

West Coast Diesel Emissions Reductions Collaborative
Marine Vessels and Ports Workgroup
November 22, 2004 Teleconference Meeting Summary

The Marine Vessels and Ports Workgroup met by conference call on November 22, 2004. The purpose of this meeting was to re-orient the Workgroup following the initial Focus Area teleconference meetings, update partners on fuels issues, and identify and pursue diesel emission reduction project opportunities.

Collaborative Update

Dennis McLerran, Puget Sound Clean Air Agency (PSCAA), provided an update on the Collaborative since the last Marine Workgroup call at the end of September.

On September 30th, eight simultaneous press events were held on the West Coast, including a marine-oriented announcement at the Port of Seattle for Princess Cruise cold ironing. This project was a great example of a successful partnership and the event was well attended, including an appearance by Governor Gary Locke. While Princess Cruise's cold ironing efforts at Pier 30 went beyond what was required, some environmental groups commented that the characterization in the media that this was completely voluntary was a misrepresentation because Princess Cruise was in fact directed to take some sort of action.

All Workgroups have met in November and plan to continue to do so every other month. The Interim Steering Committee met in October and will meet again in December.

The next steps for the Interim Steering Committee include:

- Looking to identify \$1 million for projects next year to continue the momentum, hopeful to have that short-term funding approved early in 2005.
- Identifying and communicating existing grant and other resource opportunities.
- Migrating the website to an independent domain.
- Launching a monthly newsletter to consolidate the information from the Collaborative and to minimize the email traffic.
- Beginning plans for a February face-to-face Collaborative meeting in Seattle.

Diesel Retrofit FACA

In other Workgroup relevant connections, the national diesel retrofit advisory group (known as a FACA, in reference to the Federal Advisory Committee Act, utilized when a federal agency is seeking consensus advice) has lots of activity in preparation for a series of sector specific meetings coming up in 2005. Similar to the West Coast Collaborative structure, there are several FACA sector groups, including a marine group. Michael Block, Northeast States for Coordinated Air Use Management (NESCAUM) and Trish Koman, EPA, are the co-leads for the Marine group of the FACA. Dennis McLerran, PSCAA, and Barbara Cole, Port of Seattle, are also part of that group.

Responding to questions about the FACA, Michael Block and Trish Koman explained the group's purpose, outputs and activities. While the name of the FACA suggests a focus

on diesel retrofits, in fact the FACA will consider any emission reduction technique, such as behavior changes, after-treatment devices, repowering, alternative fuel use, or equipment replacement. The FACA marine workgroup is primarily focused on emission reduction strategies for captive fleets and shore-based equipment; the workgroup is also focused on cold ironing for ocean going ships.

The primary output of the FACA will be a report due to EPA by the end of 2005. The report will provide guidance to EPA to get more out of the diesel retrofit program through two avenues: 1) greater penetration in sectors that have mature programs (such as schools buses) and 2) improve efforts for those sectors without much momentum (such as construction).

In the immediate future, the FACA marine workgroup is piggy-backing onto an American Association of Port Authorities (AAPA) meeting in Corpus Christi, Texas on January 26, 2005. Following the Corpus Christi meeting, the FACA marine group will use information from AAPA members to compile the “ports module” of the report to be delivered to EPA; they expect to have a draft ready by August for additional comment.

Dennis McLerran and Barbara Cole will help create linkages between the national FACA and the West Coast Collaborative to make sure they’re moving in the same direction. In comparison to other parts of the country, it appears that the West Coast is leading the way with respect to marine diesel retrofit efforts.

Other

In another connection to the Collaborative, the California Air Resources Board held several marine vessels conferences on November 9th, 10th, and 11th; notes from these meeting are available at:

<http://www.arb.ca.gov/msprog/offroad/marinevess/marinevess.htm>

As conference information or conference materials become available, please send this information for distribution to Brewster Boyd at Brewster.boyd@ross-assoc.com.

Workgroup Priorities

Based on past Collaborative calls and Workgroup member energy, Dennis McLerran proposed to alter the Workgroup structure to minimize redundancy by moving from three separate Focus Areas to two.

