shall contain, at a minimum, the following information:
1. the company name, address, and contact information;
  2. the vessel(s) name, country flag, and IMO identification number;
  3. the engine/(s) subject to the ACP, make, model, and serial numbers, and other information that uniquely identify the engine on the affected vessel;
  4. documentation, calculations, emissions test data,, or other information that establishes the diesel PM, NO<sub>x</sub>, and SO<sub>x</sub>, reductions, expressed in pounds, from auxiliary engines will be equivalent to or greater than the emission reductions that would have been achieved upon compliance with under subsection (e)(1);
  5. information on the California ports visits expected to be visited by the affected vessel(s) during the period that the ACP will be in effect, the anticipated dates of those visits, and the potential planned oversea routes to and from these ports; and
  6. the proposed recordkeeping, reporting, monitoring, and testing procedures that the applicant plans to use to demonstrate continued compliance with the ACP.
- (F) Emission reduction calculations demonstrating equivalence with the requirements of subsection (e)(1) shall only include diesel PM, NO<sub>x</sub>, and SO<sub>x</sub> emissions from auxiliary engines operating within any of the Regulated California Waters.

(G) Use of Shore-Side Power

1. Except as otherwise provided in this subsection (g)(1)(G), vessels in an ACP that utilize shore-side power in lieu of their auxiliary diesel engines while at dockside shall be considered to meet the emission reduction requirements of the ACP during:
  - a. all travel within Regulated California Waters from a previous port to the California port terminal where shore-side power is used;
  - b. time spent secured (“docked”) at the California port terminal where shore-side power is used; and
  - c. all travel within Regulated California Waters from the California port where shore-side power is utilized to the next port visited.
2. For the purposes of this subsection (g)(1)(G), “utilizing shore-side power” means:
  - a. connecting to electricity supplied by a utility company, or another source with emissions per unit of delivered energy equivalent to or lower than the January 1, 2007 levels specified in title 17, CCR, sections 94200-94214, “Distributed Generation Certification Program;” and
  - b. shutting down all auxiliary engines subject to this control measure no later than one hour after the vessel is secured at the port terminal, and continuously thereafter until no more than one hour prior to when the vessel leaves the terminal.
3. Except as otherwise provided in paragraph 5 below, if a vessel in an ACP visits two California ports in succession, and the vessel utilizes shore-side power at the first port but not at the second port visited, the vessel shall not be considered to meet the emission reduction requirements of the ACP during the time it is docked at the second port and any subsequent travel within Regulated California Waters from this port.
4. Except as otherwise provided in paragraph 5 below, if a vessel in an ACP visits two California ports in succession, and the vessel utilizes shore-side power at the second port but not at the first port visited, the vessel shall not be considered to meet the emission reduction requirements of the ACP during travel within Regulated California Waters to this first port or during the time the vessel is docked at the first port. Travel from the first port to the second port where shore-side power is utilized shall be deemed to meet the emission reduction requirements of the ACP.
5. The provisions in paragraphs 3 and 4 above notwithstanding, if a passenger cruise vessel in an ACP visits a California port, utilizes shore-side power at that port, then leaves that port and moors (i.e.,

drops anchor) at another offshore location away from a port, roadstead or terminal facility (e.g., Catalina Island or off Monterey), the mooring stop shall not be deemed as a second port visit. However, a person subject to this provision shall meet the emission limits in subsection (e)(1) for all auxiliary diesel engines on the passenger cruise vessel (i.e., all diesel-electric engines) during the entire time the vessel is moored.

- (H) Any person subject to an approved ACP shall maintain operating records in a manner and form as specified by the Executive Officer in the approved ACP. Required records may include, but are not limited to, information on fuel usage, routes, port calls, maintenance procedures, and emissions test results. Such records and reports shall be retained for a period of not less than three (3) years and shall be submitted to the Executive Officer in the manner specified in the approved ACP and upon request by the Executive Officer.
- (I) Emission reductions included in an ACP shall not include reductions that are otherwise required by any State, federal or international rule, regulation, or statute.
- (J) No person may operate a vessel under an ACP unless the applicant has first been notified in writing by the Executive Officer that the ACP application has been approved. Prior to such approval, applicants shall comply with the provisions of this section, including the emission limits in subsection (e)(1).

## (2) Application Process

- (A) Applications for an ACP shall be submitted in writing to the Executive Officer for evaluation.
- (B) The Executive Officer shall notify the applicant in writing whether their application is approved or denied within 90 days of receipt of the submittal.
- (C) Additional information may be provided by the applicant after submittal of the original application. However, the Executive Officer shall have 90 days after submittal of the additional information to notify the applicant of approval or denial of the ACP.
- (D) The applicant shall notify the Executive Officer in writing within 30 days upon learning of any information that would alter the emissions estimates submitted in the ACP application. If the Executive Officer has reason to believe that an approved ACP has been granted to a person that no longer meets the criteria for an ACP, the Executive Officer may modify or revoke the ACP as necessary to assure that the subject vessel(s) will meet the emission reduction requirements in this section.

## (h) Noncompliance Fee In Lieu of Meeting Subsection (e)(1)

The Executive Officer may permit a person (“person”) to pay noncompliance fees (“fees”) in lieu of meeting the requirements of subsection (e)(1). Payment of the fees notwithstanding, all other provisions of this section shall continue to apply. No person shall be permitted to pay the fees unless the person meets the notification requirements in subsection (h)(1) and the requirements in either subsections (h)(2), (h)(3), or (h)(4), as specified below:

### (1) Notification Requirements

Before the person’s vessel enters Regulated California Waters, the Executive Officer must receive notice that the person will not meet the requirements of subsection (e)(1) while operating within Regulated California Waters, but the person will instead meet the requirements of this subsection (h). If the Executive Officer has not received such notice and the person enters Regulated California Waters, the person will be in violation of this section and will not be permitted to pay the fees in lieu of meeting the requirements of subsection (e)(1).

