

***West Coast Diesel Emissions Reductions Collaborative***  
**Marine Vessels and Ports Workgroup**  
**Fuels Issues Focus Area**  
**September 28, 2004 Teleconference Meeting Summary**

*This document is written as a meeting summary and is not designed as minutes. Any comments or additions to these notes will be shared with all Workgroup partners.*

**Welcome and Roll Call**

The Fuel Issues Focus Area of the Marine Vessels and Ports Workgroup met by conference call on September 28, 2004.

The purpose of this teleconference was to:

- 1) Discuss the potential consideration of a SECA applications by EPA and Environment Canada, with the potential for a joint application, as well as the fuels-related work currently being considered by the Western States Petroleum Association (WSPA);
- 2) Discuss analysis of, and share information on, the West Coast fuel supply, specifically regional low-sulfur diesel and pacific-wide bunker fuel; and
- 3) Discuss ways to promote widespread adoption of alternative fuels before regulations go into effect, based on the successful adoption by certain vessel types (ferries and tugs) and on-shore equipment.

**SO<sub>x</sub> Emission Control Area (SECA) Considerations**

Bryan Wood-Thomas from U.S. EPA and Morris Mennell from Environment Canada discussed the background, interest and role of their respective federal governments in a potential SECA application.

From EPA's perspective, there were four areas of information related to a SECA that must be analyzed:

1. Vessel traffic
2. Transport modeling of offshore emissions
3. Environmental effects
4. Fuels markets

Of the four areas, availability of lower sulfur fuels would likely be the central issue because the overall worldwide demand for lower sulfur fuels is increasing due to economic growth in Asia, stricter SO<sub>x</sub> emission standards, and an anticipated future reduction in bunker fuel availability. EPA hopes to conduct a large-scale assessment of the fuels market in North America, done jointly with Environment Canada, in the hopes that the results would be applicable to the world fuels market. EPA noted that 1.5% was the maximum sulfur content for a SECA, although EPA continued to look at the benefits of even lower sulfur levels.

Environment Canada has already begun a life-cycle study of imported and domestic fuels in Canada. There have been discussions between the regional offices of Environment Canada on how to aggregate the regional data in order to determine the feasibility of a SECA study. It was the understanding of Environment Canada that all North American studies would be done jointly/bilaterally with EPA, and would hopefully include Mexico as well.

The issue of Mexican involvement and engagement in a potential SECA application process was discussed. Environment Canada has had informal communications with Mexican authorities, but had decided to continue to move forward before

formally approaching them. In general, Mexico seems to be a bit behind the U.S. and Canada in their understanding and discussions of SECA issues. The California Air Resources Board offered to pass on some contacts for future discussions with the Mexican government.

EPA also confirmed that a SECA is most appropriate for large areas (such as North America or the West Coast) rather than smaller areas (such as Southern California) to avoid distortion that could create unnecessary inter-port competition.

The schedule for coordinating and developing a SECA application was also discussed. EPA felt a specific timeframe would be hard to establish, as certain regions, most notably the East and Gulf Coasts, seemed to be facing larger challenges in getting started together than the West Coast. When taking into account a perceived need for discussion of gaps and limitations, EPA suggested a SECA application would happen no sooner than in 18 months. However, data/information collection could start much sooner.

Puget Sound Clean Air Agency (PSCAA) suggested using the Diesel Retrofit Federal Advisory Committee (FACA), STAPPA/ALAPCO and/or the Environmental Council of States (ECOS) to help build support beyond the West Coast for a SECA application.

Following up a rather technical discussion of air quality standards related to a SECA, the Port of Seattle felt there was a real need for not only collecting more information, but for developing a strategy and mechanism for delivering that information to stakeholders and/or decision-makers that might not have a strong technical background in air quality. By doing so, more stakeholders could be involved in the process and have their input heard.

Western States Petroleum Association (WSPA) is also actively analyzing the issues that hold the potential for being useful to a SECA application. Because there were no representatives from WSPA on the line, Dennis McLerran, PSCAA, summarized, to the best of his knowledge, WSPA's current work status. WSPA has scoped a West Coast study to investigate the introduction of low sulfur fuels related, but not exclusive to, SECA compliance. Joint development and/or funding of this project might be appropriate, as EPA believes that much of the information that might be collected by the WSPA effort would be necessary for a SECA. It is anticipated that the WSPA work would complement – rather than duplicate – EPA and/or Environment Canada's national efforts.

Dennis McLerran suggested that a group of the air quality agencies, such as EPA, Environment Canada, CARB, and PSCAA, should approach WSPA to further discuss additional involvement and potential joint development/funding of the project. Environment Canada would also see if it makes sense to include Western Canada in WSPA's West Coast study. The scope, schedule, and work plan for WSPA's study, while not definite at this point, should be available to the Marine Vessels and Ports Workgroup after the discussions happen. It was stressed that EPA and Environment Canada will still conduct a national study in addition to any WSPA West Coast study.

Overall, when working on developing a North American SECA, it is important for these West Coast efforts to craft something that can be combined with other areas, as the ultimate goal, if a SECA is pursued, would be to develop a SECA for numerous coasts in North America. It must also be developed and marketed in a way that will appeal to, and be understood by, a wide variety of stakeholders.

### **Promoting Early Adoption of Alternative Fuels**

After a brief overview of the numerous issues related to both lower sulfur diesel fuel and bunker fuel – such as compatibility of fuel types with engine types, and cost differentials – participants discussed how to bridge the issues of understanding current West Coast fuel supply issues to support early introduction of lower sulfur fuels, as well as, again, information needed for a SECA.

