

Bay Area Air Quality Management District
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APPROVED MINUTES

Summary of Board of Directors
Meeting of the Maritime Sources & Ports Committee
9:30 a.m., Wednesday, September 29, 2010

Call to Order – Roll Call: Chairperson Nate Miley called the meeting to order at 9:30 a.m.

Present: Chairperson Nate Miley; Vice Chairperson Eric Mar, and Committee Members Tom Bates, Dan Dunnigan, John Gioia, Carole Groom, Scott Haggerty, Gayle B. Uilkema and Brad Wagenknecht

Absent: Committee Member Mark Ross

Others Present: None

Public Comment Period: None

Approval of Minutes of October 26, 2009: Director Bates moved approval of the minutes of October 26, 2010; Director Dunnigan seconded; carried unanimously without objection.

7. Inventory of Emissions from Commercial Ports in the San Francisco Bay Area

Advanced Projects Advisor, Michael Murphy, gave an update on the inventory of emissions from four (4) commercial ports in the Bay Area which include Ports of Benicia, Redwood City, Richmond and San Francisco. He reviewed the Green Ports Initiative which allows for enforcement of the California Air Resources Board's (CARB's) Air Toxics Control (ATC) regulations, greater emissions reductions through grants to ports and tenants, and evaluation of progress through inventories, monitoring and public education.

Mr. Murphy stated that the District entered into a Memorandum of Understanding (MOU) with the Bay Planning Coalition and the commercial ports for preparation of a maritime emissions inventory. The inventories were compiled by Air District staff, Moffatt & Nichols, and ENVIRON. Truck and rail emissions were also calculated within port boundaries. The inventory focused on those maritime ports directly controlled by the respective port authorities. A separate analysis was completed for activities that occur at terminals owned and operated by private companies.

Mr. Murphy presented charts showing the distribution of 2005 Port annual emissions by source, by port, and by type of emission.

He discussed key points:

- Ships are the largest source of emissions;
- Use of low-sulfur marine fuel has sharply reduced SO_x and PM emissions from ships;

- Truck and rail are small contributors to regional emissions, but may be important contributors to local risks;
- Air District staff supplemented the Richmond inventory to cover extensive activity at private terminals;
- Truck and rail emissions within Port boundaries and marine emissions estimated to 11 miles off the Golden Gate are not comparable to regional emission inventory.

He reviewed next steps as:

- Incorporating more detail on each commercial port in future inventories to track progress;
- Evaluating local risk and developing strategies through CRRP's;
- Estimating benefits from regulatory measures;
- Assisting CARB with compliance and enforcement of state regulations; and
- Targeting Air District grants and working with the Ports and private terminals to seek outside funding.

Committee Comments/Questions:

Directors reviewed refinery ports and confirmed their inclusion in the regional emissions inventory, discussed distinctions between public versus private ports and the potential for events adding to emissions in the Bay Area, such as America's Cup, cruise ships and the Olympics.

Committee Action: None; Information only.

6. Update on Shore Power at Bay Area Ports

Director of Strategic Incentives Damian Breen provided an update on shore power at Bay Area Ports, discussed CARB's regulations which apply to the Port of San Francisco and the Port of Oakland and requires electrification of 50% of vessels by January 1, 2014.

He reviewed project costs, scope of work, funding and reduced emissions for the Port of San Francisco's \$5.2 million project at Pier 27 and said the project is in operation and took up to four years to complete.

Mr. Breen further stated that the Port of Oakland is the largest contributor of DPM (61 tons per year) from ocean going vessels at berth in the Bay Area. Shore power accounts for 22% of total emissions from the Port, and 30% of the total cancer health risk from Port operations, which is approximately equal to the emissions and risk from drayage trucks. The projected costs for electrification in Oakland are approximately \$90 million which excludes APL and Ports America. Mr. Breen then presented a cost scenario for APL and reviewed actions to date taken by the Port of Oakland and the District in moving towards shore power, reviewed Phase I actions taken by the Port which include acceptance of \$7.86 million from DOT in TIGER grants to electrify 3 berths by February 2012, transfer of \$4.3 million in Port reserves to match DOT grant, and the Port's request of \$7.5 million in Air District grants to support Phase I.

Other Bay Area Ports are not currently regulated under the ARB rule but may be incorporated in future amendments. Staff is working with ARB to understand the timeline for rule amendments. Mr. Breen discussed the Port of Richmond's interest in shore power and eligibility for grant funding, and said \$23.9 million is available in I-Bond funding and \$5 million in MSIF funding, subject to conditions.

Committee Comments/Questions:

Committee members reviewed deadlines for contract agreements and cost differences to electrify cargo ships versus cruise liners, cost effectiveness of projects, acknowledged the financial advantages of the San Pedro and Long Beach ports, and confirmed that remaining I-Bond money, if not used for ports, can be used for truck retrofits. The Committee requested staff return with a schedule to both the Mobile Source and Maritime Sources & Ports Committees.

Members also discussed efforts in Washington to establish a national container fee and requested that District staff keep the Board apprised on the matter.

Committee Action: None; Information only.

