



West Coast Collaborative
Marine Vessels and Ports Workgroup
November 9, 2006 Teleconference Meeting Summary

The Marine Workgroup met by teleconference on November 9, 2006. This was a regularly scheduled meeting to hear about the recent INTERTANKO proposal to the International Maritime Organization (IMO), a summary of the BUNKERWORLD conference, and to cover general updates on EPA and Collaborative activities.

Summary/Discussion of Recent INTERTANKO Announcement

Robin Meech, of Robin Meech Consulting, presented a summary of the recent INTERTANKO recommended amendments to MARPOL Annex VI. INTERTANKO submitted their proposal to the IMO on October 17 after soliciting feedback from its members on the impact of the recently established Baltic Sea Sulfur Emissions Control Area (SECA). INTERTANKO is an independent trade organization representing approximately 50 percent of the actively operating tanker ships in the world. The recommendations include the use of distillate fuels with a global sulfur content cap of 1.0% and the establishment of a Global SECA. The proposal focuses principally on SO_x, though Volatile Organic Compounds (VOCs) and NO_x are included. A major goal of the proposal is to create one, global platform for regulations that is realistic and feasible, while also reducing emissions.

Factors motivating the INTERTANKO proposal include the continued use of tanker fuel use in port during cargo discharging which uses significant more energy than normal operation. In addition, boilers used to power steam driven pumps are inefficient, but upgrade costs make transitioning to cleaner technologies prohibitively expensive in some cases. INTERTANKO believes the switching process from high- to low-sulfur fuel is dangerous, scrubbing technology is untested, and on-board cleaning to reduce particulate matter (PM) should not be required. The group does realize that there will have to be some changes to reduce diesel emissions, particularly with steam boilers used to power offloading pumps.

The proposal predicts large reductions in SO_x and PM and a 10-15% reduction in NO_x, with no investments other than a higher price for distillate fuels due to increased demand. INTERTANKO believes the proposal eliminates the need for bunker treatments and catalytic exhaust processes, and reduces the amount of fuel wasted. The proposal would also eliminate complex operations for changing between different grades of fuel in port and during transport. Because of this simplification, INTERTANKO believes the proposal will eliminate human errors, reduce PM and CO₂, simplify monitoring and regulatory controls, and create a level playing field.

Mr. Meech anticipates that by 2010, the shipping sector will be consuming 650 million tons of residual fuel, which would be a 14 percent increase in current diesel fuel demand. However, he noted that it will be impossible to increase supply that much given the already tight supply chain for diesel fuel driven by high demand from Asian countries. INTERTANKO would like to be seen as green and progressive, however, as Mr. Meech pointed out, this proposal will slow down the process of regulation and requiring cleaner technologies aboard tankers.

After providing the summary to the group, Mr. Meech answered the following questions:

How did INTERTANKO develop these recommendations?

- There was no formal process, however the proposal was vetted with and approved by Intertanko's Executive and Technical Committees.

INTERTANKO has said the proposal would reduce CO₂ emissions; however industry seems to be raising the issue of marine distillate increasing CO₂ because of the distillate production process - increasing demand will increase production and thus production-caused CO₂ emissions. What do you think?



- Mr Meech believes there will no doubt be a large increase in the demand for diesel fuels if this proposal is implemented. However, the production capacity is lagging behind demand, and thus production will not dramatically increase as a result of this proposal.

What is the current daily diesel consumption worldwide?

- About 60 million barrels. In 2010, there will be about 4.5 million barrels of residual consumption and 34 million barrels of distillate used world wide.

How has this proposal been received at BLG?

- It has been reviewed unofficially. Their perception is that this proposal has been good for INTERTANKO's reputation. The concept of a global cap at a level that would reduce global emissions has appeal to people and this proposal will lead to arguments to bring the global cap down.

Summary Discussion of BUNKERWORLD Conference

TL Garret presented a summary of the BUNKERWORLD conference in Copenhagen. Two overriding themes of the conference were a global cap on sulfur emissions and low sulfur fuels.

The implications of fuel testing came up repeatedly. Participants saw a clear need for better defined fuel specifications to ensure that fuels are in compliance. Many attendees of the conference found it troubling that implementation and enforcement are currently undefined.

