

**Public Comments on California Air Resources Board's  
Proposed Measure for Auxiliary Diesel Engines Operated on  
Oceangoing Ships in California Coastal Waters**

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Our organizations strongly support the California Air Resources Board's (ARB) initiative to develop new air quality regulations for oceangoing vessel (OGV) auxiliary engines that operate in state waters. We agree that the regulations should apply to all OGVs, including foreign-flagged vessels, not only in California Coastal Waters but also inland and estuarine waters.

Furthermore, we strongly recommend that the ARB pursue complementary marine vessel rulemakings for shoreside power and propulsion engines independent of this rulemaking. We believe all three rulemakings are necessary to address the significant quantities of PM and NO<sub>x</sub> generated during OGV transit, maneuvering and hotelling operations.

Below are specific comments and recommendations on the auxiliary engine draft regulatory concepts followed by a brief listing describing the availability and use of lower sulfur fuel for OGVs today.

### **Performance Requirements**

#### Cleaner Fuels

We commend ARB for proposing comprehensive fuel requirements for all types of OGVs on the proposed time schedule. We urge ARB to develop regulatory language which explains how the lower sulfur content marine fuel requirements will be enforced during transit (inbound and outbound), maneuvering and hotelling operations. We recommend that all OGVs be required to provide supporting documentation to ARB enforcement officials upon request of fuel specifications and usage data for all fuels used on board. We also recommend that the appropriate authority enforce this regulation by conducting random sampling aboard vessels. A clear explanation of the enforcement procedures should be outlined to ensure proper compliance with the measure.

Additionally, we recommend that specific provisions are included in the rulemaking, which outline the penalties for non-compliance with the requirements detailed in subsection (e)(1).

## Additional Requirements for Frequent Visitors

We also commend ARB for including provisions to further reduce PM and NO<sub>x</sub> for selected vessels beyond the cleaner fuels requirement. Although in concept a 'frequent visitor' (FV) approach for targeting specific OGVs appears to be a good one, we are concerned that this approach in practice will not prove successful for four primary reasons:

- 1) FVs, as defined in the proposed rulemaking, capture less than 50% of the calls at some of California's ports. As an example, FVs (5 or more visits) at the Port of Long Beach covers 14% of total vessels or 47% of the calls.<sup>1</sup> Not only do we feel this captures an insufficient percentage of OGV visits, each port will have different levels of emission benefits depending on their OGV frequency distribution;
- 2) Because of the necessary resources needed to comply with this section of the proposed regulation and the potential for shipping companies to alter their vessel visit frequencies, the opportunity exists for shippers to avoid meeting the FV threshold;
- 3) The current language does not guarantee that the FVs identified in 2008 will necessarily remain FVs and meet a minimum usage requirement come 2010. Therefore, the emission benefits are unpredictable; and,
- 4) As worded, the proposed language would register FVs based on visits starting in 2008 with compliance to begin in 2010. Due to changes in logistics, such as routes serviced or shifts in cargo carrying capacity requirements, or natural turnover of ships, this requirement may actually reduce a shipping company's flexibility to run their most efficient routes with the most applicable vessels.

Instead of defining compliance with this section based on FVs, alternatively, we propose that 70% of all OGV calls to a port be required to meet the additional 50% reduction in both NO<sub>x</sub> and PM. By requiring a uniform strategy, we believe this allows flexibility to accommodate shifts in shipping logistics and demands and, simultaneously, would hold all ports to the same standard, in turn locking in emission reductions.

We recommend that ARB pursue this strategy by requiring that a certain percentage of all ship calls at outfitted terminals be connected to shoreside power and that for future expansions and during lease renewals that terminals be required to be equipped with shoreside hook-ups for marine vessels.