### (2) Noncompliance for Reasons Beyond a Person’s Reasonable Control

Any person wishing to pay the fees under this subsection (h)(2) shall meet the following criteria:

(A) ***Demonstration of Need***: The person shall, through adequate documentation, demonstrate to the Executive Officer’s satisfaction that the person’s noncompliance with the requirements of subsection (e)(1) is beyond the person’s reasonable control. For the purposes of this paragraph, “beyond the person’s reasonable control” applies only when one or more of the following sets of circumstances (1, 2, 3, or 4) applies:

1. **Unplanned Redirection**. This provision applies only when all of the following criteria are met:
  - a. after leaving the last port of call, the person’s vessel was redirected from his/her original, officially logged, non-California destination to a California port, roadstead, or terminal facility (“port”); and
  - b. the vessel does not contain a quantity of fuel sufficient for the auxiliary engines to meet the requirements of subsection (e)(1).
2. **Inadequate Fuel Supply**. This provision applies only when all of the following criteria are met:
  - a. the person made good faith efforts to acquire a quantity of fuel sufficient for the vessel’s auxiliary engines to meet the requirements of subsection (e)(1); and

- b. the person was unable to acquire fuel sufficient for the engines to meet the requirements of subsection (e)(1).

3. **Inadvertent Purchase of Defective Fuel**. This provision applies only when all of the following criteria are met:

- a. based on the fuel supplier's certification of the fuel specifications, the person reasonably believed, and relied on such belief, that the fuel the person purchased on the route from the vessel's home port to California would enable the auxiliary engines to meet the requirements of subsection (e)(1);
- b. the person determined that the vessel's auxiliary engines in fact will not meet the requirements of subsection (e)(1) using any of the fuel purchased under paragraph 3.a. above; and
- c. the vessel is already on its way to California, and there are no other ports of call on the vessel's route where fuel can be purchased sufficient to meet the requirements of subsection (e)(1).

(B) ***Payment of Fees***. Upon meeting the requirements of paragraph (A) in this subsection (h)(2), the person shall pay the fees for every port visit during the period of time the person does not meet the requirements of subsection (e)(1), as specified in subsection (h)(5) below.

(C) ***Executive Officer Review***. For the purposes of verifying the demonstration of need as specified in subsection (h)(2)(A), the Executive Officer may consider and rely on any facts or circumstances the Executive Officer believes are appropriate, including but not limited to: the fuel supplier's ability or failure to provide adequate fuel ordered by the person; any material misrepresentation by the fuel supplier concerning the fuel specifications; the reasonableness of the person's reliance on fuel suppliers with a history of supplying fuel inadequate for meeting the requirements of subsection (e)(1); and force majeure.

(3) Noncompliance for Vessels To Be Taken Out of Service for Modifications

If a person cannot meet the requirements of subsection (e)(1) without vessel modifications, and such modifications cannot be completed prior to the effective date of subsection (e)(1), the Executive Officer may permit the person to pay the fees as specified in this subsection. This provision also applies to vessels that will undergo modifications pursuant to an Executive Officer approved Alternative Compliance Plan. The vessel must be scheduled to complete the necessary modifications (e.g. during a dry dock operation) as soon as possible, but no later than 5 years after the effective date of this section. For this provision to apply, the person shall meet all of the following criteria:

- (A) **Demonstration of Need.** The person shall provide the Executive Officer a Compliance Retrofit Report, signed by the Chief Engineer of the person's vessel, which:
1. identifies the specific vessel modifications ("modifications") (e.g. installation of additional fuel tanks) the person plans to use for meeting the requirements of subsection (e)(1) or an Alternative Compliance Plan;
  2. identifies the specific date by which the modifications will be completed (e.g. while the vessel is in dry dock); and
  3. demonstrates to the satisfaction of the Executive Officer that the modifications will be made at the earliest possible date (e.g. the vessel has been scheduled for the earliest available dry dock appointment).
- (B) **Payment of Fees.** Upon meeting the requirements of paragraph (A) in this subsection (h)(3), the person shall pay the fees for every port visit until the dry dock modifications are completed, as specified in subsection (h)(5) below,.
- (C) **Proof of Modifications Actually Performed.** Within ten (10) business days after the scheduled or actual completion of the modifications, whichever occurs first, the person shall provide written certification to the Executive Officer that the modifications specified under this subsection (h)(3) have been completed. If the modifications have not been completed, the person shall certify which modifications have been completed, which have not, and the anticipated completion date for the remaining modifications. The notification requirement specified in this paragraph, the notification requirements in subsection (h)(1) above, and the fee provisions in subsection (h)(5) below shall apply until all the modifications have been completed.

(4) Noncompliance Based on Infrequent Visits and Need for Vessel Modifications

If a person cannot meet the requirements of subsection (e)(1) without vessel modifications, and this vessel will make no more than two California port visits per calendar year, and no more than 4 California port visits after January 1, 2007 during the life of the vessel, the Executive Officer may permit the person to pay the fees as specified in this subsection.

- (A) **Demonstration of Need.** The person shall demonstrate to the satisfaction of the Executive Officer that modifications to the vessel are necessary to meet the requirements of subsection (e)(1), and that the vessel shall meet the visitation limits specified in this subsection (h)(4).

- (B) **Payment of Fees.** Upon meeting the requirements of paragraph (A) in this subsection (h)(4), the person shall pay the fees for every port visit up to a maximum of 4 visits, as specified in subsection (h)(5) below.

(5) Calculation and Payment of Fees

For each California port, roadstead, or terminal facility in Regulated California Waters at which the person’s vessel stops or anchors (“port visit”), the person who elects to pay the fees shall pay the applicable fees shown in Table 1. For each port visit, the person shall deposit the fees in the port’s Noncompliance Fee Settlement and Air Quality Mitigation Fund prior to leaving the California port:

- (A) After January 1, 2007, each instance of a vessel stopping or anchoring at a port shall count as one port visit, and the port visits shall be cumulative.

