

TITLES 13 AND 17. CALIFORNIA AIR RESOURCES BOARD

NOTICE OF PUBLIC HEARING TO CONSIDER THE ADOPTION OF A PROPOSED REGULATION FOR FUEL SULFUR AND OTHER OPERATIONAL REQUIREMENTS FOR OCEAN-GOING VESSELS WITHIN CALIFORNIA WATERS AND 24 NAUTICAL MILES OF THE CALIFORNIA BASELINE

The Air Resources Board (ARB or Board) will conduct a public hearing at the time and place noted below to consider adoption of a regulation to reduce diesel particulate matter (diesel PM), particulate matter (PM), nitrogen oxides (NOx), and sulfur oxides (SOx) by requiring the use of low sulfur marine distillate fuels in auxiliary diesel and diesel-electric engines, main propulsion diesel engines, and auxiliary boilers in ocean-going vessels operating within Regulated California Waters.

DATE: July 24, 2008

TIME: 9:00 a.m.

PLACE: California Environmental Protection Agency
Air Resources Board
Byron Sher Auditorium, Second Floor
1001 I Street
Sacramento, California 95814

This item will be considered at a two-day meeting of the ARB, which will commence at 9:00 a.m., July 24, 2008, and may continue at 8:30 a.m., July 25, 2008. This item may not be considered until Friday, July 25, 2008. Please consult the agenda for the meeting, which will be available at least 10 days before July 24, 2008, to determine the day on which this item will be considered.

For individuals with sensory disabilities, this document is available in Braille, large print, audiocassette or computer disk. Please contact ARB's Disability Coordinator at (916) 323-4916 by voice or through the California Relay Services at 711, to place your request for disability services. If you are a person with limited English and would like to request interpreter services, please contact ARB's Bilingual Manager at (916) 323-7053.

INFORMATIVE DIGEST OF PROPOSED ACTION AND POLICY STATEMENT OVERVIEW

Sections Affected: Proposed adoption of new section 2299.2, title 13, California Code of Regulations (CCR) and new section 93118.2, title 17, CCR. The following documents would be incorporated in the regulations by reference: (1) International Standard ISO 8217, "Specifications of Marine Fuels Requirements for Marine Residual Fuels," (as revised in 2005); (2) International Standard ISO 8754, "Determination of

Sulfur Content -- Energy-dispersive X-ray Fluorescence Method,” (as adopted in 2003); (3) ASTM Designation E 29-93a, “Standard Practice for Using Significant Digits in Test Data to Determine Conformance with Specifications” (published May 1993); and (4) the following National Oceanic and Atmospheric Administration (NOAA) Nautical Charts, as authored by the NOAA Office of Coast Survey: (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 (August 2005), (D) Chart 18680, Point Sur to San Francisco (June 2005), (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 (April 2005).

Background:

Emissions from ocean-going vessels are significant sources of air pollution and have an adverse impact on public health and air quality. Ocean-going vessels are responsible for approximately 20 percent of the statewide goods-movement related diesel PM emissions and about 12 percent of the statewide NO_x emissions.¹ Ocean-going vessels also contribute significantly to community health risks. Recent ARB studies at the Ports of Los Angeles and Long Beach and in the West Oakland community found that of the port-related emissions, ships are responsible for over half of the increased population-weighted cancer risks in nearby communities. Since 2004, the ARB has adopted several regulations to address emissions from marine vessels, which include cleaner fuels and emission standards for commercial harbor craft, lower-sulfur fuels in ocean-going ship auxiliary diesel engines, and further restrictions for using auxiliary diesel engines on commercial vessels while docked at a California port.² However, significant opportunities exist to further reduce emissions from ocean-going vessels.

Control of Criteria Air Pollutants

Health and Safety Code (H&S) sections 43013 and 43018 direct ARB to adopt standards and regulations that the Board has found to be necessary, cost-effective, and technologically feasible for various mobile source categories, including off-road diesel engines and equipment such as marine vessels, through the setting of emission control requirements. Specifically, H&S section 43013(b) directs ARB to adopt such standards and regulations for marine vessels to the extent permitted by federal law.