A related problem beginning to emerge is the trouble matching fuel quality with lube oils. Currently, most companies do not feel comfortable doing this because they do not have enough experience. Mr. Meech noted that testing different mixtures can be difficult because the mixing requires centrifuges that can accommodate at least 100 liters.

European Union representatives were skeptical about the need for low sulfur fuels, noting that there is not a strong scientific background indicating the appropriate level of fuel sulfur to achieve the desired goals. There is also no definition of the ultimate endpoint for sulfur regulation. Many attendees voiced concern that specification is insufficient without changing fuel chemistry which might need to occur in the transition from high to low SO_x residual fuels.

MES and Crystalon both gave updates on their sweater scrubbing projects, and noted that they have both have had problems during testing.

EPA Update - IMO Negotiations and Rulemaking(s)

EPA representatives will be traveling to Oslo, Norway to participate in the next round of IMO negotiations for a new tier of Annex VI standards.

With regard to the EPA rulemaking for marine diesel engines up to 30 l/cyl displacement, EPA is working hard to pull the draft package together and will be sharing it with its regulatory Workgroup in the near future. EPA hopes to complete an internal review and send the draft recommendations to the Office of Management and Budget (OMB) by the end of the year. The package will be available to the general public in early 2007. [NOTE: There was some confusion in the discussion here; many people may have thought Ms. Revelt was referring to the C3 rule.]

Is there a sense of when proposal for C3 marine diesel engines will be presented and standards will be tightened?

-EPA is unsure. The IMO negotiations have not yet come to an agreement on what the specific numeric standards would be, as the group has just begun to explore what is possible technologically.



Britain proposed criteria for washwater from seawater scrubbing, and another country proposed more relaxed limits. There was not a final decision made but people were charged to resolve it by the April meeting. Correct?

-The UK paper was submitted to BLG, and was assigned to Working Group B. It is not clear at this time when this issue will be resolved.

Is there a public process for contributing to the negotiations of the new level of international standards with the EPA or the Coast Guard?

-There will be a public hearing before the next round of negotiations in April. This hearing is held by Coast Guard. They will publish a notice of this hearing in the Federal Register beforehand.

How will the current IMO negotiations affect the rule making for Category 3 next year?

-EPA is interested in seeing where the standards end up for the international program, which will have an impact on EPA's rulemaking.

Are they linked?

-No, not directly.

Action Item: Marine Workgroup members agreed they should create a conduit on the issue of the IMO to provide input to the EPA from members of the Collaborative.

Collaborative Updates

- Pacific Ports Conference on Clean Air Policies & Strategies
 - This conference will be held December 13-15, 2006 in Los Angeles. The conference provides an opportunity for port staff to meet their counterparts around the Pacific Rim. Most of the conference will be centered around updates on regulatory issues and idea sharing. Attendees will also discuss and finalize the charter, talk about best practices, and explore a Pacific Rim emissions inventory. The conference details are available at www.ppagc.org.
- Clean Ships: Advanced Technology for Clean Air
 - This conference will be held February 7-9, 2007 in San Diego. The goal of the conference is to encourage conversations among maritime executives and federal and state regulators around vessel requirements and technology.
- Faster Freight Cleaner Air Conference
 - 2007 will mark the third year of the FFCA conference for airports and seaports.
- U.S.-Mexico Border/Goods Movement Study
 - Tom Beierle from Ross and Associates presented an update on an EPA-funded project to research and identify reduction opportunities and pilot projects for diesel emissions reduction along the US-Mexico border. Call participants should contact Tom if they know of potential contacts, interested parties, or ideas for pilot projects. tom.beierle@ross-assoc.com or 206-447-1805.
- Funding Forums
 - The West Coast Collaborative held Funding Forums on diesel emissions reduction funding sources in Oakland, Fresno and Sacramento on November 6, 7, and 8 respectively. Two additional forums are being planned. For more information, contact Kristin Ria at 415-497-4150 or visit the Collaborative Funding Forum website at: <http://www.westcoastcollaborative.org/funding-forum.htm>
- Puget Sound-Georgia Basin Emissions Inventory
 - The inventory will be completed and released in January 2007. As a follow-up, there may be a mini-conference in May in Seattle, similar to the Faster Freight Cleaner Air conference. If there are any agenda suggestions for this conference, contact the Georgia Basin Coordination Office. Zita.Botelho@ec.gc.ca.

Conclusion

The next Marine Workgroup teleconference will be in January 2007, date to be determined.