Table 1: Noncompliance Fee Schedule, Per Vessel		
Visit	Fee	
	Diesel-Electric Vessels	Other Vessels
1 <sup>st</sup> Port Visited	\$32,500	\$13,000
2 <sup>nd</sup> Port Visited	\$65,000	\$26,000
3 <sup>rd</sup> Port Visited	\$97,500	\$39,000
4 <sup>th</sup> Port Visited	\$130,000	\$52,000
5 <sup>th</sup> or more Port Visited	\$162,500	\$65,000

- (B) The fees shown in Table 1 shall be assessed by the Executive Officer at the time of the port visit. However, if for any reason the person is not notified by the Executive Officer of the assessed fee by the end of the port visit, the person shall nevertheless be responsible for payment of the appropriate fee as specified in this subsection (h) prior to leaving the California port.
- (C) The Executive Officer shall enter into enforceable agreements with each port that will receive the fees. The agreements shall require that the fees be used by the ports only to fund projects that will substantially reduce air pollution from on-site sources, sources within 2 miles of port boundaries, or oceangoing vessels operated within the Regulated California Waters, except that the fees shall not be used to fund projects on vessels from which noncompliance fees were paid. Fees intended for ports that do not have such agreements at the time the fees are paid shall be deposited into the California Air Pollution Control Fund.

**(i) Test Methods**

The following test methods or alternative test methods that are demonstrated to the written satisfaction of the Executive Officer to be equally or more accurate, shall be used to determine compliance with this section:

- (1) Test methods used to determine whether fuels meets the requirements of marine gas oil (DMA or DMX) or marine diesel oil (DMB), as specified in subsection (e)(1), shall be the methods specified in International Standard ISO 8217 (as revised in 1996), which is incorporated herein by reference.
- (2) The sulfur content of fuels shall be determined per International Standard ISO 8754 (as adopted in 1992), which is incorporated herein by reference.

**(j) Sunset, Technology Re-evaluation, and Baseline and Test Method Review**

- (1) If the Executive Officer determines that the International Maritime Organization or the United States Environmental Protection Agency have adopted regulations that will achieve equivalent or greater emission reductions from oceangoing vessels in California compared to the emission reductions resulting from this regulation, the Executive Officer shall propose to the Board for its consideration the termination of the requirements of this section or other modifications to the section as deemed appropriate by the Executive Officer.
- (2) On or before July 1, 2008, the Executive Officer shall re-evaluate the feasibility of the emission limits based on using marine gas oil with no greater than 0.1 percent sulfur by weight in auxiliary diesel engines. The re-evaluation shall consider, but not be limited to:
  - (A) the availability of 0.1 percent sulfur marine gas oil at bunkering ports worldwide;
  - (B) the ability of petroleum refiners and marine fuel suppliers to deliver 0.1 percent sulfur fuel by January 1, 2010;
  - (C) fuel lubricity and compatibility of the 0.1 percent sulfur marine gas oil with heavy fuel oil during fuel transitions; and
  - (D) the additional cost of 0.1 percent sulfur fuel compared to marine gas oil with other levels of sulfur content.
- (3) Pursuant to paragraph (2) of this subsection (j), if the Executive Officer determines that modifications to subsection (e)(1)(B) are necessary, the Executive Officer shall propose appropriate changes to the Board prior to January 1, 2009.
- (4) The Executive Officer shall periodically review the California baseline determinations by the National Oceanic and Atmospheric Administration (NOAA) to determine if updates to the baseline maps incorporated by reference in this



section are necessary. If modifications to the baseline maps are determined to be necessary, the Executive Officer shall conduct a public hearing as soon as practicable to amend this section accordingly.

- (5) The Executive Officer shall periodically review the test methods incorporated by reference in this section to determine if updates to the referenced methods are necessary. If updates to the test methods are determined to be necessary, the Executive Officer shall conduct a public hearing as soon as practicable to amend this section accordingly.

**(k) Severability**

Each part of this section shall be deemed severable, and in the event that any part of this section is held to be invalid, the remainder of this section shall continue in full force and effect.

NOTE: Authority cited: Sections 39600, 39601, 41510, 41511, 43013, and 43018, Health and Safety Code; and *Western Oil and Gas Ass'n v. Orange County Air Pollution Control District*, 14 Cal.3rd 411, 121 Cal.Rptr. 249 (1975). Reference: Sections 39000, 39001, 39002, 39003, 39500, 39515, 39516, 41510, 41511, 43013, 43016, and 43018, Health and Safety Code; and *Western Oil and Gas Ass'n v. Orange County Air Pollution Control District*, 14 Cal.3rd 411, 121 Cal.Rptr. 249 (1975).

## PROPOSED REGULATION ORDER

### AIRBORNE TOXIC CONTROL MEASURE FOR AUXILIARY DIESEL ENGINES AND DIESEL-ELECTRIC ENGINES OPERATED ON OCEAN-GOING VESSELS WITHIN CALIFORNIA WATERS AND 24 NAUTICAL MILES OF THE CALIFORNIA BASELINE

Adopt new section 93118, title 17, California Code of Regulations (CCR), to read as follows:

#### **17 CCR, section 93118. Airborne Toxic Control Measure for Auxiliary Diesel Engines and Diesel-Electric Engines Operated on Ocean-going Vessels within California Waters and 24 Nautical Miles of the California Baseline.**

##### **(a) Purpose**

The purpose of this section is to reduce emissions of diesel particulate matter (PM), nitrogen oxides, and sulfur oxides from the use of auxiliary diesel engines and diesel-electric engines operated on ocean-going vessels located within any of the waters subject to this regulation (“Regulated California Waters”), which includes all California inland waters; all California estuarine waters; and all waters, except as otherwise specified in this section, within 24 nautical miles, inclusive, of the California baseline, including but not limited to, the Territorial Sea, the Contiguous Zone, and any California port, roadstead or terminal facility.

