



Position of the World Shipping Council

Regarding

The International Maritime Organization's Review of Vessel Air Emissions And The Proposal by the Government of the United States

Background

Effectively addressing vessel air emissions through a new international regulatory regime is an important issue facing the shipping industry. The international liner shipping sector of the industry, whose vessels regularly call at many urban ports facing air quality issues, recognizes the need for effective action by the International Maritime Organization ("IMO") to strengthen and unify current vessel air emission standards.

The World Shipping Council ("WSC" or "Council") represents the ocean carriers carrying the vast majority of the world's liner shipping cargo. WSC Members, listed at the end of this memo, transport roughly 90% of the world's containerized cargo, or roughly 100 million TEUs annually, and are responsible for a substantial percentage of the world's port calls. For example, the U.S. government has estimated that container ships made 31% of the vessel calls at U.S. ports in 2005.

Decisive IMO leadership is needed to address this issue. Negotiations to strengthen the current emission standards in the MARPOL Annex VI Treaty are underway at the IMO.

The Council supports the following objectives for these international vessel air emission negotiations:

1. Development of uniform, international rules that are widely adopted and respected. Ships are instrumentalities of international commerce and need consistent international rules governing vessel emissions. WSC opposes the establishment of different regulatory approaches by individual national, regional

or local governments. The industry needs an effective, predictable, international regulatory system.

Failure to take decisive and effective action would put the IMO at risk of losing its leadership role and its ability to establish international standards that will be adopted and respected. For local, national and regional authorities to defer to the IMO, the organization must produce effective standards that meet the environmental objectives of those authorities, particularly in major urban port areas. It will be a significant problem for the industry if there is not an international regime that effectively addresses these issues and if there is a plethora of different national and regional regulations. In an encouraging development, the California Air Resources Board has gone on record as supporting the U.S. proposal at the IMO, stating that “equally effective international regulation of ship emissions would be a better solution”.

2. The regime should recognize the need to establish more stringent air emission standards near populated coastal zones with serious air quality issues than on the high seas and other areas. Regional coastal or port area air emission requirements established under consistent IMO methodology must be able to meet the environmental needs of the most affected and concerned port areas, including Hong Kong, U.S. West Coast, and certain European ports, all of whom have established or are considering unilateral measures to address the issue because of local air quality concerns. These stricter standards needed for these identified coastal zones do not need to be required in all coastal areas or on the high seas.
3. The industry should be able to operate with no more than two different fuel standards -- one distillate fuel standard for certain, defined coastal areas that meets those areas’ environmental needs, and a residual fuel standard for the open ocean. One low sulfur distillate fuel standard is needed that would be acceptable in all defined “SECA-like” coastal areas.¹ More than two different fuel standards would be very difficult to implement for vessel operators, and would cause confusion in the marine fuel refining market. The sulfur standard for the distillate fuel should be the lowest practical level that will be sufficient to meet environmental needs.
4. Avoid a requirement to use only distillate fuel globally.

First, the oil refining industry is unlikely to be able to produce such quantities of marine distillate fuel without enormous difficulty, at best. The maritime industry today burns approximately 200 million tons of residual fuel a year (by comparison in 2005, the entire European Union consumed about 170 million tons of diesel fuel). To refine that volume of residual fuel into distillate would be an enormous undertaking for the refining industry.

¹ SOx Emission Control Areas or “SECAs” are internationally agreed areas of the sea where ships are required to burn low sulfur fuel as a result of demonstrated environmental air quality needs of nearby populations.

Second, the proposal to require the use of distillate fuel everywhere would be enormously expensive.

Third, the sulfur levels in the proposed distillate fuel standard that Intertanko proposed at the IMO (1% and then 0.5%) are not sufficient to meet the requirements of certain governments, as California and Europe have already established regimes involving 0.1% sulfur levels.

