West Coast Collaborative
Marine Vessels and Ports Sector Workgroup Call
Wednesday, July 18, 2007 – Meeting Summary

San Pedro Bay Clean Air Action Plan Implementation

Heather Tomley, Port of Long Beach (tomley@polb.com)

Website: http://www.cleanairactionplan.org/

In November the Boards of the Port of Long Beach and Port of Los Angeles jointly adopted the San Pedro Bay Clean Air Action Plan. The two Ports have since been working on implementing the programs in the plan, including providing extensive outreach to industry groups, conducting public meetings, and holding workshops to explain the programs and answer questions. An ocean-going vessel (OGV) workshop will be held on July 19 to provide more information about the goals in the plan and how carriers can move forward to reach those goals. The Ports also developed an annual recognition program to recognize industry that go beyond current requirements to help meet the plan goals. The first application period for the recognition program will be January 2008.

The Ports recently launched a technology advancement program under the Plan. Guidelines and an application for submission of proposals are on the website, listed above. The program is conducted jointly by the South Coast Air Quality Management District (AQMD), the California Air Resources Board (CARB), and the Environmental Protection Agency (EPA) to ensure consistency and pool funding. Contact Heather directly regarding proposal submissions for this program. In addition, an RFP was launched for a Liquefied Natural Gas (LNG) on-road truck fueling and maintenance facility in the port area. The Ports also released a proposed clean trucks program in April and are currently finalizing materials for the program based on comments received.

Also under the Plan, the Ports are working with the Coast Guard to look at extending vessel speed reduction zones from twenty to forty miles off the California coast. Both ports are moving forward with various other implementation processes as well. The Port of Long Beach will have its first shore powered birth this fall, along with best management practices for construction activities by the end of year. In addition, the development of a hybrid tugboat has begun through the technology program. The Ports are tracking progress on a quarterly basis and are moving forward with developing the next version of the Plan under the annual update process, to be completed by the end of this year.

Heather clarified on the call that the Plan is a combination of voluntary and mandated efforts, and that it builds off of already established voluntary reduction activities by and important partnerships with the port industry.

Puget Sound Maritime Air Emissions Inventory and Northwest Ports Clean Air Strategy
Dennis McLerran, Puget Sound Clean Air Agency (Contact Dave Kircher: DaveK@pscleanair.org)

Website: www.maritimeairforum.org

The Ports of Tacoma and Seattle, along with their respective air agencies, released a Puget Sound Maritime Emissions Inventory (EI) in May. In conjunction with the inventory, the two ports along with the Vancouver Port Authority in British Columbia have been working jointly on a strategy to reduce port-related diesel emissions in the region.

An outside consulting firm prepared the EI with funding from the Ports of Seattle, Tacoma, and Everett; several environmental agencies; and private sector organizations such as the American Lung Association of Washington, the Pacific Merchant Shipping Association, and the Western States Petroleum Association; at cost of more than $1M. The EI is comprehensive in scope, is the first in the country to include CO2, and has a geographic scope which is larger than most other EIs reaching 125 miles out to the entrance of straight of Juan de Fuca. The inventory is broken down in different ways including by air district boundaries and port areas, and covers ocean-going vessels, cargo handling equipment, rail, harbor craft, and fleet vehicles.

Building off the information in the inventory, the three ports developed a joint emissions reduction strategy, announced on May 16 at the Faster Freight Cleaner Air Puget Sound conference. This draft strategy is currently undergoing review by tenants and stakeholders. It is anticipated that the Ports of Seattle and Tacoma will adopt a final strategy by the end of the year, with Vancouver Port Authority closely following in early 2008 dependent upon their amalgamation schedule. The short term actions in the strategy focus on switching to cleaner fuels, using best available technologies, retrofitting older equipment, and continuing operational efficiency improvements. The actions in the plan build on actions already underway at one or more of the ports. The actions are primarily voluntary and rely a great deal on stakeholder involvement. The actions are a menu of activities from which stakeholders can choose to help reach the performance based standards that have been or will be identified in the strategy, thus allowing for flexibility in achieving the goals.

Clean Ports USA
Rosa Shim, EPA (shim.rosa@epa.gov)

Website: http://www.epa.gov/cleandiesel/ports/index.htm

EPA held a successful webinar last week on a hydraulic hybrid engine which improves fuel economy by about 70%. The technology was built for highway applications, but is being demonstrated for port applications as well. Slides from the webinar are posted on the website.