##### **(b) Applicability**

- (3) Except as provided in subsection (c), this section applies to any person who owns, operates, charters, rents, or leases an ocean-going vessel, including foreign-flagged vessels, within any of the Regulated California Waters, which include all California inland waters; all California estuarine waters; and all waters, except as otherwise specified in this section, within 24 nautical miles, inclusive, of the California baseline, including but not limited to, the Territorial Sea, the Contiguous Zone, and any California port, roadstead, or terminal facility.
- (4) Nothing in this section shall be construed to amend, repeal, modify, or change in any way any applicable U.S. Coast Guard requirements. Any person subject to this section shall be responsible for ensuring compliance with both U.S. Coast Guard regulations and the requirements of this section, including but not limited to, obtaining any necessary approvals, exemptions, or orders from the U.S. Coast Guard.

### **(c) Exemptions**

- (5) The requirements of this section do not apply to oceangoing vessels while in innocent passage, as defined in subsection (d), through the Territorial Sea or the Contiguous Zone.
- (6) The requirements of this section do not apply to slow-speed two-stroke diesel engines as defined in subsection (d).
- (7) The requirements of this section do not apply to auxiliary engines onboard oceangoing military vessels.
- (8) The requirements of this section do not apply to auxiliary engines while operating on liquefied natural gas or compressed natural gas.

### **(d) Definitions**

For purposes of this section, the following definitions apply:

- (33) “ASTM” means ASTM International
- (34) “Auxiliary engine” means an engine on an oceangoing vessel designed primarily to provide power for uses other than propulsion, except that all diesel-electric engines shall be considered “auxiliary diesel engines” for purposes of this regulation.
- (35) “Baseline” means the mean lower low water line along the California coast, as shown on the following National Oceanic and Atmospheric Administration (NOAA) Nautical Charts as authored by the NOAA Office of Coast Survey, which are incorporated herein by reference:
  - (H) Chart 18600, Trinidad Head to Cape Blanco (January 2002);
  - (I) Chart 18620, Point Arena to Trinidad Head (June 2002);
  - (J) Chart 18640, San Francisco to Point Arena (July 2000);
  - (K) Chart 18680, Point Sur to San Francisco (March 2001);
  - (L) Chart 18700, Point Conception to Point Sur (July 2003);
  - (M) Chart 18720, Point Dume to Purisima Point (January 2005); and
  - (N) Chart 18740, San Diego to Santa Rosa Island (August 2003).
- (36) “Contiguous Zone” means the maritime zone adjacent to the territorial sea and extending to 24 nautical miles from the baseline of California, determined in accordance with international law as specified in Presidential Proclamation No. 7219 of August 2, 1999, 64 F.R. 48701 (September 8, 1999).
- (37) “Diesel Engine” means an internal combustion, compression-ignition (CI) engine with operating characteristics significantly similar to the theoretical diesel combustion cycle. The regulation of power by controlling fuel supply in lieu of a throttle is indicative of a compression ignition engine.

- (38) “Diesel Particulate Matter” 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.
- (39) “Diesel-electric engine” means a diesel engine connected to a generator that is used as a source of electricity for propulsion or other uses.
- (40) “Emission Control Strategy” means any device, system, or strategy employed with a diesel engine that is intended to reduce emissions, including, but not limited to, utilization of shore-side electrical power, diesel oxidation catalysts, selective catalytic reduction systems, fuel additives, diesel particulate filters, alternative diesel fuels, water emulsified fuels, lower sulfur fuels, and any combination of the above.
- (41) “Estuarine Waters” means an arm of the sea or ocean that extends inland to meet the mouth of a river.
- (42) “Executive Officer” means the executive officer of the Air Resources Board, or his or her designee.
- (43) “Hydrocarbon (HC)” means the sum of all hydrocarbon air pollutants.
- (44) “Inland Waterways” means any navigable river or waterway within the State of California.
- (45) “IMO” means the International Maritime Organization.
- (46) “Innocent Passage” means the continuous and expeditious navigation through Territorial Sea or the Contiguous Zone for the purpose of traversing such bodies of water without entering internal California waters or calling at a port, roadstead, or terminal facility. “Innocent passage” does not include passage of an oceangoing vessel if that vessel engages in any of the prejudicial activities specified in United Nations Convention on the Law of the Seas (UNCLOS) 1982, Article 19, subpart 2. For the purposes of this definition, “continuous and expeditious navigation” includes stopping and anchoring only to the extent such stopping and anchoring are documented as required by the U.S. Coast Guard; rendered necessary by force majeure or distress; or made for the purpose of rendering assistance to persons, ships, or aircraft in danger or distress. Notwithstanding any Coast Guard mandated stops or stops due to force majeure or the rendering of assistance, a vessel is not in innocent passage if the vessel was otherwise scheduled or intended to enter internal California waters or call at a port, roadstead or terminal facility.
- (47) “ISO” means the International Organization for Standardization.
- (48) “Marine Diesel Oil” means any fuel that meets all the specifications for DMB grades as defined in Table I of International Standard ISO 8217, as revised in 1996, which is incorporated herein by reference.