Fourth, converting all marine fuel to distillate would produce a very substantial increase in greenhouse gas emissions by refineries as a result of additional refining processes. The petroleum industry estimates that refinery CO₂ emissions to produce this marine distillate fuel would increase by 138 million tons per year, a net increase of about 15%. These are significant numbers, particularly in light of the fact the European Union and other governments are looking to restrict CO₂ emissions. While the IMO Annex VI does not deal with CO₂ or greenhouse gas emissions, care needs to be exercised not to unnecessarily increase these emissions when addressing NO_x, SO_x and particulate matter (PM) issues.

5. Ensure that future engine and any after-treatment technology standards can be commercially met by engine and technology manufacturers in the time frames specified, and that such equipment can be certified as compliant with the standards.
6. The industry needs to have sufficient time to implement the new standards.

Liner Shipping Industry Support for the U.S. Proposal

Having reviewed the various proposals and progress made to date at the IMO on this issue, as well as the regulations that have emerged or are likely to emerge at national and local government levels, it is the judgment of the World Shipping Council that the approach proposed at the IMO by the U.S. government would meet the above objectives. It would provide an environmentally effective regulatory system sufficient to meet the needs of urban port areas with significant air quality concerns. It would establish a predictable, international regulatory mechanism for both fuel and engine standards. It would avoid undue disruption of world oil refining capacity. It would avoid the creation of a greenhouse gas “penalty” in addressing NO_x, SO_x and PM emissions.

Other proposals fail either to meet the necessary minimum environmental objectives to be accepted as an applicable international regime, or impose unnecessary or impractical burdens on the industry, or both.

Accordingly, the Council expresses its support for the U.S. government proposed approach at the IMO to address vessel air emissions.

Regarding the specifics of the U.S. proposal, we provide the following additional comments and explanation.

PM and SOx Standards

In order to address particulate matter (PM) and sulfur oxide (SOx) vessel emission issues, the U.S. proposal to the IMO calls for specific performance-based PM and SOx limits within certain defined coastal areas that could be met either by exhaust gas cleaning technology or by the use of low-sulfur distillate fuel.

WSC supports the U.S. proposal based on the following assumptions that have been discussed and confirmed with the U.S. government:

1. The protected coastal zones to be negotiated and defined by governments are not intended to be 200 miles from shore, or a specific distance from all shores, but are to be established pursuant to IMO SOx Emission Control Area (SECA)-like criteria designed to meet demonstrated environmental justification. Thus, a designated zone may be established in an area adjacent to Southern California, for example, but that would not imply that a similar zone be applied adjacent to the Aleutian Islands in Alaska.
2. The specific sulfur content in the distillate fuel standard is to be determined. The proposal by the U.S government is 0.1%, a standard that has already been set for future use in European ports and in Southern California. WSC has no objection to a 0.1% or a 0.2% standard, so long as fuel meeting the standard is reasonably available. 0.2% or lower sulfur fuel is used by a number of WSC lines in certain areas today on a voluntary basis. The sulfur content chosen needs to meet governments' environmental objectives. WSC believes that a sulfur standard in this range, while significantly lower than some proposals at the IMO, is necessary to ensure that the IMO standards are embraced by governments around the world as environmentally adequate. The only obvious condition WSC sees as necessary is that fuel meeting this standard is reasonably available from refiners on a global basis by the proposed implementation date of 2011, and we are not aware of a reason to believe that it would not be available if the IMO can act promptly and provide refiners with a clear and uniform standard and date.
3. Alternative use of scrubber technology needs to be assessed after further clarity is obtained regarding waste discharge limits for scrubbers.

NOx Engine Standards

The U.S. proposal would create four categories of engine standards that would apply to the reduction of NOx emissions:

1. Existing Engines (pre-2000): The U.S. has proposed that those pre-2000 large displacement (greater than 30 liters per cylinder) engines that can be reasonably retrofitted to meet Annex VI Tier 1 standards by use of in-engine adjustments (i.e., valve exchange and injector adjustment) should be retrofitted.

WSC can support this approach, recognizing that engine manufacturers will need to identify which pre-2000 engines are appropriate for valve and fuel injection improvements.