¹ 2005 ARB Goods Movement Emissions Inventory

² ARB's fuel standards for harbor craft are codified at title 13, CCR, section 2299. ARB's operational requirements for ships berthed at dock were approved for adoption by the Board at its December 2007 hearing (proposed title 13, CCR, section 2299.3 and title 17, CCR, section 93118.3). ARB's fuel standards and other requirements for diesel auxiliary and diesel-electric engines on ocean-going vessels are codified at title 13, CCR, section 2299.1 and title 17, CCR, section 93118, which were later declared to be emission standards, as drafted, and preempted without federal authorization under Clean Air Act section 209(e). *Pacific Merchant Shipping Ass'n v. James Goldstene*, No. 07-16695 (9th Cir. Feb. 27, 2008). The proposed regulatory action is intended to apply non-preempted operational fuel requirements to these auxiliary and diesel-electric engines.

Control of Toxic Air Contaminants

The California Toxic Air Contaminant Identification and Control Program (Air Toxics Program), established under California law by Assembly Bill 1807 (Stats. 1983, ch. 1047) and set forth in H&S sections 39650 through 39675, requires ARB to identify and control air toxics in California. The identification phase of the Air Toxics Program requires ARB, with participation of other state agencies such as the Office of Environmental Health Hazard Assessment, to evaluate the health impacts of, and exposure to substances, and to identify those substances that pose the greatest health threat as toxic air contaminants (TACs). ARB's evaluation is made available to the public and is formally reviewed by the Scientific Review Panel (SRP) established under H&S section 39670. Following ARB's evaluation and the SRP's review, the Board may formally identify a TAC at a public hearing. Following identification, H&S sections 39658, 39665, and 39666 require ARB, with participation of the air pollution control and air quality management districts (districts), and in consultation with affected sources and interested parties, to prepare a report on the need and appropriate degree of regulation for that substance (a "needs assessment") and to adopt airborne toxic control measures (ATCMs).

In 1998, the Board identified diesel PM as a TAC with no Board-specified threshold exposure level. A needs assessment for diesel PM was conducted between 1998 and 2000, which resulted in ARB staff developing and the Board approving a Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles (Diesel RRP) in 2000. The Diesel RRP presented information that identified the available options for reducing diesel PM and recommended control measures to achieve further reductions. The scope of the Diesel RRP was broad, addressing all categories of engines, both mobile and stationary, and included control measures for off-road diesel engines, such as those covered by the proposed regulation. The ultimate goal of the Diesel RRP is to reduce California's diesel PM emissions and associated cancer risks 85 percent from 2000 baseline levels by 2020. The proposed regulation would reduce diesel PM emissions and the local health impacts from main engines, auxiliary diesel and diesel-electric engines, and auxiliary boilers aboard ocean-going ships while operating in Regulated California Waters and would assist the Board with meeting the 2020 Diesel RRP goal.

Attainment of Ambient Air Quality Standards

The federal Clean Air Act (CAA) requires the U.S. Environmental Protection Agency (U.S. EPA) to establish National Ambient Air Quality Standards (national standards) for pollutants considered harmful to public health, including fine particulate matter (PM_{2.5}) and ozone. Set to protect public health, the national standards are adopted based on a review of health studies by experts and a public process. Ambient PM_{2.5} is associated with premature mortality, aggravation of respiratory and cardiovascular disease, asthma exacerbation, chronic and acute bronchitis and reductions in lung function. Ozone is a powerful oxidant. Exposure to ozone can result in reduced lung function, increased respiratory symptoms, increased airway hyper-reactivity, and increased airway

inflammation. Exposure to ozone is also associated with premature death, hospitalization for cardiopulmonary causes, and emergency room visits for asthma.

Areas in the State that exceed the national standards are required by federal law to develop State Implementation Plans (SIPs) describing how they will attain the standards by certain deadlines. Diesel PM and PM emission reductions are needed because they contribute to ambient concentrations of PM_{2.5}; NO_x emission reductions are needed because NO_x leads to formation in the atmosphere of both ozone and PM_{2.5}; and SO_x emission reductions are needed because SO_x leads to the formation in the atmosphere of PM_{2.5}. At this time, the South Coast Air Basin is required to attain the PM_{2.5} standard by 2015. U.S. EPA further requires that all necessary emission reductions be achieved one calendar year sooner – by 2014 – in recognition of the annual average form of the standard.