- (49) "Marine Gas Oil" 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 in 1996, which is incorporated herein by reference.
- (50) "Military Vessel" means any ship, boat, watercraft, or other contrivance used for any purpose on water, and owned or operated by the armed services.
- (51) "Nitrogen Oxides (NOx)" means compounds of nitric oxide (NO), nitrogen dioxide (NO<sub>2</sub>), and other oxides of nitrogen, which are typically created during combustion processes and are major contributors to smog formation and acid deposition.
- (52) "Non-Methane Hydrocarbons (NMHC)" means the sum of all hydrocarbon air pollutants except methane.
- (53) "Oceangoing Vessel" means a commercial, government, or military vessel meeting any one of the following criteria:
- (E) a vessel with a "registry" (foreign trade) endorsement on its United States Coast Guard certificate of documentation, or a vessel that is registered under the flag of a country other than the United States;
  - (F) a vessel greater than or equal to 400 feet in length overall (LOA) as defined in 50 CFR § 679.2, as adopted June 19, 1996;
  - (G) a vessel greater than or equal to 10,000 gross tons (GT ITC) per the convention measurement (international system) as defined in 46 CFR 69.51-.61, as adopted September 12, 1989; or
  - (H) a vessel propelled by a marine compression ignition engine with a per-cylinder displacement of greater than or equal to 30 liters.
- (54) "Operate" means steering the vessel while underway.
- (55) "Own" means having all the incidents of ownership, including the legal title, of a vessel whether or not that person lends, rents, or pledges the vessel; having or being entitled to the possession of a vessel as the purchaser under a conditional sale contract; or being the mortgagor of a vessel.
- (56) "Particulate Matter" 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).
- (57) "Person" includes all of the following:
- (A) any person, firm, association, organization, partnership, business trust, corporation, limited liability company, or company;
  - (B) any state or local governmental agency or public district, or any officer or employee thereof;
  - (C) the United States or its agencies, to the extent authorized by federal law.

- (58) "Regulated California Waters" means all California inland waters; all California estuarine waters; and any portion of the Territorial Sea, the Contiguous Zone, and any California port, roadstead, or terminal facility located:
- (A) within the area between the California baseline and 24 nautical miles seaward, inclusive, starting at the California-Oregon border to 34.43 degrees North, 121.12 degrees West; and
  - (B) within the area 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 32.48 degrees North, 117.67 degrees West; and ending at the California-Mexican border at the Pacific Ocean.
- (59) "Roadstead" means any facility, located anywhere within the bodies of water specified in subsection (b), that is used for the loading, unloading, and anchoring of ships.
- (60) "Slow Speed Engine" means an engine with a rated speed of 150 revolutions per minute or less.
- (61) "Sulfur Oxides" means compounds of sulfur dioxide (SO<sub>2</sub>), and other oxides of sulfur, which are typically created during combustion of sulfur containing fuels.
- (62) "Territorial Sea" means the maritime zone extending to 12 nautical miles from the California baseline, determined in accordance with international law as specified in Presidential Proclamation No. 5928 of December 27, 1988, 54 F.R. 777 (January 9, 1989).
- (63) "Two-stroke Engine" means an internal combustion engine which operates on a two stroke cycle where the cycle of operation completes in one revolution of the crankshaft.
- (64) "Vessel" means any tugboat, tanker, freighter, passenger ship, barge, or other boat, ship, or watercraft, except those used primarily for recreation and any of the following:
- (A) A seaplane on the water;
  - (B) A watercraft specifically designed to operate on a permanently fixed course, the movement of which is restricted to a fixed track or arm to which the watercraft is attached or by which the watercraft is controlled.

## **(e) Requirements**

### **(3) Emission Limits**

Except as provided in subsections (c), (f), (g) and (h), no person subject to this section shall operate any auxiliary diesel engine, while the vessel is operating in any of the Regulated California Waters, which emits levels of diesel PM, NO<sub>x</sub>, or SO<sub>x</sub> in exceedance of the emission rates of those pollutants that would result had the engine used the following fuels:

- (C) Beginning January 1, 2007:
  - 1. marine gas oil, as defined in subsection (d); or
  - 2. marine diesel oil, as defined in subsection (d), with a sulfur content of no more than 0.5 percent by weight;
- (D) Beginning January 1, 2010: marine gas oil with a sulfur content of no more than 0.1 percent by weight.
- (C) Compliance with the emission rate limits specified in subsection (e)(1) is presumed if the person operates the regulated engine(s) with the fuels as specified in subsection (e)(1)(A) and (e)(1)(B), or as otherwise permitted in subsection (g).

#### (4) Recordkeeping, Reporting, and Monitoring Requirements

##### (A) Recordkeeping

Beginning January 1, 2007, any person subject to this section shall retain and maintain records in English that contain the following information for at least three years following the date when the records were made:

:

- 1. The date, local time, and position (longitude and latitude) of the vessel for each entry into and departure from the Contiguous Zone, excluding any voyages comprised solely of innocent passage as defined in subsection (d);
- 2. The date, local time, and position (longitude and latitude) of the vessel at the initiation and completion of any fuel switching procedures used to comply with subsection (e)(1) prior to entry into any of the Regulated California Waters;
- 3. The date, local time, and position (longitude and latitude) of the vessel at the initiation and completion of any fuel switching procedures within any of the Regulated California Waters;
- 4. Completion of fuel switching procedures is the moment at which a given engine (or engines) has completely transitioned from operation on one fuel to another fuel;
- 5. The type of each fuel used (e.g. marine gas oil) in each auxiliary engine operated in any of the Regulated California Waters; and
- 6. The types, amounts, and the actual percent by weight sulfur content of all fuels purchased for use on the vessel during the calendar year, as reported by the fuel supplier or a fuel testing firm.

(B) Reporting and Monitoring

3. Any person subject to this section shall provide in writing the information specified in subsection (e)(2)(A) to the Executive Officer upon request, either within 24 hours or a mutually agreed time approved by the Executive Officer. To the extent the person already collects the information specified in subsection (e)(2)(A) to comply with other regulatory requirements or standard practices, the person may provide the requested information in a format consistent with those other regulatory requirements or standard practices.
4. Any person subject to this section shall provide to the Executive Officer upon request additional information the Executive Officer determines to be necessary to determine compliance with this section including, but not limited to:
  - a. the make, model, rated power, and serial numbers of all auxiliary engines subject to subsection (e)(1);
  - b. the capacity and locations of all fuel tanks on the vessel; and
  - c. piping diagrams and specifications for mixing tanks or other fuel handling equipment applicable to auxiliary engines.
3. Any person subject to this section shall provide to the Executive Officer access to the vessel for the purpose of determining compliance with this section, including but not limited to, access to and review of records and information required under subsection (e)(2)(A) or (e)(2)(B)2, and for the purpose of collecting fuel samples for testing and analysis.