1. Projects and Information Sharing – will continue to pursue regional diesel emission reduction projects and to share information when helpful; will identify potential projects and encourage cross-border (state and international) efforts when possible; will meet approximately every other month.
2. Fuels Issues – will continue to focus on supporting a potential SO_x Emission Control Area (SECA) and early adoption of lower sulfur fuels; will connect to Emission Inventory (EI) work in local forums and will coordinate along the West Coast and nationally as appropriate; may commission, supplement and/or support fuel and emissions studies on the West Coast; will meet on an as needed basis.

This proposal draws from the impression that interest around local emission inventories is largely based in the Puget Sound area. Instead of having the full group focus on EIs, the Puget Sound local forum (and others as appropriate) will connect to the Workgroup through the Fuels Issues Focus Area. At the same time, national emission inventory coordination remains important and this coordination will likely relate to SECA information requests and will be covered under Fuels Issues.

Fuel Issues Updates

Emissions Inventory

Barbara Cole, Port of Seattle, reported that the Puget Sound Forum has been established to focus on developing a regional emission inventory. According to their charter, Puget Sound Forum has three goals:

- Build greater technical understanding of marine air emissions, starting with preparation of a high quality maritime emissions inventory;
- Support implementation of cost effective maritime air pollution control strategies by sharing expertise and resources and building partnerships when activities require the cooperation of multiple organizations for success; and
- Serve as the Puget Sound forum for the ports and vessels track of the West Coast Diesel Emission Reduction Collaborative.

The EI will encompass the Puget Sound region up to the Canadian border and out to the mouth of the Strait of San Juan de Fuca. The forum will use a contractor for the methodology and EI design and forum members have committed staff to collect the information. Notably, in contrast to most other EIs around the country, the Puget Sound EI is being done not as a regulatory response, but for planning purposes. The EI will include criteria pollutants, air toxics, and greenhouse gases.

SECA update

Dennis McLerran offered an update on the progress toward a potential SECA application. He suggested we are on the cusp of significant things happening in moving toward. Environment Canada (EC) has a proposal to define a blueprint for a SECA and EPA is pursuing a blueprint, working with NESCAUM as the contractor to develop a draft blueprint.

Andrew Green, EC Yukon Region, reported that EPA and EC have tentatively agreed to consider a SECA for all of North America including the West Coast, East Coast, Gulf Coast and the Great Lakes. Both agencies are working to define whether there is a justified case to make the application. The study commissioned by Environment Canada will identify the criteria from the International Maritime Organization (IMO), define the data available, and confirm what information gaps exist. EC would like to award the contract in December and anticipates having the report complete in March. The scope of work can be seen by double clicking on the following icon.



Revised Merx
Posting SECA.mht

There will be a series of items required to support a SECA application, including identifying the environmental and ecological effects, atmospheric modeling, and collecting emission inventory information. The Workgroup can play a significant role in helping determine whether there is sufficient support for a SECA. It is likely that there will be a lead state agency on the West Coast; CARB could potentially play that role.

Lisa McArthur, EPA Region 10, reported that the understanding with Mexico around a SECA is that EPA headquarters will bring them in when necessary. Alicia Blancarte, Port of Vancouver, mentioned that in her experience, Mexico is interested in looking at the SECA, but they are behind U.S. and Canada. Mexico has some major capital investments needs to even meet Annex VI and also have to conduct significant emission inventory work before they would be able to fully participate. Regardless of whether Mexico is ready to embrace a SECA application, Workgroup members may be able to independently help them in the interim through various personal connections.

So far, there has not been much pushback to a SECA, but it might be that information has not yet reached those who might be concerned. The next steps of collecting accurate information and broadly distributing that information may help reveal concerns, if any. It may be easier to develop a final application down the road if we address any concerns early on.

There is an important intermediary step along the way in that both Canada and the U.S. must ratify Annex VI before a SECA can be considered. However, indicators are that ratification is seen as a formality rather than a debated issue.

Teri Shore, Bluewater Network, suggested that environmental advocacy groups could provide valuable outreach and public education to build support for a SECA.

Dennis McLerran will play a role bridging EPA headquarters to the Collaborative Workgroup to make sure EPA knows that we are a standing group and ready to assist. Over the next month or two, we should see significant movement in the federal agencies. The next Marine Workgroup meeting will include the needs/process for a SECA application as a major agenda item.