The ARB has adopted revisions to the South Coast ozone and PM_{2.5} SIPs and has submitted the SIPs to the U.S. EPA. Air quality modeling indicates that significant reductions in diesel PM, PM, NO_x and SO_x are needed to meet the PM_{2.5} standards. The strategy to achieve attainment of the PM_{2.5} standards in the South Coast Air Basin includes a 68 percent reduction in SO_x emissions, a 55 percent reduction in NO_x emissions, and a 15 percent reduction in direct PM_{2.5} emissions from 2006 baseline levels. The diesel PM, PM, NO_x, and SO_x, emission reductions from the proposed regulation would play an essential role in assisting the South Coast Air Basin with meeting its 2014 PM_{2.5} deadline as well as its future ozone deadlines.

As part of the submittal, ARB has also requested from U.S. EPA a reclassification of the South Coast Air Basin to “extreme” nonattainment for ozone, which will give the Basin until 2023 to attain the federal ozone standard. Air quality modeling indicated that by 2023, NO_x emissions will need to be reduced by almost 90 percent – to 12 percent of the 2006 levels – to meet the current national 8-hour ozone standard.

The federal CAA permits states to adopt more protective air quality standards if needed, and California has set standards for particulate matter and ozone that are more protective of public health than respective federal standards. The Bay Area, South Coast, and San Diego areas are nonattainment for the State standards for ozone and PM_{2.5}. Health and Safety Code section 40911 requires the local air districts to submit plans to the Board for attaining the State ambient air quality standards, and H&S section 40924 requires triennial updates of those plans. The NO_x, SO_x, and PM_{2.5} emission reductions from the proposed regulation will assist the districts in achieving attainment of the State ambient air quality standards.

Control of Emissions from Goods Movement-related Activities

In April 2006, the Board approved the Emission Reduction Plan for the Ports and Goods Movement in California (GMERP). The GMERP identifies strategies for reducing emissions created from the movement of goods through California ports and into other regions of the State. The GMERP is part of the broader Goods Movement Action Plan

(GMAP) being jointly carried out by the California Environmental Protection Agency and the Business, Transportation, and Housing Agency. Phase I of the GMAP was released in September 2005 and highlighted the air pollution impacts of goods movement and the urgent need to mitigate localized health risk in affected communities. The final GMAP was released in January 2007 and includes a framework that identifies the key contributors to goods movement-related emissions.

The GMERP identifies numerous strategies for reducing emissions from all significant emission sources involved in goods movement, including ocean-going vessels, commercial harbor craft, cargo handling equipment, locomotives, and trucks. The GMERP identifies several strategies for reducing emissions from ships, including the use of low sulfur fuels in ocean-going vessels. The proposed regulation would represent a significant step toward satisfying the GMERP goals by establishing fuel sulfur content limits for auxiliary diesel and diesel-electric engines, main engines, and auxiliary boilers beginning in 2009, with even lower sulfur content limits being required in 2012.

Authority

The ARB has authority under California law to adopt the proposed regulations. Health and Safety Code sections 43013(b) and 43018 provide broad authority for ARB to adopt emission standards and other regulations to reduce emissions from new and in-use vehicular, nonvehicular and other mobile sources. Under H&S sections 43013(b) and 43018, ARB is directly authorized to adopt emission standards and other regulations for marine vessels, as expeditiously as possible and to the extent permitted by federal law, to meet State ambient air quality standards. The ARB is further mandated by California law under H&S section 39666 to adopt ATCMs for new and in-use nonvehicular sources, including marine vessels such as ocean-going vessels, for identified TACs such as diesel PM.

Emission Reductions and Public Health Benefits Projected

The proposed regulation is expected to significantly reduce emissions of diesel PM, PM, NO_x, and SO_x from ocean-going vessel auxiliary diesel and diesel electric engines, main engines, and auxiliary boilers. Diesel PM emission reductions are needed to reduce cancer risk, premature mortality, and other adverse impacts from exposure to this TAC. The proposal would help achieve the 2020 goal set forth in the 2000 Diesel RRP of reducing diesel PM by 85 percent from 2000 baseline levels and the 2015 and 2020 goals of the GMERP.