**(f) [Reserved for future use]**

**(g) Alternative Compliance Plan (ACP) In Lieu of Meeting Subsection (e)(1)**

(3) Requirements

- (K) The purpose of this subsection is to allow any person (“person” or “applicant”) subject to this regulation the option of complying with the requirements of this subsection (g) in lieu of the requirements of subsection (e)(1). Under this subsection (g), alternative emission control strategies can be implemented in lieu of meeting the requirements of subsection (e)(1), provided they result in no greater emissions, expressed in pounds, of diesel PM, NO<sub>x</sub>, and SO<sub>x</sub>, emissions from the auxiliary diesel engines, over the applicable calendar year, relative to the emissions that would have occurred under subsection (e)(1).
- (L) An applicant wishing to participate in an ACP may include one or more vessels in the alternative compliance plan, but the applicant shall only include vessels that the person owns or operates under their direct



control.

- (M) An applicant for an ACP shall submit information to the Executive Officer that demonstrates that the alternative emission control strategies under the proposed ACP will result in no greater emissions, expressed in pounds, of diesel PM, NO<sub>x</sub>, and SO<sub>x</sub> emissions from the auxiliary diesel engines, over the applicable calendar year, relative to the emissions that would have occurred under subsection (e)(1).
- (N) Alternative emission control strategies may include, but are not limited to:
  - 5. utilization of shore-side electrical power in lieu of onboard generators,
  - 6. auxiliary engine modifications,
  - 7. exhaust treatment control, and
  - 8. use of alternative fuels or fuel additives.
- (O) The ACP application demonstrating compliance with this subsection shall contain, at a minimum, the following information:
  - 7. the company name, address, and contact information;
  - 8. the vessel(s) name, country flag, and IMO identification number;
  - 9. the engine/(s) subject to the ACP, make, model, and serial numbers, and other information that uniquely identify the engine on the affected vessel;
  - 10. documentation, calculations, emissions test data,, or other information that establishes the diesel PM, NO<sub>x</sub>, and SO<sub>x</sub>, reductions, expressed in pounds, from auxiliary engines will be equivalent to or greater than the emission reductions that would have been achieved upon compliance with under subsection (e)(1);
  - 11. information on the California ports visits expected to be visited by the affected vessel(s) during the period that the ACP will be in effect, the anticipated dates of those visits, and the potential planned oversea routes to and from these ports; and
  - 12. the proposed recordkeeping, reporting, monitoring, and testing procedures that the applicant plans to use to demonstrate continued compliance with the ACP.
- (P) Emission reduction calculations demonstrating equivalence with the requirements of subsection (e)(1) shall only include diesel PM, NO<sub>x</sub>, and SO<sub>x</sub> emissions from auxiliary engines operating within any of the Regulated California Waters.

(Q) Use of Shore-Side Power

1. Except as otherwise provided in this subsection (g)(1)(G), vessels in an ACP that utilize shore-side power in lieu of their auxiliary diesel engines while at dockside shall be considered to meet the emission reduction requirements of the ACP during:
  - a. all travel within Regulated California Waters from a previous port to the California port terminal where shore-side power is used;
  - b. time spent secured (“docked”) at the California port terminal where shore-side power is used; and
  - c. all travel within Regulated California Waters from the California port where shore-side power is utilized to the next port visited.
2. For the purposes of this subsection (g)(1)(G), “utilizing shore-side power” means:
  - a. connecting to electricity supplied by a utility company, or another source with emissions per unit of delivered energy equivalent to or lower than the January 1, 2007 levels specified in title 17, CCR, sections 94200-94214, “Distributed Generation Certification Program;” and
  - b. shutting down all auxiliary engines subject to this control measure no later than one hour after the vessel is secured at the port terminal, and continuously thereafter until no more than one hour prior to when the vessel leaves the terminal.
3. Except as otherwise provided in paragraph 5 below, if a vessel in an ACP visits two California ports in succession, and the vessel utilizes shore-side power at the first port but not at the second port visited, the vessel shall not be considered to meet the emission reduction requirements of the ACP during the time it is docked at the second port and any subsequent travel within Regulated California Waters from this port.
4. Except as otherwise provided in paragraph 5 below, if a vessel in an ACP visits two California ports in succession, and the vessel utilizes shore-side power at the second port but not at the first port visited, the vessel shall not be considered to meet the emission reduction requirements of the ACP during travel within Regulated California Waters to this first port or during the time the vessel is docked at the first port. Travel from the first port to the second port where shore-side power is utilized shall be deemed to meet the emission reduction requirements of the ACP.
5. The provisions in paragraphs 3 and 4 above notwithstanding, if a passenger cruise vessel in an ACP visits a California port, utilizes shore-side power at that port, then leaves that port and moors (i.e.,

drops anchor) at another offshore location away from a port, roadstead or terminal facility (e.g., Catalina Island or off Monterey), the mooring stop shall not be deemed as a second port visit. However, a person subject to this provision shall meet the emission limits in subsection (e)(1) for all auxiliary diesel engines on the passenger cruise vessel (i.e., all diesel-electric engines) during the entire time the vessel is moored.

- (R) Any person subject to an approved ACP shall maintain operating records in a manner and form as specified by the Executive Officer in the approved ACP. Required records may include, but are not limited to, information on fuel usage, routes, port calls, maintenance procedures, and emissions test results. Such records and reports shall be retained for a period of not less than three (3) years and shall be submitted to the Executive Officer in the manner specified in the approved ACP and upon request by the Executive Officer.
- (S) Emission reductions included in an ACP shall not include reductions that are otherwise required by any State, federal or international rule, regulation, or statute.
- (T) No person may operate a vessel under an ACP unless the applicant has first been notified in writing by the Executive Officer that the ACP application has been approved. Prior to such approval, applicants shall comply with the provisions of this section, including the emission limits in subsection (e)(1).