5. Status on Mobile Source Enforcement at the Port of Oakland

Air Quality Program Manager Barbara Coler gave the presentation, stating the Mobile Source Enforcement Program commenced in the fall of 2009 at the Port of Oakland, other Bay Area ports, and in Community Air Risk Evaluation (CARE) areas, which allows for consistent, timely and effective enforcement actions. She presented examples of District enforcement training, inspection of drayage trucks, with on-road inspections to soon begin.

Partnerships with CARB and Port of Oakland have complemented enforcement efforts, as well as strategic incentives partnerships. Staff will soon start inspections for on-road trucks which have grant applications. She said the drayage truck regulation requires truck registration, reporting and compliance with engine emission standards. She reviewed statistics on inspections and violations with a focus on community concerns, such as container switch loading or “dray off” on city property.

Ms. Coler reviewed the independent program the District runs prohibiting idling by commercial diesel vehicles for more than 5 minutes, and she noted that 71 inspections were conducted, 15 violations issued, for a 79% compliance rate. She said staff worked with the Port of Oakland on digital signboards, which were developed in five languages. Posters have been placed at 120 locations at the Port and around West Oakland, and staff has been working with San Francisco and Richmond Ports as well.

Ms. Coler then gave an overview and discussed inspections, violations issued and compliance rates, and presented examples of enforcement regulations for commercial idling, ships, harbor craft, portable equipment, Transportation Refrigeration Units (TRUs), off-road diesel equipment, and trains and locomotives.

In conclusion, she noted that the Bay Area Air District is the first air district to develop a Comprehensive Mobile Source Enforcement Program. A strong compliance and enforcement program reduces diesel PM exposures, provides leadership on mobile source enforcement and improves air quality and public health for the Bay Area.

Director Discussion/Comments:

In response to Director Haggerty’s question regarding whether or not the City of Oakland or CARB would address switch loading or “dray off” on city property, Ms. Coler responded that CARB ‘s proposed amendments would likely address this issue.

Director Uilkema questioned costs of the programs and staffing resources, and Ms. Coler explained that costs are recovered through violations, and there are currently 2 FTE’s at a cost of \$200,000. She noted that CARB contributes 50% of the ticket amount back to the District.

4. Summary of West Oakland Truck Survey and West Oakland Monitoring Study

Senior Advanced Projects Advisor, Dr. Phil Martien, gave a summary of West Oakland Truck Survey and West Oakland Monitoring Study, and noted that the studies have helped address questions and refine the Health Risk Assessment inputs and findings. Modeling-based health risk assessment (HRA) has helped guide emission reductions, but also raised questions regarding total number of trucks, their routes, who operates them, and evaluating modeling with air pollution measurements.

Dr. Martien reviewed the purpose of the truck survey to obtain better information for designing and prioritizing mitigations, and checking information related to on-road trucks. Staff collaborated with the community, West Oakland Environmental Indicators staff, and surveyed trucks at 38 different locations for two weeks in August 2008. Surveyors used automatic counters at high to medium traffic locations, collected and observed truck idling, took videos of freeways, recorded trucks and activities, and documented license numbers to determine age of vehicles.

Major findings revealed that trucks are still the major source of diesel-related health risk in West Oakland. There are fewer trucks on surface streets than estimated, the fraction of trucks related to the Port was greater (29%) than the HRA estimated (16%), total potential cancer risk was still much higher than the Bay Area average, and continued clean-up of trucks remains a priority.

Dr. Martien reviewed the West Oakland Monitoring Study and said its purpose is to provide a measurement-based benchmark of air quality, determine variations of toxic air contaminants at many locations, and estimate diesel PM contribution to total PM. The three types of measurements were PM measurements, hydrocarbons, NOx and mobile van sampling. He reviewed the extensive monitoring network, the work with the community to identify monitoring locations, and work to obtain 2009 summer and 2009/2010 winter measurements. Major findings revealed that overall, concentrations of toxic air contaminants in West Oakland are similar to measurements collected in other Bay Area cities, pollutant concentrations are 2 to 5 times higher along major roads used by diesel trucks, diesel PM is a significant fraction of total PM in West Oakland, and PM concentrations estimated from 2009/10 measurements were about half of the HRA modeled 2005 concentrations.

Next steps include using information gathered to help design and implement emission reduction measures through grants and incentives and enforcement of diesel regulations; advising local land use decisions through CEQA guidelines and CRRP's, tracking progress and continuation of community partnerships.

Committee Discussion/Comments:

Directors reviewed major truck activities and total cancer risk, and confirmed that the fraction of trucks related to the Port was greater, at 29% than the HRA had estimated, at 16%. The other 71% is non-port related and the on-road rule should help with these diesel emissions. Directors discussed CARB's potential movement of its compliance deadline to 2019, and while this allows for more time and money for expenditure of retrofits, it means the risk remains higher and for a longer period.

Public Comments:

Tracy Fidell, on behalf of Moffatt & Nichols and ENVIRON, thanked the Committee for the opportunity to work with the District and Bay Area Planning Coalition and assist in compilation of the inventories.

Committee Action: None; Information only.

Committee Member Comments/Other Business: None

Time and Place of Next Meeting: At the Call of the Chair.

Adjournment: The meeting adjourned at 11:05 a.m.

LS/ Lisa Harper

Lisa Harper
Clerk of the Boards