Reductions in diesel PM, PM, NO_x (which forms “secondary” nitrate PM in the atmosphere), and SO_x (which forms “secondary” sulfate PM in the atmosphere) will also contribute to regional PM reductions that will assist in California’s progress toward achieving State and federal air quality standards. Reductions in NO_x, an ingredient in the formation of ozone pollution, will help reduce regional ozone levels. In 2010, the proposed regulation is expected to reduce diesel PM and PM emissions by about 13

tons per day (TPD), NO_x emissions by about 10 TPD, and SO_x emissions by about 110 TPD throughout California. Most of these reductions will be realized near ports, where environmental justice concerns are especially prevalent, and in coastal urban areas. Many of these coastal areas are non-attainment for the State and federal ambient air quality standards for PM₁₀, PM_{2.5}, and ozone.

Staff also evaluated the proposed regulation's impacts on greenhouse gas emissions. Based on a total fuel cycle analysis of the carbon dioxide (CO₂) emissions associated with a switch to marine distillate fuels, ARB staff estimates that there potentially could be a slight 1-2% increase in global CO₂ emissions. This net change in fuel-cycle CO₂ emissions is primarily a function of the increased energy required at the refining stage to produce compliant distillate fuels. This offsets the decreased CO₂ emissions from ship operations. The decrease in CO₂ emissions from ship operations results primarily from the higher energy content of the distillate fuel, as compared to heavy fuel oil. But these results assume no effort by refineries to improve energy efficiency while maintaining, upgrading, or expanding their capacity to produce distillate fuels. Therefore, this potential fuel-cycle increase in CO₂ emissions may be conservatively high.

Staff Report and Further Information

As described in more detail below, ARB staff has prepared as part of this rulemaking a Staff Report: Initial Statement of Reasons (Staff Report). Together with the needs assessment (i.e., the Diesel RRP), these two documents serve as the report on the need and appropriate degree of regulation for ocean-going ship main engines, auxiliary diesel and diesel-electric engines, and auxiliary boilers.

Description of the Proposed Regulatory Action:

Under the approach proposed by staff, the Board would approve adoption of two separate but essentially identical regulations, pursuant to its authority under H&S sections 43013(b) and 43018, which would apply to the emissions from auxiliary diesel and diesel-electric engines, main propulsion engines, and auxiliary boilers on ocean-going vessels operating within any of the Regulated California Waters (as defined in the proposal). The Board would also approve adoption of essentially identical provisions as an ATCM, pursuant to its authority under H&S section 39666, which would complement the regulation and provide maximum notice to the regulated community of the regulatory requirements on ocean-going vessels. These measures will hereinafter sometimes be referred to collectively as "the proposed regulations."

Applicability

The proposal applies to any person who owns, operates, charters, rents, or leases any ocean-going vessel that operates in any of the Regulated California Waters, regardless of the country in which the vessel is flagged or registered. The Regulated California Waters include all California internal waters, all California estuarine waters, all California ports, roadsteads, and terminal facilities, and all waters within 24 nautical miles of the

California baseline except for specified areas along the Southern California coastline (a more detailed description is provided in the regulatory proposal).

The proposed regulation includes language explicitly stating and clarifying that the proposal does not change or supersede any existing United States Coast Guard (USCG) regulations, and vessel owners and operators are responsible for ensuring that they meet all applicable USCG regulations, as well as the proposed regulation.