Specifically, we recommend that ARB propose and adopt a regulation as soon as possible requiring at least 70% of ship calls utilize shoreside power within two years at terminals where a new lease is entered or an existing lease is renewed. Additionally, this regulation should require 70% of total OGV calls for all ship types (e.g. container, reefer, tanker, cruise, etc.) or all OGV FVs (5 or more visits), whichever approach yields the greatest

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<sup>1</sup> Vessels which paid 3 or more visits per year to the Port of Long Beach account for 26% of the total vessels or 64% of the total calls. 'Cold Ironing Cost Effectiveness Study – Volume I - Report', prepared for the Port of Long Beach by ENVIRON International Corporation, March 20, 2004, Table 1-1, Section 1 page 2.

emission reductions, to use shoreside power and have a 100% participation rate by a 2010 compliance deadline.<sup>2</sup>

### Vessel Emission Reduction Plan (VERP)

We support the concept of a VERP to demonstrate the technology that will be used to meet the additional NO<sub>x</sub> and PM reduction requirements; however, we believe the VERP should give clear priority to emission reduction options under this section based on proximity and maximum public health benefit to communities (e.g. emission reduction benefits 40 miles out at sea are not as beneficial as reductions at the shore).

Additionally, given the intent of this rule is to reduce emissions from auxiliary engines, we strongly suggest that provision (g)(1)(b) be removed. Further reductions in emissions as required by the VERP should be achieved from auxiliary engine related emissions and we believe other ‘sources’ of pollution (e.g. boilers, propulsion engines) should not be mixed or essentially ‘traded’ under this rule.

Finally, we also recommend the removal of provision (g)(d)(v) which allows ‘operational controls’ to achieve the additional reductions in emissions. We believe only measures that are verifiable and enforceable should be permitted to satisfy this provision.

### Alternative Compliance Plan (ACP)

We support the concept of allowing OGVs to meet equivalent reductions of PM and NO<sub>x</sub> through approved alternative methods; however, section (f) should clearly state that if the ACP is chosen to meet the requirements of (e)(1), this does not exempt the OGV from complying with subsection (e)(2).

Also, as stated in the above section, we similarly want to emphasize that strategies permitted under the ACP must be prioritized by emission reductions which are closest and provide the greatest public health benefit to communities.

Also, as stated in the above section, we recommend the removal of provision (f)(c)(5) which allows ‘operational controls’ to achieve reductions in emissions. We believe only measures that are verifiable and enforceable should be permitted to satisfy this provision.

### **Examples of the use of low sulfur marine fuel and its availability:**

1. NYK shipping line uses less than 2,000 ppm sulfur marine fuel in their ships operating around the West Coast of North America and in Europe.

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<sup>2</sup> Our recommendation mirrors the recently approved Port of Los Angeles No Net Increase Task Force’s recommended mitigation measure on OGVs and shoreside power. It is our understanding that a slightly more stringent version of mitigation measure OGV16 (see draft distributed on March 1<sup>st</sup>, 2005, p. 30) was negotiated and approved at the March 2<sup>nd</sup> and 3<sup>rd</sup> Task Force meetings. The compliance rate for non cruise ship vessels was increased to 100% by 2010 with an interim deadline to be determined. We propose that ARB adopt a regulation which reflects this more stringent measure.

2. A Port of Los Angeles shipping line is using less than 2,000 ppm sulfur marine fuel shoreside.
3. New oceangoing vessel – OOCL Long Beach – built to run on lower sulfur marine fuel.
4. Four major distillate grades with less than 2,000 ppm sulfur are available today in the U.S. Various grades of distillates are currently available at the Port of Long Beach, including 15 ppm sulfur fuel (sold by BP Amoco) which has the required flashpoint for use in marine vessels.
5. 95-99% of European Union ports supply less than 2,000 ppm sulfur marine fuel.
6. By 2010, European Union plans to have all ships using less than 1,000 ppm sulfur fuel at berth. Accordingly, by no later than 2010, most ships will have added any additional tanks or infrastructure necessary to comply with low sulfur fuel requirements.
7. Wartsila has reported the capability of cruise ships to safely switch between marine bunker and distillate fuels while underway and approaching a port.