Advisory to Owners or Operators of Ocean-Going Vessels Visiting California Ports
August 2006

Regulation to Reduce Emissions from Auxiliary Diesel Engines and Diesel-Electric Engines Operated on Ocean-Going Vessels within California Waters and 24 Nautical Miles of the California Baseline

The purpose of this advisory is to inform owners and operators of ocean-going vessels of a new regulation recently approved by the California Air Resources Board (ARB). While the regulation is not yet in effect, we expect the regulation to become legally effective later this year. As a courtesy, we are sending this advisory to the shipping industry and other affected parties.

The regulation will require ship operators visiting California ports to reduce the air pollution from their auxiliary diesel engines or diesel-electric engines through the use of cleaner marine distillate fuels or equivalent emission controls. This advisory is only a summary of the requirements, and does not contain all the information that may be needed to comply with the 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/marine2005/marine2005.htm

Who is covered by the regulation?

The regulation applies to any person who owns, operates, charters, rents, or leases ocean-going vessels (both U.S. and foreign-flagged) in any of the “Regulated California Waters” shown on the attached map. The ocean-going vessels covered under the regulation include most cargo vessels and passenger cruise ships. Military vessels and government vessels used for noncommercial purposes are exempt. The regulation generally does not cover harbor craft such as ferries, fishing vessels, and tugs.

What are the requirements?

The requirements apply to auxiliary diesel engines and diesel-electric engines. Direct-drive propulsion engines, turbines, and boilers are not covered. For the engines subject to the regulation, vessel owner/operators are required to meet an emissions limit based on the use of the marine distillate fuels shown in Table 1. Specifically, they can comply by: (1) using the specified fuels; (2) through the “Alternative Control of Emissions” provision; or (3) in specified circumstances, through the “Noncompliance Fee” provision described below.
Table 1: Fuels Complying with the Requirements

<table>
<thead>
<tr>
<th>Effective Date</th>
<th>Fuel</th>
</tr>
</thead>
<tbody>
<tr>
<td>January 1, 2007</td>
<td>Marine gas oil (DMA*); or Marine diesel oil (DMB*) at or below 0.5% sulfur</td>
</tr>
<tr>
<td>January 1, 2010</td>
<td>Marine gas oil (DMA*) at or below 0.1% sulfur**</td>
</tr>
</tbody>
</table>

* DMA and DMB are marine grades of fuel as defined in Table I of International Standard ISO 8217.
** This standard will become effective in 2010, pending the results of a feasibility study.

Where do these requirements apply?

The regulation applies to the auxiliary diesel engines and diesel-electric engines on ocean-going vessels, both foreign-flagged and U.S.-flagged, while these engines are operating within the Regulated California Waters (see Fig. 1 below). “Regulated California Waters” is a zone off California’s coast that is approximately 24 nautical miles offshore starting at the California-Oregon border and ending at the California-Mexico border.

Are there recordkeeping requirements?

Yes, vessel operators must keep records noting the date, local time, and location when they: (1) enter and leave Regulated California Waters; and (2) switch fuels, if they employ fuel switching in order to comply with the regulation. They must also keep records of the types of fuel purchased, fuel sulfur content, and types of fuels used by the subject engines while in Regulated California Waters. This information must be provided to the Air Resources Board upon request, along with other information necessary to determine compliance. In many cases, these records are already collected for other regulatory requirements or standard practices, and they may be submitted in a format consistent with these other requirements.

How can I comply under the “Alternative Control of Emissions” provision?

Vessel owner/operators can comply with the emission limit above through alternative means such as the use of shore-side electrical power or exhaust emission controls. Under this provision, vessel owners must submit an application demonstrating that the alternative strategies will result in emissions that are no greater than compliance through the use of the specified fuels. The application must be approved before vessel owner/operators can comply using these alternative means of compliance.

When can I pay a noncompliance fee in lieu of direct compliance?

Vessel owner/operators can comply with the regulation by paying a noncompliance fee under the following circumstances: (1) unplanned redirection to a California port; (2) inability to purchase complying fuel; (3) inadvertent purchase of defective fuel; or (4) inability to schedule vessel modifications in time for compliance. The Noncompliance Fee Schedule is shown in Table 2 below.
Table 2: Noncompliance Fee Schedule, Per Vessel

<table>
<thead>
<tr>
<th>California Port Visits</th>
<th>Diesel-Electric Vessel</th>
<th>Other Vessels</th>
</tr>
</thead>
<tbody>
<tr>
<td>1\textsuperscript{st} Port Visited</td>
<td>$32,500</td>
<td>$13,000</td>
</tr>
<tr>
<td>2\textsuperscript{nd} Port Visited</td>
<td>$65,000</td>
<td>$26,000</td>
</tr>
<tr>
<td>3\textsuperscript{rd} Port Visited</td>
<td>$97,500</td>
<td>$39,000</td>
</tr>
<tr>
<td>4\textsuperscript{th} Port Visited</td>
<td>$130,000</td>
<td>$52,000</td>
</tr>
<tr>
<td>5\textsuperscript{th} or more Port Visited</td>
<td>$162,000</td>
<td>$65,000</td>
</tr>
</tbody>
</table>

In addition to the cases above, the noncompliance fee provision may be utilized by infrequent visitors that would be required to make vessel modifications to comply with the regulation. Under this scenario, “infrequent” means a vessel that makes no more than two port visits per vessel in any calendar year and no more than four visits total during the life of the vessel after January 1, 2007. In this special case, the fee schedule shown in Table 2 would not apply after four port visits.

Vessel operators are strongly advised to refer to the regulation prior to relying on the noncompliance fee option. This will ensure that they meet the specific requirements for each case mentioned above. For example, there are notification requirements, and in some cases, records that need to be provided to demonstrate the need to utilize the provision.

**What should I do now?**

We expect the regulation to become legally effective in late 2006, with implementation of the requirements starting on January 1, 2007. We recommend that affected parties take steps now to ensure that they will be prepared to comply. If you plan to comply by switching from heavy fuel oil to distillate fuel as you approach the Regulated California Waters, you should consider whether your vessel will require any modifications (such as adding fuel tank capacity). You should also ensure that vessel crews are thoroughly familiar with the operational procedures used to switch from one fuel to another. If you plan to comply under the Alternative Control of Emissions provision, you should contact ARB staff now to ensure that your approach can be successfully implemented.

**Need More Information?**

For further information, please contact Paul Milkey, Technical Analysis Section, at (916) 327-2957, or by email at pmilkey@arb.ca.gov.
Figure I: Regulated California Waters (24 nm Zone)