2. Tier 1 Engines: (2000-2010 engines) Current, established IMO Annex VI standards apply.
3. Tier 2 Engines: The U.S. has proposed that as of January 1, 2011 new engine standards for large engines should reduce NOx emissions by an amount to be agreed, but in a range of 15-25% below Tier 1 limits. These new standards would be achieved through in-engine design changes.

So long as there is reasonable confidence that engine manufacturers can meet the new standard by the proposed date, WSC can support this approach.

4. Tier 3 Engines: The U.S. has proposed that engines installed in ships with large marine engine propulsion systems, constructed after January 1, 2016, should be able to meet NOx emission standards in the defined, SECA-type coastal areas that are 80% lower than the Tier 2 levels. The U.S. proposal recognizes that this cannot be achieved by new engine standards alone and will require after-treatment technology to be installed as part of the vessel's engine system.

This is an aggressive proposal designed to apply advanced technology to achieve significantly enhanced NOx emission results in those sensitive coastal areas that are determined and agreed to need additional protection.

To the extent that engine and after-treatment technology manufacturers can be reasonably confident with the U.S. government assertion that new IMO standards can be met within the prescribed time frame, the WSC can support this approach. Vessel operators are dependent upon these manufacturers to provide the necessary technical expertise to assist governments in deciding what standards are reasonable, and to certify their products' compliance with the standards.

Vessel operators' compliance with the standards should be measured by the acquisition and utilization of certified engines and after-treatment technology.

Conclusion

The U.S. government's proposed approach to the issue of vessel air emissions appears to address the environmental objectives of urban port areas concerned about vessel air emissions, the liner shipping industry's objectives stated above, the need to develop fuel standards that are reasonably capable of being met by the oil refining industry, and the need to accomplish these things via a consistent, predictable, international legal regime.

The United States and other governments have from time to time been criticized for pursuing unilateral solutions to maritime issues, rather than international solutions through the IMO. In this situation, the U.S. government is in the process of ratifying Annex VI and is undertaking a concerted effort to develop an effective IMO solution to this challenge through that treaty.

The success of that effort depends on the timeliness and content of the product that the IMO will produce. Ignoring the calls to address this issue, or seeking to delay action or to negotiate the most lenient standards possible would fail to meet environmental needs, would undermine IMO leadership on these issues, and would run the risk of producing a plethora of varying national and regional regulatory "solutions". This would create confusion and litigation, and subject the industry to continued criticism as an environmental problem rather than an environmentally sound form of transportation.

IMO Secretary-General Mitropoulos was clearly correct on April 16th when he noted the need for the maritime industry to be "at the forefront" of meeting the vessel air emission challenge with an effective, international solution.

For all these reasons, the World Shipping Council and its member companies wish to express their support for the approach proposed by the United States at the IMO in addressing this important issue, and hope that other governments and the U.S. government will join in establishing a new effective international vessel air emission regime in the near future.

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World Shipping Council Member Lines:

APL

A.P. Møller-Maersk (including Maersk Line and Safmarine)

Atlantic Container Line (ACL)

China Ocean Shipping Company (COSCO)

China Shipping Group

CMA-CGM Group

Compania Sud-Americana de Vapores (CSAV)
Crowley Maritime Corporation
Dole Ocean Cargo Express
Evergreen Marine Corporation (including Italia Marittima and Hatsu Marine)
Great White Fleet
Hamburg Sud (including Alianca)
Hanjin Shipping Company
Hapag-Lloyd Container Line
Höegh Autoliners, Inc.(formerly HUAL North America, Inc.)
Hyundai Merchant Marine Company
Kawasaki Kisen Kaisha Ltd. (K Line)
Malaysia International Shipping Corporation (MISC)
Mediterranean Shipping Company(MSC)
Mitsui O.S.K. Lines
NYK Line
Orient Overseas Container Line, Ltd. (OOCL)
Pacific International Lines (Pte) Ltd.
United Arab Shipping Company
Wan Hai Lines Ltd.
Wallenius Wilhelmsen Logistics
Yangming Marine Transport Corporation
Zim Integrated Shipping Services, Ltd.