Exemptions

The proposed regulation includes several exemptions. First, the proposal does not apply to vessel voyages that are comprised of continuous and expeditious navigation through any Regulated California Waters for the purpose of traversing such bodies of water without entering California internal or estuarine waters or calling at a port, roadstead, or terminal facility. An exemption is included for steamships whose primary propulsion and electrical power are provided by steam boilers. The proposed regulation does not apply to vessels owned or operated by any branch of local, state, or federal government, or by a foreign government, when the vessels are operated on government non-commercial service. The proposed requirements exclude all emergency generators, and it also excludes auxiliary engines, main engines, and auxiliary boilers while such engines are using alternative fuel in Regulated California Waters. The proposed regulation does not apply if the vessel master reasonably and actually determines that compliance with the requirements would endanger the safety of the vessel, its crew, its cargo, or its passengers because of severe weather conditions, equipment failure, fuel contamination, or other extraordinary reasons beyond the master's reasonable control. Finally, the proposed requirements do not apply to vessels that have been granted a temporary experimental exemption by the Executive Officer for the duration of the approved exemption.

In-Use Operational Requirements

Staff's proposal would require vessel operators to ensure that their auxiliary diesel engines and diesel-electric engines operating in Regulated California Waters operate with either marine gas oil (MGO), with a maximum of 1.5 percent sulfur by weight, or marine diesel oil (MDO), with a maximum of 0.5 percent sulfur by weight, beginning upon the effective date of the regulation as approved by the Office of Administrative Law. Staff's proposal would require vessel operators to ensure that their main engines and auxiliary boilers operating in Regulated California Waters operate with either marine gas oil (MGO), with a maximum of 1.5 percent sulfur by weight, or marine diesel oil (MDO), with a maximum of 0.5 percent sulfur by weight, beginning July 1, 2009. Beginning on January 1, 2012, vessel operators would need to ensure that their auxiliary diesel and diesel-electric engines, main engines and auxiliary boilers operating in Regulated California Waters operate with either MGO or MDO, each limited to a maximum of 0.1 percent sulfur by weight. As noted below, vessel operators would be allowed under specified circumstances to pay a noncompliance mitigation fee for a limited duration in lieu of meeting the in-use operational requirements above.

Recordkeeping

Any person subject to the regulation will be required to maintain specified records in English for a minimum of three years. Staff has designed these requirements to minimize any impacts on vessel crews by relying on existing recordkeeping procedures to the extent possible. Additionally, the proposal requires records be retained and maintained documenting fuel switch over procedures.

Reporting, Monitoring, and Right of Entry

The information required to be recorded, as specified in the proposal, would have to be supplied in writing to the Executive Officer, but only upon request. Some of the recordkeeping required by the proposal may already be recorded to comply with other regulations or standardized practices. In these cases, the information may be provided to ARB in a format consistent with these regulations or practices, as long as the required information is provided. Ship owners or operators must also supply additional information as requested that may be necessary to determine compliance with the proposed regulations. To monitor compliance with the requirements of the proposal, vessel owners or operators would have to provide access to the records necessary to establish compliance with the requirements of the proposal, as well as access to fuel tanks or pipes for the purpose of collecting fuel samples for testing and analysis.

Other Provisions

The proposed regulation allows a vessel owner or operator, under restricted and specified circumstances, to pay a fee in lieu of complying with the in-use operational requirements. A vessel owner or operator using this mechanism would have to notify the Executive Officer of the vessel's noncompliance condition prior to the vessel entering Regulated California Waters. Also, the situations under which the fee provision could be used are limited to a finite set of specific circumstances, all of which must be documented (i.e., a "needs" demonstration). Further, the fee increases substantially with each subsequent port visit, which serves as an effective deterrent to continued use of the fee and an incentive to meet the in-use operational requirements as quickly as possible.

To use this option, the ship owner or operator would need to submit the required notification and mitigation fee, along with evidence demonstrating that the person meets the required conditions for participation in the program. The mitigation fees collected under this program may be deposited in the port's Noncompliance Fee Settlement and Air Quality Mitigation Fund to be used at the ports that are visited; emission reductions from marine and port related sources would be funded with these mitigation fees to benefit nearby affected communities. The fees would be disbursed pursuant to contracts entered into between the participating ports and ARB. If no such port fund exists, the fees would be deposited into the California Air Pollution Control Fund.

Through December 31, 2014, all or part of the fuel use requirements would be waived for vessels requiring essential modifications in order to use the specified fuel, provided certain criteria and documentation requirements are met and approved by the Executive Officer. Vessel operators would be required to use the low sulfur fuel to the maximum extent feasible without the need for essential modifications (e.g., closer to shore, in a subset of the ships engines, etc.).