#### (4) Application Process

- (E) Applications for an ACP shall be submitted in writing to the Executive Officer for evaluation.
- (F) The Executive Officer shall notify the applicant in writing whether their application is approved or denied within 90 days of receipt of the submittal.
- (G) Additional information may be provided by the applicant after submittal of the original application. However, the Executive Officer shall have 90 days after submittal of the additional information to notify the applicant of approval or denial of the ACP.
- (H) The applicant shall notify the Executive Officer in writing within 30 days upon learning of any information that would alter the emissions estimates submitted in the ACP application. If the Executive Officer has reason to believe that an approved ACP has been granted to a person that no longer meets the criteria for an ACP, the Executive Officer may modify or revoke the ACP as necessary to assure that the subject vessel(s) will meet the emission reduction requirements in this section.

## **(h) Noncompliance Fee In Lieu of Meeting Subsection (e)(1)**

The Executive Officer may permit a person (“person”) to pay noncompliance fees (“fees”) in lieu of meeting the requirements of subsection (e)(1). Payment of the fees notwithstanding, all other provisions of this section shall continue to apply. No person shall be permitted to pay the fees unless the person meets the notification requirements in subsection (h)(1) and the requirements in either subsections (h)(2), (h)(3), or (h)(4), as specified below:

### **(1) Notification Requirements**

Before the person’s vessel enters Regulated California Waters, the Executive Officer must receive notice that the person will not meet the requirements of subsection (e)(1) while operating within Regulated California Waters, but the person will instead meet the requirements of this subsection (h). If the Executive Officer has not received such notice and the person enters Regulated California Waters, the person will be in violation of this section and will not be permitted to pay the fees in lieu of meeting the requirements of subsection (e)(1).

### **(2) Noncompliance for Reasons Beyond a Person’s Reasonable Control**

Any person wishing to pay the fees under this subsection (h)(2) shall meet the following criteria:

(A) ***Demonstration of Need***: The person shall, through adequate documentation, demonstrate to the Executive Officer’s satisfaction that the person’s noncompliance with the requirements of subsection (e)(1) is beyond the person’s reasonable control. For the purposes of this paragraph, “beyond the person’s reasonable control” applies only when one or more of the following sets of circumstances (1, 2, 3, or 4) applies:

3. **Unplanned Redirection**. This provision applies only when all of the following criteria are met:
  - a. after leaving the last port of call, the person’s vessel was redirected from his/her original, officially logged, non-California destination to a California port, roadstead, or terminal facility (“port”); and
  - b. the vessel does not contain a quantity of fuel sufficient for the auxiliary engines to meet the requirements of subsection (e)(1).
2. **Inadequate Fuel Supply**. This provision applies only when all of the following criteria are met:
  - a. the person made good faith efforts to acquire a quantity of fuel sufficient for the vessel’s auxiliary engines to meet the requirements of subsection (e)(1); and

- b. the person was unable to acquire fuel sufficient for the engines to meet the requirements of subsection (e)(1).

3. **Inadvertent Purchase of Defective Fuel**. This provision applies only when all of the following criteria are met:

- a. based on the fuel supplier's certification of the fuel specifications, the person reasonably believed, and relied on such belief, that the fuel the person purchased on the route from the vessel's home port to California would enable the auxiliary engines to meet the requirements of subsection (e)(1);
- b. the person determined that the vessel's auxiliary engines in fact will not meet the requirements of subsection (e)(1) using any of the fuel purchased under paragraph 3.a. above; and
- c. the vessel is already on its way to California, and there are no other ports of call on the vessel's route where fuel can be purchased sufficient to meet the requirements of subsection (e)(1).

(D) ***Payment of Fees***. Upon meeting the requirements of paragraph (A) in this subsection (h)(2), the person shall pay the fees for every port visit during the period of time the person does not meet the requirements of subsection (e)(1), as specified in subsection (h)(5) below.

(E) ***Executive Officer Review***. For the purposes of verifying the demonstration of need as specified in subsection (h)(2)(A), the Executive Officer may consider and rely on any facts or circumstances the Executive Officer believes are appropriate, including but not limited to: the fuel supplier's ability or failure to provide adequate fuel ordered by the person; any material misrepresentation by the fuel supplier concerning the fuel specifications; the reasonableness of the person's reliance on fuel suppliers with a history of supplying fuel inadequate for meeting the requirements of subsection (e)(1); and force majeure.

(3) Noncompliance for Vessels To Be Taken Out of Service for Modifications

If a person cannot meet the requirements of subsection (e)(1) without vessel modifications, and such modifications cannot be completed prior to the effective date of subsection (e)(1), the Executive Officer may permit the person to pay the fees as specified in this subsection. This provision also applies to vessels that will undergo modifications pursuant to an Executive Officer approved Alternative Compliance Plan. The vessel must be scheduled to complete the necessary modifications (e.g. during a dry dock operation) as soon as possible, but no later than 5 years after the effective date of this section. For this provision to apply, the person shall meet all of the following criteria:

- (A) **Demonstration of Need.** The person shall provide the Executive Officer a Compliance Retrofit Report, signed by the Chief Engineer of the person's vessel, which:
1. identifies the specific vessel modifications ("modifications") (e.g. installation of additional fuel tanks) the person plans to use for meeting the requirements of subsection (e)(1) or an Alternative Compliance Plan;
  4. identifies the specific date by which the modifications will be completed (e.g. while the vessel is in dry dock); and
  3. demonstrates to the satisfaction of the Executive Officer that the modifications will be made at the earliest possible date (e.g. the vessel has been scheduled for the earliest available dry dock appointment).
- (B) **Payment of Fees.** Upon meeting the requirements of paragraph (A) in this subsection (h)(3), the person shall pay the fees for every port visit until the dry dock modifications are completed, as specified in subsection (h)(5) below,.
- (C) **Proof of Modifications Actually Performed.** Within ten (10) business days after the scheduled or actual completion of the modifications, whichever occurs first, the person shall provide written certification to the Executive Officer that the modifications specified under this subsection (h)(3) have been completed. If the modifications have not been completed, the person shall certify which modifications have been completed, which have not, and the anticipated completion date for the remaining modifications. The notification requirement specified in this paragraph, the notification requirements in subsection (h)(1) above, and the fee provisions in subsection (h)(5) below shall apply until all the modifications have been completed.