Western States Petroleum Association (WSPA) Fuel Study

A subset of the Workgroup considered WSPA's scope of work contracted to Entrix (based in California) to look at fuel use along the West Coast on behalf of its member refineries. The subset of the Workgroup determined that while agencies and ports could support and use the study, it was not appropriate at the SECA level and did not fully address all of the Marine Workgroup-relevant fuel use questions on the West Coast. Therefore, the Workgroup will not join or expand the scope of work.

The study may include proprietary information and WSPA will decide what information can be shared with others and what needs to remain confidential. Calls and information requests may be coming from WSPA to help supply publicly available information.

To supplement the WSPA study, Ross & Associates will be looking at fuel use and availability along the coast to understand the on and off-road diesel fuel availability. Please share any relevant information with Brewster Boyd (brewster.boyd@ross-assoc.com).

In addition, a Pacific Rim bunker fuel supply study will be commissioned by EPA in conjunction with other SECA-related efforts.

The remaining piece of information not captured in these views is the supply and use of marine gas-oils. CARB has some information, but the situation on the rest of the West Coast is unknown.

CARB Information

There are two developments from CARB regarding diesel use in marine applications:

- At a November 10th CARB Board meeting, it was proposed (but has not yet been approved) that ocean-going vessels auxiliary engines switch from gas-oil to distillates when operating on the California coast or dockside.
- The CARB Board approved a measure requiring CARB diesel fuel be used in harbor craft (and intra-state locomotives). This will result in both NO_x (6%) and PM (14%) reductions compared to EPA diesel.

Potential Projects

Peter Murchie, EPA and West Coast Collaborative Coordinator, introduced that the Collaborative is developing a portfolio of project descriptions to suggest the types of projects that are possible if additional resources were available. The portfolio of projects could be used by Collaborative participants, individually and together, as they have conversations with budget decision makers who control sources of funding to encourage identification and dedication of new resources. The Collaborative wants to show decision makers that we are working together successfully to prove that additional funds will be used well.

In the short term, EPA hopes to issue an RFP for diesel reduction projects for Regions 9 and 10 on the order of \$1 million in December or January. In the longer term, in part by using the project portfolio, the Collaborative hopes to garner significant federal funds.

The list of projects presented in the agenda (copied below) was gleaned from past meetings and teleconferences; it is not in any prioritized order. Neither this Workgroup nor the Collaborative suggests supporting or promoting any of the projects over the others. The list is provided to maintain a record of potential project areas. While specific projects coming out of this list could eventually apply for funding from the EPA RFP or

other funding sources, the project descriptions requested are not going to be used directly in any competitive grant process.

1. Ocean-going vessels (container, cruise, bulk, and tanker ships)
 - Cold ironing
 - Promoting lower sulfur fuel use while berthed
 - Remote fuel use monitoring
 - Retrofitting to enable use of fuel emulsification technology
 - Retrofitting auxiliary power units
2. Captive fleets (ferries, tugs, barges, and tour boats,)
 - Subsidizing further alternative fuel adoption
 - Installing diesel oxidation catalysts for ferries
3. Shore-based equipment
 - Retrofitting auxiliary engine
 - Retiring and replacing older equipment/fleets
 - Installing plug-in power
 - Installing diesel oxidation catalysts or carbon particulate filters
 - Promoting alternative fuel options, such as LNG or CNG
 - Retrofitting with anti-idling technology
4. Trans-modal
 - Installing anti-idling technologies for trucks and switcher locomotives operating in ports

A template to guide project descriptions follows these notes, however, other written material is certainly acceptable – this is not meant to create unnecessary work. The Collaborative is asking for potential project descriptions by December 10th to help share information with budget decision makers. There are no limitations to the projects or who can submit projects. This information can be sent to the EPA regional leads for this Marine Workgroup – Lisa McArthur, Region 10, at mcarthur.lisa@epa.gov and Bill Jones, Region 9, at jones.bill@epa.gov.

Summary and Next Steps

The Marine Vessels and Ports Workgroup anticipates considerable SECA-related developments from the U.S. and Canadian federal governments in the next couple of months. The availability of SECA-related information will play an important role in the timing of the group's next teleconference.

In the meantime, diesel emissions reduction efforts continue and participants are encouraged to combine efforts where appropriate.