Test Methods and Other Incorporated Documents

The proposal references International Standard ISO 8217, as revised in 2005 by the International Organization for Standardization (ISO). This standard includes the properties necessary for a fuel to qualify as DMX or DMA grade fuel (marine gas oil), or DMB grade fuel (marine diesel oil), and specifies the test methods for determining compliance with each of these properties. The proposal also references the test method (ISO 8754, as adopted in 2003) to be used for determining the sulfur level of these fuels, as well as the rounding method of ASTM Designation E 29-93a, Standard Practice for Using Significant Digits in Test Data to Determine Conformance with Specifications (published May 1993).

Violations

The proposal specifies that any violation of the requirements or other provisions would subject the person who committed the violation to the penalties, injunctive relief, and other remedies available under Health and Safety Code section 42400 et seq., other applicable sections of the Health and Safety Code, and other applicable provisions of California law for each violation. The proposal further specifies that each failure to meet a requirement, criteria, or provision of the regulation would constitute a single, separate violation for each hour that a person operates an ocean-going vessel within Regulated California Waters until the provision, criteria, or requirement has been met.

Sunset Provision

The “sunset” provision directs the Executive Officer to propose for the Board’s consideration the termination of the proposed regulations under specified conditions. This would occur if the Executive Officer determines that the International Maritime Organization or the U.S. EPA has adopted regulations that will achieve equivalent benefits compared to the proposed regulation. This provision recognizes that, while California is authorized to require the use of low sulfur fuel on and regulate the emissions from ocean-going vessels, it would be preferable to regulate such emissions on a national or international basis.

Review of Baseline and Test Methods

This provision directs the Executive Officer to periodically review the California baseline determinations and conduct a public hearing to consider appropriate updates to the baseline. The definition for “Regulated California Waters” is based partly on the

definition of “baseline,” which generally follows the California coastline but is subject to change due to erosion and accretion. The baseline is published on official charts authored by NOAA, and as NOAA modifies the charts, the Executive Officer can determine at that time whether revisions to the proposed regulation are necessary.

Similar to the baseline review, this provision also directs the Executive Officer to periodically review the test methods cited in the proposal and hold a public hearing to consider recommended changes to the Board as needed.

For the Executive Officer to conduct the hearings on the baseline and test methods specified, the Board will need to delegate such authority to the Executive Officer. The ARB staff intends to seek such express delegation as part of the Board resolution to this proposal.

Severability

This proposed regulation states that if any part of the regulation is held to be invalid, the remainder of the regulation shall continue to be effective.

COMPARABLE FEDERAL REGULATIONS

There are no current federal regulations that are comparable to the proposed regulation. The U.S. EPA adopted regulations – title 40, Code of Federal Regulations (CFR), parts 89 and 94 – that govern the emissions from “Category 2” (between 5 and 30 liters per cylinder displacement) and “Category 3” (at or above 30 liters per cylinder displacement) compression-ignition engines used on ocean-going vessels. While the U.S. EPA regulations apply to ocean-going vessels, they differ significantly from the staff’s proposal in several ways. First, the federal regulations apply only to new engines to be installed on vessels, and only to engines installed on U.S.-flagged vessels. By contrast, the staff’s proposal applies to in-use auxiliary diesel and diesel-electric engines, main diesel engines and auxiliary boilers on all ocean-going vessels that visit California ports, including both U.S. and foreign-flagged vessels. Further, the U.S. EPA regulation in 40 C.F.R., part 94, does not apply to the diesel PM or PM emissions from the regulated Category 3 engines, whereas the staff’s proposal places a major emphasis on the control of toxic diesel PM emissions, as well as NOx and SOx, on all auxiliary diesel engines, diesel electric engines, main diesel engines, including Category 3 engines, and auxiliary boilers. Because of these differences, the federal regulations are not comparable to the staff’s proposal.