Clean Ports is working on finalizing a new contract with ICF, Ross and Associates, and GETF to develop two White Papers on eco-speed and viable technology options for OGVs to reduce diesel emissions. EPA anticipates that the papers will be completed in the winter of 2008 or spring of 2009.

The Director of the World Shipping Council met with EPA and the Coast Guard to discuss the United States proposal to amend Annex VI and establish more stringent emissions standards. In conclusion, the World Shipping Council chose to endorse the proposal.

EPA International Marine Issues – IMO MARPOL Annex VI
Patrick Cotter, EPA (cotter.patrick@epa.gov)

Website: http://www.epa.gov/otaq/oceanvessels.htm

Bryan Wood-Thomas will chair a working group meeting in July to set the scope and schedule of a study looking at the cost and feasibility implications of a worldwide distillate fuel requirement. There will be an additional two working group meetings on the NOx technical code and SOx scrubbers. EPA redrafted the cleaning system guidelines and terms of reference for the next meeting in Berlin to discuss the policy issues related to Annex VI. Reports from the IMO meetings are currently located on a password protected site. Grace will follow-up with EPA about obtaining the report from the last Working Group VI meeting, covering the U.S. proposal, for distribution to the Marine Vessel and Ports Sector. Grace will also follow-up with EPA on the past global (bunker) fuel availability study conducted by EPA. At last update, the final draft was in review, but had not yet been publicly released. EPA is also working on determining the status of the MARPOL legislation which has been in the United States Senate Commerce Committee since early April.

EPA was awarded some extra funding for international marine diesel work. Bryan Muehling is working with Regions 2, 9, and 10 to start projects under the National Clean Diesel Campaign/ West Coast Collaborative. There are no money or project details yet, but an update is expected in time for the next Marine Vessel and Ports Sector call.

EPA Marine and Locomotive Rulemaking
Michael Samulski, EPA (samulski.michael@epa.gov)

Website: http://www.epa.gov/otaq/marine.htm

EPA's proposal for the new rulemaking for more stringent exhaust emission standards for locomotives and marine diesel engines was released April 3, 2007. The comment period has closed and EPA is currently addressing comments with a target completion for the end of this year. The larger Category 3 engines regulatory deadline was extended from April of this year. There is an open proposal for what the new deadline will be. EPA is working on an advanced proposed rulemaking based on Jim Corbett's work. The advanced proposed rulemaking will soon enter the OMB review process.

SECA Processes Update
Athena Bertolino, Ross and Associates Environmental Consulting, Ltd. (athena.bertolino@ross-assoc.com)

Website: http://www.arb.ca.gov/research/seca/seca.htm

The SECA Team is continuing their work in parallel with the IMO proposal in the event that the proposal does not pass. The studies being conducted for the SECA work will also be used to back up the IMO proposal. The Lead Agencies (EPA Headquarters, CARB, and Environment Canada) have completed their baseline emissions inventory work and are moving into the modeling phase. Preliminary modeling results are expected in time for the February 2008 IMO meeting. In addition, Environment Canada is conducting critical load studies, EPA is completing some fuel studies (consumption, refinery modeling, and an economic analysis of scrubber alternative), and CARB is conducting studies on engine control technology and sulfur boundaries. The Team has asked west coast states to submit any information they have on acid deposition

effects. The Team is holding a technical call on July 19 to resolve some outstanding technical issues including emissions factors and stack parameters. Anyone who has expertise on stack parameters is invited to attend the meeting or contact Athena or Andrew Green (Andrew.Green@ec.gc.ca) with information that would provide insight for the Team's discussion and decision-making.

Marine Sector Clearinghouse

Grace Cheng, West Coast Collaborative Sector Lead/ EPA Region 9 (Cheng.Grace@epa.gov)

Website: http://www.westcoastcollaborative.org/tech-clearinghouse.asp

Grace is planning to revive the Clearinghouse website and will distribute an updated submission form for Sector participants to fill out.

CARB Regulatory Update

Peggy Taricco, Robert Krieger, Paul Milkey, and Bonnie Soriano, CARB (rkrieger@arb.ca.gov) (pmilkey@arb.ca.gov) (bsoriano@arb.ca.gov) (ptaricco@arb.ca.gov)

Website: http://www.arb.ca.gov/ports/marinevess/marinevess.htm

Auxiliary Engines

To date there have been only four potential violations of the new OGV auxiliary engine rule, and four instances of use of the non-compliance fee option. CARB has not yet received applications under the Alternative Compliance Plan (ACP) or Alternative Control of Emissions (ACE) provisions, but expects some in the near future. Carriers can opt to use either distillate marine gas oil (MGO) or marine diesel oil (MDO). Most are using marine gas oil with an expected average of below 0.5% sulfur. The actual average fuel sulfur content after sixty inspections is approximately 0.3%, with a great deal of variability in the sulfur levels from vessel to vessel.