(4) Noncompliance Based on Infrequent Visits and Need for Vessel Modifications

If a person cannot meet the requirements of subsection (e)(1) without vessel modifications, and this vessel will make no more than two California port visits per calendar year, and no more than 4 California port visits after January 1, 2007 during the life of the vessel, the Executive Officer may permit the person to pay the fees as specified in this subsection.

- (A) **Demonstration of Need.** The person shall demonstrate to the satisfaction of the Executive Officer that modifications to the vessel are necessary to meet the requirements of subsection (e)(1), and that the vessel shall meet the visitation limits specified in this subsection (h)(4).

- (B) **Payment of Fees.** Upon meeting the requirements of paragraph (A) in this subsection (h)(4), the person shall pay the fees for every port visit up to a maximum of 4 visits, as specified in subsection (h)(5) below.

(5) Calculation and Payment of Fees

For each California port, roadstead, or terminal facility in Regulated California Waters at which the person’s vessel stops or anchors (“port visit”), the person who elects to pay the fees shall pay the applicable fees shown in Table 1. For each port visit, the person shall deposit the fees in the port’s Noncompliance Fee Settlement and Air Quality Mitigation Fund prior to leaving the California port:

- (A) After January 1, 2007, each instance of a vessel stopping or anchoring at a port shall count as one port visit, and the port visits shall be cumulative.

Table 1: Noncompliance Fee Schedule, Per Vessel		
Visit	Fee	
	Diesel-Electric Vessels	Other Vessels
1 <sup>st</sup> Port Visited	\$32,500	\$13,000
2 <sup>nd</sup> Port Visited	\$65,000	\$26,000
3 <sup>rd</sup> Port Visited	\$97,500	\$39,000
4 <sup>th</sup> Port Visited	\$130,000	\$52,000
5 <sup>th</sup> or more Port Visited	\$162,500	\$65,000

- (B) The fees shown in Table 1 shall be assessed by the Executive Officer at the time of the port visit. However, if for any reason the person is not notified by the Executive Officer of the assessed fee by the end of the port visit, the person shall nevertheless be responsible for payment of the appropriate fee as specified in this subsection (h) prior to leaving the California port.
- (C) The Executive Officer shall enter into enforceable agreements with each port that will receive the fees. The agreements shall require that the fees be used by the ports only to fund projects that will substantially reduce air pollution from on-site sources, sources within 2 miles of port boundaries, or oceangoing vessels operated within the Regulated California Waters, except that the fees shall not be used to fund projects on vessels from which noncompliance fees were paid. Fees intended for ports that do not have such agreements at the time the fees are paid shall be deposited into the California Air Pollution Control Fund.

**(i) Test Methods**

The following test methods or alternative test methods that are demonstrated to the written satisfaction of the Executive Officer to be equally or more accurate, shall be used to determine compliance with this section:

- (3) Test methods used to determine whether fuels meets the requirements of marine gas oil (DMA or DMX) or marine diesel oil (DMB), as specified in subsection (e)(1), shall be the methods specified in International Standard ISO 8217 (as revised in 1996), which is incorporated herein by reference.
- (4) The sulfur content of fuels shall be determined per International Standard ISO 8754 (as adopted in 1992), which is incorporated herein by reference.

**(j) Sunset, Technology Re-evaluation, and Baseline and Test Method Review**

- (6) If the Executive Officer determines that the International Maritime Organization or the United States Environmental Protection Agency have adopted regulations that will achieve equivalent or greater emission reductions from oceangoing vessels in California compared to the emission reductions resulting from this regulation, the Executive Officer shall propose to the Board for its consideration the termination of the requirements of this section or other modifications to the section as deemed appropriate by the Executive Officer.
- (7) On or before July 1, 2008, the Executive Officer shall re-evaluate the feasibility of the emission limits based on using marine gas oil with no greater than 0.1 percent sulfur by weight in auxiliary diesel engines. The re-evaluation shall consider, but not be limited to:
  - (A) the availability of 0.1 percent sulfur marine gas oil at bunkering ports worldwide;
  - (B) the ability of petroleum refiners and marine fuel suppliers to deliver 0.1 percent sulfur fuel by January 1, 2010;
  - (C) fuel lubricity and compatibility of the 0.1 percent sulfur marine gas oil with heavy fuel oil during fuel transitions; and
  - (D) the additional cost of 0.1 percent sulfur fuel compared to marine gas oil with other levels of sulfur content.
- (8) Pursuant to paragraph (2) of this subsection (j), if the Executive Officer determines that modifications to subsection (e)(1)(B) are necessary, the Executive Officer shall propose appropriate changes to the Board prior to January 1, 2009.
- (9) The Executive Officer shall periodically review the California baseline determinations by the National Oceanic and Atmospheric Administration (NOAA) to determine if updates to the baseline maps incorporated by reference in this



section are necessary. If modifications to the baseline maps are determined to be necessary, the Executive Officer shall conduct a public hearing as soon as practicable to amend this section accordingly.

- (10) The Executive Officer shall periodically review the test methods incorporated by reference in this section to determine if updates to the referenced methods are necessary. If updates to the test methods are determined to be necessary, the Executive Officer shall conduct a public hearing as soon as practicable to amend this section accordingly.

**(k) Severability**

Each part of this section shall be deemed severable, and in the event that any part of this section is held to be invalid, the remainder of this section shall continue in full force and effect.

NOTE: Authority cited: Sections 39600, 39601, 39650, 39658, 39659, 39666, 41510, 41511, Health and Safety Code. Reference: Sections 39650, 39658, 39659, 39666, 41510, and 41511, Health and Safety Code.