AVAILABILITY OF DOCUMENTS AND AGENCY CONTACT PERSONS

The Board staff has prepared a Staff Report: Initial Statement of Reasons (ISOR) for the proposed regulatory action, which includes a summary of the potential environmental and economic impacts of the proposal. The ISOR is entitled, “Staff

Report: Initial Statement of Reasons for the Proposed Regulation for Fuel Sulfur and Other Operational Requirements for Ocean-Going Vessels within California Waters and 24 Nautical Miles of the California Baseline.”

Copies of the Staff Report with the full text of the proposed regulatory language may be accessed on the ARB’s web site listed below, or may be obtained from the Public Information Office, Air Resources Board, 1001 I Street, Visitors and Environmental Services Center, 1st Floor, Sacramento, CA 95814, (916) 322-2990, at least 45 days prior to the scheduled hearing on July 24, 2008.

Upon its completion, the Final Statement of Reasons (FSOR) will be available and copies may be requested from the agency contact persons in this notice, or may be accessed on the ARB’s web site listed below.

Inquiries concerning the substance of the proposed regulations may be directed to the designated agency contact persons, Peggy Taricco, Manager of the Technical Analysis Section, at (916) 323-4882 or by email at ptaricco@arb.ca.gov, or Bonnie Soriano, Air Resources Engineer, at (916) 327-6888 or by email at bsoriano@arb.ca.gov.

Further, the agency representative and designated back-up contact persons to whom nonsubstantive inquiries concerning the proposed administrative action may be directed are Lori Andreoni, Manager, Board Administration & Regulatory Coordination Unit, (916) 322-4011, and Amy Whiting, Regulations Coordinator, (916) 322-6533. The Board has compiled a record for this rulemaking action, which includes all the information upon which the proposal is based. This material is available for inspection upon request to the contact persons.

This notice, the Staff Report, and all subsequent regulatory documents, including the FSOR, when completed, are also available on the ARB Internet site for this rulemaking at <http://www.arb.ca.gov/regact/2008/fuelogv08/fuelogv08.htm>.

COSTS TO PUBLIC AGENCIES AND TO BUSINESSES AND PERSONS AFFECTED

The determinations of the Board's Executive Officer concerning the costs or savings necessarily incurred by public agencies and private persons and businesses in reasonable compliance with the proposed regulations are presented below.

Costs to Local and State Government Agencies

Pursuant to Government Code section 11346.5(a)(5) and 11346.5(a)(6), the Executive Officer has determined that the proposed regulatory action would not create costs or savings to any state agency or in federal funding to the state, costs or mandate to any local agency or school district whether or not reimbursable by the state pursuant to Part 7 (commencing with section 17500), Division 4, Title 2 of the Government Code, except as discussed below, or other nondiscretionary savings to state or local agencies.

Costs to Businesses and Private Individuals

In developing this regulatory proposal, the ARB staff evaluated the potential economic impacts on representative private persons or businesses. The Executive Officer has determined that although most vessel owners will need to switch to more expensive marine distillate fuels while operating in Regulated California Waters in order to comply with the proposed regulation, these costs are a small fraction of the overall operating costs. We therefore expect no significant impacts on affected businesses. On average, we estimate the added annual fuel cost for a typical vessel operator to be about \$300,000 to \$700,000 per company depending on the year. For the entire ocean-going shipping fleet that visits California, we estimate an added annual fuel cost to range from about \$140 million in 2009 (when the rule is implemented mid-year) to \$360 million in 2014 (the final year of cost analysis). The added cost of the regulation represents about 1 percent of the total costs of a typical trans-Pacific voyage. We do not expect that the proposed regulation will result in significant capital costs to ship operators, since most vessels are unlikely to need to make modifications to use distillate fuel.

The Executive Officer has determined that, because the added costs of the proposed regulations are a small percentage of the overall operating costs, no significant impact on ship operators, businesses that import or export goods, California port competitiveness, or on individuals purchasing such goods is expected, even if all these costs were passed on to the consumer.

The Executive Officer has made an initial determination that the proposed regulatory action would not have a significant statewide adverse economic impact directly affecting businesses, including the ability of California businesses to compete with businesses in other states, or on representative private persons. A number of businesses are integrally linked to the goods that travel through California ports. However, we do not believe that the added costs of the proposed regulations are high enough for ship operators to consider alternative ports outside California.

