Advisory on Plans to Implement a Proposed ARB Regulation on
Fuel Sulfur and Other Operational Requirements for Ocean-Going Vessels

October 2008

The purpose of this advisory is to inform owners and operators of ocean-going vessels of a new regulation that was recently approved by the California Air Resources Board (ARB) and is now currently in the later stages of development. The proposed regulation would apply to diesel main and auxiliary engines, and auxiliary boilers on ocean-going vessels. As discussed below, this regulation is expected to become legally effective in 2009.

When would the regulation become effective?

The regulation was approved by the Air Resources Board on July 24, 2008, and we expect it to become legally effective in early 2009. However, there are several steps that need to be completed before the rule takes effect. First, ARB will be releasing the regulation with some minor modifications for a 15-day public comment period that will provide interested parties with an opportunity to comment on the changes to the original proposal. If, after considering the comments received, ARB decides not to make further revisions in the regulation, ARB will submit the regulation to the California Office of Administrative Law (OAL), along with a “Final Statement of Reasons for Rulemaking” (FSOR). The FSOR will include a summary of all the comments received on the regulation during the official public comment periods, along with ARB staff’s responses to the comments. The OAL has 30 working days to review the regulation to ensure that it meets all applicable legal standards. The OAL will also ensure that the regulation was developed through a process that meets the requirements of the California Administrative Procedure Act. When approved by the OAL, the regulation would be submitted to the Secretary of State for publication in the California Code of Regulations. Regulations become legally effective 30 days after approval by the OAL. ARB staff plans to issue a more detailed advisory on the regulation upon OAL approval.

What are the proposed fuel requirements and when would they begin?

The fuel requirements in the proposed regulation would apply to ocean-going vessel main (propulsion) diesel engines, auxiliary diesel engines, and auxiliary boilers when operating within 24 nautical miles of the California Coastline (see Figure 1). Vessel owners/operators would be required to use the marine distillate fuels shown in Table 1. The “Phase I” fuel requirement specifies the use of marine gas oil up to 1.5 percent sulfur, or marine diesel oil up to 0.5 percent sulfur. The Phase I fuel requirement would become effective on July 1, 2009 for main engines and auxiliary boilers under the proposed compliance schedule. For auxiliary engines (including all diesel-electric engines), this fuel requirement would become effective when the regulation becomes legally effective. As discussed above, this is expected to occur in early 2009, approximately 9 to 10 weeks after ARB submits the regulation to OAL. The “Phase II”
fuel requirement specifies the use of marine gas oil or marine diesel oil up to 0.1 percent sulfur fuel. The Phase II requirement would become effective on January 1, 2012, for all sources covered by this regulation.

Table 1: Fuels Complying with the Requirements

<table>
<thead>
<tr>
<th>Effective Date</th>
<th>Fuel**</th>
</tr>
</thead>
<tbody>
<tr>
<td>July 1, 2009 (except auxiliary engines)*</td>
<td>Phase I Fuel Requirement</td>
</tr>
<tr>
<td></td>
<td>Marine gas oil (DMA) at or below 1.5% sulfur; or Marine diesel oil (DMB) at or below 0.5% sulfur</td>
</tr>
<tr>
<td>January 1, 2012</td>
<td>Phase II Fuel Requirement</td>
</tr>
<tr>
<td></td>
<td>Marine gas oil (DMA) or marine diesel oil (DMB) at or below 0.1% sulfur</td>
</tr>
</tbody>
</table>

* The fuel requirements for auxiliary engines will become effective when the regulation becomes legally effective, which is expected to occur early in 2009.

** DMA and DMB are marine grades of fuel as defined in Table I of International Standard ISO 8217.

Where can I get a copy of the proposed regulation?

To receive a copy of the regulation, please contact the ARB staff listed at the end of this advisory, or visit the ARB’s website at the following location:

http://www.arb.ca.gov/regact/2008/fuelogv08/fuelogv08.htm

What happened to the ARB’s Ship Auxiliary Engine Regulation?

The ARB approved the Ship Auxiliary Engine Regulation in 2005, and enforcement of the requirements began on January 1, 2007. However, ARB is no longer enforcing this regulation pursuant to an injunction issued by a federal district court. The court order may be dissolved if the ARB receives an authorization from the United States Environmental Protection Agency to enforce the regulation. For more details, please refer to the following advisory:

http://www.arb.ca.gov/ports/marinevess/documents/Auxenforce050708.pdf

The ARB’s proposed regulation for ocean-going vessels is designed so that it will not require an authorization from U.S. EPA.

What should I do now?

We expect the regulation to become legally effective in early 2009, with implementation of the fuel requirements for auxiliary engines beginning 30 days after OAL approval of the regulation, and on July 1, 2009 for main engines and auxiliary boilers. As mentioned previously, we plan to issue an advisory as soon as the OAL approves the regulation to notify the shipping lines in advance of when implementation will begin.

We recommend that affected parties take steps now to ensure that they will be prepared to comply by switching from heavy fuel oil to the specified distillate fuel. For example,
you should ensure that vessel crews are thoroughly familiar with the operational procedures used to switch from one fuel to another.

Shipping lines may also want to consider switching fuels in advance of the regulation, potentially under port-specific programs. The Ports of Los Angeles and Long Beach have implemented a “Low Sulfur Fuel Incentive Program” which would pay ship operators the difference between the price of bunker fuel and distillate fuel at or below 0.2 percent sulfur. More information (as of the date of this advisory) is available here: http://www.cleanairactionplan.org/strategies/vessels/fuel.asp.

**Need More Information?**

For further information, please contact Ms. Bonnie Soriano, Technical Analysis Section, at (916) 327-6888, or by email at bsoriano@arb.ca.gov; or Mr. Paul Milkey, Technical Analysis Section, at (916) 327-2957, or by email at pmilkey@arb.ca.gov. You can also sign up to receive future notices regarding our marine vessel programs at our website here: http://www.arb.ca.gov/ports/marinevess/lists.htm
Figure I: Regulated California Waters (24 nm Zone)