The next Workgroup call will likely be in mid-late January.

Attendees

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Bob Hoffman	Dockwatts	310-373-8222	energydynamix@att.net
Bob Saunders	Washington Department of Ecology	360-407-6888	rsau461@ECY.WA.GOV
Bill Jones	U.S. EPA, Region 9	415-947-4276	jones.bill@epa.gov
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Contact Name	Contact Organization	Contact Phone	Contact e-mail
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Lisa McArthur	U.S. EPA, Region 10	206-553-1814	mcarthur.lisa@epa.gov
Michael Block	North East States for Coordinated Air Use Management (NESCAUM)	617-259-2000	mblock@nescaum.org
Mike Moore	PSSOA Puget Sound Steamship Operator Association	425-493-6150	mikemoore@pssoa.org
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Trish Koman	U.S. EPA	734-214-4955	koman.trish@epa.gov

West Coast Diesel Emissions Reductions Collaborative

Name Of Project Or Project-Area

Working with leaders from government, the private sector, and environmental groups the West Coast Diesel Emissions Reduction Collaborative (Collaborative) brings attention to the need for additional funding for diesel emissions reduction on the West Coast and encourages voluntary and incentive based projects that reduce diesel emissions. The Collaborative is focused on projects that are regional in scope, leverage funds from a variety of sources, result in real measurable reductions/results, and create momentum for future diesel emissions reductions. This document describes an important potential diesel emissions reduction project in the name of sector: name of project or project-area.

Project at a Glance

- Tons or pounds of NOx, PM2.5, and/or GHG reduced per unit.
- Total projected emissions reductions over the life of the project.
- Number of people / population that benefits. Quantify projected health benefits, if possible, e.g., 100 fewer lost-school days per year.
- Number of units, e.g., trucks, pumps, etc. addressed.
- Fuel or other savings, if applicable
- Cross-media benefits, if applicable

Problem Statement

Describe the problem and the emission source that will be addressed by the project or project area and why it is important. List facts and figures that will capture people's imaginations, for example, total emissions per year and some of the projected health effects of these emissions. Make a compelling case why this type of project will improve human health and the environment.

Proposed Actions

Describe what you propose to do, the locations it will occur, and the timeline/timeframe. Be as specific and engaging as possible. Mention proposed milestones and intermediate goals, describe how you will monitor progress and determine how your goals are being met; and write about your evaluation plan and any end products such as reports or white papers you will create.

Anticipated Benefits

Describe the anticipated benefits and quantify them wherever possible. Emphasize potential emissions reductions (NOx, PM2.5, and GHG) by tons or pounds per year, population that will be served by the project (if there are EJ benefits mention them), any

multi-media impacts, opportunity to leverage other funds, and other benefits/savings. If this is a demonstration project, project future benefits from additional applications.

Estimated Costs

Describe the incremental costs (ie, cost per unit of pollution reduced and cost per unit of equipment), and the total costs.

Collaborative Partners

Identify the partners in your project, their roles, and (if applicable) their funding contribution. Describe how each partner will be involved and their qualifications of key organizations or staff.

More Information on the Collaborative and Contacts

The West Coast Diesel Emissions Reduction Collaborative is made up of federal government agencies from the U.S., Canada and Mexico, and state and local governments and non-profit and private sector partners from California, Oregon, Washington, Alaska and British Columbia. The Collaborative's purpose is to bring attention to the need for additional funding for diesel emissions on the West Coast, support voluntary diesel emissions reductions, create a forum for information sharing among diesel emissions reductions advocates, and leverage significant new resources to expand voluntary diesel emissions reductions efforts.

The goal of the Collaborative is to leverage over \$100 million in new federal funds for diesel emissions reductions projects per year for 5 years to reduce emissions from the most polluting diesel sources in the most impacted communities and significantly improve air quality and public health. By targeting the higher polluting engines with the most cost effective strategies, we estimate that the benefits of this investment will significantly outweigh the costs.

For more information on project or project-area, contact: name, affiliation, phone, email—it would be good to try to list one government and one non-government contact for each project..

For more information on the Collaborative in general, go to www.epa.gov/air/westcoastdiesel or contact Peter Murchie, murchie.peter@epa.gov or Michelle Roos, roos.michelle@epa.gov.