In accordance with Government Code section 11346.3, the Executive Officer has determined that the proposed regulatory action would not affect the creation or elimination of jobs within the State of California, the creation of new businesses or elimination of existing businesses within the State of California, or the expansion of businesses currently doing business within the State of California. A detailed assessment of the economic impacts of the proposed regulatory action can be found in the ISOR.

The Executive Officer has also determined that, pursuant to title 1, CCR, section 4, the proposed regulatory action would not affect small businesses because we do not believe that the ship operators subject to this proposal would qualify as small businesses due to the large capital and operating costs associated with vessel operation.

The Executive Officer has also determined that there is a possibility the proposed regulatory action will result in a positive impact on business creation due to additional sales of marine fuels in California beginning in 2012, when vessel operators must use 0.1 percent sulfur marine gas oil or marine gas oil to meet the specified emission limits. This is because California is expected to have 0.1 percent sulfur fuel available and the regulation contains a provision that allow vessel operators, unable to obtain compliant fuel at a foreign port, to purchase compliant fuel upon arriving at a California port without having to pay a noncompliance fee.

In accordance with Government Code sections 11346.3(c) and 11346.5(a) (11), the Executive Officer has found that the reporting requirements of the regulations that apply to businesses are necessary for the health, safety, and welfare of the people of the State of California.

In accordance with H&S section 43013(a) and (b), the Executive Officer has determined that the standards and other requirements in the proposed regulations are necessary, cost-effective, and technologically feasible for auxiliary diesel and diesel-electric engines, main engines, and auxiliary boilers operated on ocean-going vessels within the Regulated California Waters.

Before taking final action on the proposed regulatory action, the Board must determine that no reasonable alternative considered by the agency or that has otherwise been identified and brought to the attention of the agency would be more effective in carrying out the purpose for which the action is proposed or would be as effective and less burdensome to affected private persons than the proposed action.

SUBMITTAL OF COMMENTS

The public may present comments relating to this matter orally or in writing at the hearing, and in writing or by e-mail before the hearing. To be considered by the Board, written submissions must be received **no later than 12:00 noon, Pacific Standard Time, July 23, 2008**, and addressed to the following:

- Postal mail: Clerk of the Board, Air Resources Board
1001 I Street, Sacramento, California 95814
- Electronic submittal : <http://www.arb.ca.gov/lispub/comm/bclist.php>
- Facsimile submittal: (916) 322-3928

Please note that under the California Public Records Act (Government Code section 6250 et seq.), your written and oral comments, attachments, and associated contact information (e.g., you address, phone, email, etc.) become part of the public record and can be released to the public upon request. Additionally, this information may become available via Google, Yahoo, and other search engines.

The Board requests but does not require 30 copies of any written submission. The Board also requests that written, facsimile, and e-mail statements be filed at least 10 days prior to the hearing so that ARB staff and Board Members have time to fully consider each comment. The ARB encourages members of the public to bring to the attention of staff in advance of the hearing any suggestions for modification of the proposed regulatory action.

Additionally, the Board requests but does not require that persons who submit written comments to the Board reference the title of the proposal in their comments to facilitate review.

STATUTORY AUTHORITY AND REFERENCES

This regulatory action is proposed under the authority granted to ARB in sections 39600, 39601, 39658, 39659, 39666, 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). This regulatory action is proposed to implement, interpret, or make specific sections 39000, 39001, 39002, 39003, 39515, 39516, 39650, 39658, 39659, 39666, 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).

HEARING PROCEDURES

The public hearing will be conducted in accordance with the California Administrative Procedure Act, title 2, division 3, part 1, chapter 3.5 (commencing with section 11340) of the Government Code.

Following the public hearing, the ARB may adopt the regulatory language as originally proposed or with non-substantial or grammatical modifications. The Board may also adopt the proposed regulatory language with other modifications if the text as modified is sufficiently related to the originally proposed text that the public was adequately placed on notice that the regulatory language as modified could result from the proposed regulatory action. In the event that such modifications are made, the full regulatory text, with the modifications clearly indicated, will be made available to the public for written comment at least 15 days before it is adopted.