OGV Main Engine Rule

CARB is developing a new rule for main engines similar to the auxiliary engine rule. The proposed rule is scheduled to go to the Board for decision at the end of 2007. There have been two workshops with stakeholders so far to discuss the proposed concepts and draft language. CARB will hold a working group meeting with industry, engine manufacturers, fuel providers, and shipping companies undertaking early implementation on July 24 to discuss technical matters related to fuel switching including feasibility and availability. Marine Vessel and Ports Sector participants are invited to the meeting, and the meeting will be webcast. More information can be found on the CARB website, listed above.

The draft language currently proposes implementation in 2009 of a Phase 1 fuel use requirement of distillate MGO or MDO in main engines up to twenty-four nautical miles off the coast of California. CARB is still deciding if there will be a cap within that designation. A second phase is scheduled for 2013 or 2014, requiring a 1% sulfur fuel switch, again at the twenty-four mile boundary. An assessment of proposed Phase 2 would occur in 2012, and a feasibility review would occur in 2013 or 2014 to determine if the twenty-four mile boundary should be extended. The end objective is to align the auxiliary and main engine rules, if possible, with likely amendments to auxiliary rule once the main engine rule is established.

Vessel Speed Reduction
CARB held an initial workshop the week of July 9 to begin to discuss a voluntary program similar to that in place at the Ports of Los Angeles and Long Beach. This would be a statewide approach, covering all California ports.

Harbor Craft
A new rule to implement Tier 2 engine or better standards for harbor craft is scheduled to go to the Board for decision in September.

Cold Ironing
A new rule on cold ironing is scheduled to go to the Board for decision in November.

General Collaborative Announcements
Grace announced that the Collaborative is expecting more money for Fiscal Year 2007. As soon as the dollar amount is determined, a new project RFP will be announced via the Collaborative website and Sector listserv.

Previous Conferences
Following is a list of marine-related conferences held in the past seven months. Conference materials are posted on the conference websites – links included below.

December 13 –15, 2006, Los Angeles, CA: Pacific Ports Air Quality Collaborative, First International Conference on Port Clean Air Policies and Strategies.
http://www.ppcac.org/production/index.php?lang=en
Note: You have to sign up as a member to view the materials.
A second meeting in China is tentatively being planned.

February 26- 28, 2007, Long Beach, CA: Faster Freight Cleaner Air (FFCA). http://www.ffca2007.com/

February 7-9, 2007, San Diego, CA: Clean Ships: Advanced Technology for Clean Air.
http://www.cleanshipsconference.com/

March 5-6, 2007, Long Beach, CA: Seventh Annual Trans-Pacific Maritime (TPM) Conference.
http://www.joc.com/conferences/tpm/

March 28-29, 2007 Sacramento, CA: Annual West Coast Collaborative Partnership Meeting.
http://www.westcoastcollaborative.org/partners-mtg07.htm

May 16, 2007, Seattle, WA: Faster Freight Cleaner Air Puget Sound. http://www.ffcapugetsound.com/

Upcoming Conferences
Sector related conferences are posted on the conference calendar on the Collaborative website.

- BunkerWorld Forum: Marine Fuel Sustainability – October 23-26, 2007 in Long Beach, CA
    - Information and registration: http://www.bunkerworld.com/events/losangeles2007/
    - The **West Cost Collaborative Marine Vessels and Ports Sector** will tentatively be holding a face to face meeting in conjunction with this conference – details TBD
- Air and Waste Management Association Conference: Managing Ship Emissions and Effluents with Emphasis on Eastern Canada and the North Atlantic Seaboard
    - Information and registration: http://www.awma.org/events/view_event.html?typeid=1&id=52
- Faster Freight Cleaner Air – July 2008 in New York, NY
    - This conference has not yet been formally announced – details TBD

Adjourn
The next Marine Workgroup teleconference will be held on September 5, 2007 from 9:00 am – 10:30 am PT. The teleconference line for all calls is: 1-866-299-3188. The conference code is: 2065538087#.