The Canadian Petroleum Products Institute (CPPI) asked if it would be productive for separate work to be done on the West Coast, since, as mentioned earlier, it could overlap work already done or currently being done. The WSPA study appears to be involved with the fuels issue, while Environment Canada and EPA would have to also be involved primarily with the three other issues that must be discussed in the SECA, for which both agencies are still in the process of developing a blueprint. It was stressed that the Workgroup needed to think about what would be the most efficient way to operate to support these efforts.

In the area of identifying additional partners and funding sources, the Port of Seattle mentioned that the University of Washington had recently received a \$30 million grant from EPA to examine air quality issues related to fine particles. This spurred further discussion on the parties that should be involved in the process.

The discussion next shifted to identifying opportunities and strategies for promoting the early adoption of alternative fuels. As a preface, it was noted that EPA has under consideration revisions to standards for marine vessels that will require ultra low sulfur diesel (ULSD – 15 ppm sulfur content), likely starting in 2012. However, some earlier adoption of lower sulfur diesel is already taking place at the local level for specific vessel types, such as ferries, tugs, and locomotives.

Promoting early adoption of alternative fuels needs to largely focus on lowering the cost of lower sulfur fuels. An important step in supporting efforts to lower costs would be to collect information on and differentiate between types of vessels and engine types regarding what types of fuels they can utilize, so that efforts can be targeted properly. The Puget Sound Steamship Operator Association strongly concurred with this idea, noting that an education campaign was necessary so that Collaborative partners, as well as additional stakeholders, are more knowledgeable on the differences that exist within the numerous vessel types.

An important first step is to work with WSPA and other fuel supply industry stakeholders on what the current and projected market for lower sulfur fuels is, and what the availability of lower sulfur fuels might look like in the coming years. Some estimates suggested the difference between ultra low sulfur fuel and highway fuel is at most 3-5 cents per gallon, which suggests that higher sulfur fuels could be phased out even before regulations take effect if that differential could be lowered. Other estimates were that the cost differential between fuel types at the refinery is negligible, thus the need to understand the transportation and distribution system in order to help target efforts to lower costs.

It is also important to understand the timing of the West Coast refinery capacity to switch to lower sulfur fuels, and whether the switch to lower sulfur fuels for on-road use in 2006 will eliminate the availability of higher sulfur fuels for other uses even before the regulatory deadlines for those other uses.

World Fuel Services suggested that the study analyze the timeframe and costs for vessels associated with switching fuel types, noting that ULSD currently yielded a \$60/ton premium for its customers in Port Angeles. APL informed participants that ULSD commands a \$40/ton premium over 3% sulfur for its customers, and fuel costs almost double when compared to those using heavy sulfur fuels. Much of the information assorted with this type of study most likely already “exists” and is known by one or more of the Workgroup partners. For example, CARB may have done a similar analysis to support recent rule makings.

Further discussion with WSPA as described above on completing its study of the supply, demand, and availability of fuel currently in the West Coast market, and what the pricing structure will likely be, was determined to be an excellent first step. Such a study might help serve as a definitive source for what types of fuels are currently being used, and by which segments of the market (ports, vessels, trucks, etc.).

Dennis McLerran suggested that Ross & Associates help scope what such an analysis would need to address (questions to be asked, people to be contacted, etc.) and then help compare this scope of work to what is going to be analyzed by

the federal governments' SECA effort and/or the WSPA study to identify gaps. Dennis could then report back to the Workgroup on a recommended path forward and the suggested level of effort and participation required to accomplish this analysis.

### **Wrap Up and Next Steps**

Now that the three introductory Focus Area calls have been completed, and a substantive agenda of work for the Collaborative is emerging, Ross & Associates will work with EPA, Environment Canada and PSCAA to develop a work plan and recommendations for the Workgroup on how to move forward that would then be shared with all partners for discussion.

The group was informed to watch for further development of the Marine Vessels and Ports area of the Collaborative website ([www.epa.gov/air/westcoastdiesel](http://www.epa.gov/air/westcoastdiesel)) where all agendas and meeting summary notes will be posted.

***Attendees***

Alicia Blancarte	Port of Vancouver
John Berge	Pacific Merchant Shipping Assoc.
Tom Chapelle	Alaska Department of Environmental Conservation
Barbara J. Cole	Port of Seattle, Environmental Programs
Wade DeClaris	World Fuel Services
Anthony Fournier	Santa Barbara County Air Pollution Control District
Ellen Garvey	Cleaire
Andrew Green	Environment Canada
Gina Grey	West States Petroleum Association
Roxanne Johnson	US EPA Region 9
David Levitan	Ross & Associates
Lisa McArthur	US EPA Region 10
Dennis McLerran	Puget Sound Clean Air Agency
Morris Mennell	Environment Canada, Pacific & Yukon Region
Mike Moore	Puget Sound Steamship Operator Association
Peter Murchie	US EPA Region 10
Susan Payman	APL
Debbie Rosenblatt	Environment Canada
Bill Ross	Ross & Associates
Bob Saunders	Washington Department of Ecology
John Skowronski	Canadian Petroleum Products Institute
Peggy Tarrico	California Air Resources Board
Jay Willenberg	CH2M Hill
Bryan Wood-Thomas	US EPA
Dan Yuska	US Maritime Administration

