



BAY AREA  
AIR QUALITY  
MANAGEMENT  
DISTRICT

BOARD OF DIRECTORS  
MARITIME SOURCES & PORTS COMMITTEE MEETING

COMMITTEE MEMBERS

NATE MILEY, CHAIR  
SCOTT HAGGERTY

JOHN GIOIA, VICE-CHAIR  
ERIC MAR  
GAYLE B. UILKEMA

THURSDAY  
FEBRUARY 24, 2011  
9:30 A.M.

4<sup>TH</sup> FLOOR CONFERENCE ROOM  
939 ELLIS STREET  
SAN FRANCISCO, CA 94109

AGENDA

1. **CALL TO ORDER – ROLL CALL**
2. **PUBLIC COMMENT PERIOD** *(Public Comment on Non-Agenda Items Pursuant to Government Code § 54954.3) Members of the public are afforded the opportunity to speak on any agenda item. All agendas for regular meetings are posted at District headquarters, 939 Ellis Street, San Francisco, CA, at least 72 hours in advance of a regular meeting. At the beginning of the regular meeting agenda, an opportunity is also provided for the public to speak on any subject within the Committee's subject matter jurisdiction. Speakers will be limited to three (3) minutes each.*
3. **APPROVAL OF MINUTES OF SEPTEMBER 29, 2010**
4. **UPDATE ON PORT TRUCK PROGRAM** **D. Breen/5041**  
[dbreen@baaqmd.gov](mailto:dbreen@baaqmd.gov)  
*Staff will provide an update on the California Air Resources Board (CARB) drayage truck rule requirements and the effect on Air District grant programs.*
5. **UPDATE ON SHORE-POWER AT BAY AREA PORTS** **D. Breen/5041**  
[dbreen@baaqmd.gov](mailto:dbreen@baaqmd.gov)  
*Staff will provide an update on the California Air Resources Board (CARB) shore power rule requirements, Port of Oakland shore power plans, and Air District grant funding for shore power.*
6. **UPDATE ON MOBILE SOURCE ENFORCEMENT PROGRAM** **K. Wee/4760**  
[kwee@baaqmd.gov](mailto:kwee@baaqmd.gov)  
*Staff will update the Committee on the Air District's enforcement of CARB mobile source regulations at the Port of Oakland, other Bay Area ports and in CARE Areas.*
7. **COMMITTEE MEMBER COMMENTS/OTHER BUSINESS**  
*Any member of the Committee, or its staff, on his or her own initiative or in response to questions posed by the public, may ask a question for clarification, make a brief announcement or report on his or her own activities, provide a reference to staff regarding factual information, request staff to report back at a subsequent meeting concerning any matter or take action to direct staff to place a matter of business on a future agenda. (Gov't Code § 54954.2).*
8. **TIME AND PLACE OF NEXT MEETING: AT THE CALL OF THE CHAIR**
9. **ADJOURNMENT**

**CONTACT EXECUTIVE OFFICE- 939 ELLIS STREET SAN  
FRANCISCO, CA 94109**

**(415) 749-5130  
FAX: (415) 928-8560  
BAAQMD homepage:  
[www.baaqmd.gov](http://www.baaqmd.gov)**

- To submit written comments on an agenda item in advance of the meeting.
- To request, in advance of the meeting, to be placed on the list to testify on an agenda item.
- To request special accommodations for those persons with disabilities notification to the Clerk's Office should be given at least three working days prior to the date of the meeting so that arrangements can be made accordingly.
- Any writing relating to an open session item on this Agenda that is distributed to all, or a majority of all, members of the body to which this Agenda relates shall be made available at the District's offices at 939 Ellis Street, San Francisco, CA 94109, at the time such writing is made available to all, or a majority of all, members of that body. Such writing(s) may also be posted on the District's website ([www.baaqmd.gov](http://www.baaqmd.gov)) at that time.

**BAY AREA AIR QUALITY MANAGEMENT DISTRICT**  
**939 ELLIS STREET, SAN FRANCISCO, CALIFORNIA 94109**  
**(415) 771-6000**

**EXECUTIVE OFFICE:**  
**MONTHLY CALENDAR OF DISTRICT MEETINGS**

**FEBRUARY 2011**

| <u>TYPE OF MEETING</u>   | <u>DAY</u> | <u>DATE</u> | <u>TIME</u>   | <u>ROOM</u>                         |
|--|------------|-------------|---|-------------------------------------|
| <b>Board of Directors Mobile Source Committee</b> <i>(Meets 4<sup>th</sup> Thursday each Month)</i><br>- CANCELLED | Thursday   | 24          | 9:30 a.m.   | 4 <sup>th</sup> Floor<br>Conf. Room |
| <b>Board of Directors Maritime Sources &amp; Ports Committee</b> <i>(At the Call of the Chair)</i>                 | Thursday   | 24          | 9:30 a.m.   | 4 <sup>th</sup> Floor<br>Conf. Room |
| <b>Board of Directors Budget and Finance Committee</b> <i>(At the Call of the Chair)</i>                           | Thursday   | 24          | 11:00 a.m.<br>Following<br>Maritime<br>Source & Port<br>Meeting | 4 <sup>th</sup> Floor<br>Conf. Room |

**MARCH 2011**

| <u>TYPE OF MEETING</u>   | <u>DAY</u> | <u>DATE</u> | <u>TIME</u>  | <u>ROOM</u>                         |
|--|------------|-------------|--|-------------------------------------|
| <b>Board of Directors Regular Meeting</b> <i>(Meets 1<sup>st</sup> &amp; 3<sup>rd</sup> Wednesday of each Month)</i> | Wednesday  | 2           | 9:45 a.m.  | Board Room                          |
| <b>Board of Directors Stationary Source Committee</b> <i>(At the Call of the Chair)</i>                              | Thursday   | 3           | 9:30 a.m.  | 4 <sup>th</sup> Floor<br>Conf. Room |
| <b>Board of Directors Public Outreach Committee</b> <i>(At the Call of the Chair)</i>                                | Thursday   | 3           | 11:00 a.m.<br>Following<br>Stationary<br>Source<br>Meeting | 4 <sup>th</sup> Floor<br>Conf. Room |
| <b>Board of Directors Legislative Committee</b> <i>(At the Call of the Chair)</i>                                    | Monday     | 7           | 9:45 a.m.  | 4 <sup>th</sup> Floor<br>Conf. Room |
| <b>Board of Directors Climate Protection Committee</b> <i>(At the Call of the Chair)</i>                             | Monday     | 7           | 11:00 a.m.<br>Following<br>Legislative<br>Meeting          | 4 <sup>th</sup> Floor<br>Conf. Room |
| <b>Advisory Council Meeting</b>  | Wednesday  | 9           | 9:00 a.m.  | Board Room                          |

March 2011 Calendar Continued on Next Page

## MARCH 2011

| <u>TYPE OF MEETING</u>  | <u>DAY</u> | <u>DATE</u> | <u>TIME</u> | <u>ROOM</u>                         |
|---|------------|-------------|-------------|-------------------------------------|
| <b>Board of Directors Regular Meeting</b><br><i>(Meets 1<sup>st</sup> &amp; 3<sup>rd</sup> Wednesday of each Month)</i> | Wednesday  | 16          | 9:45 a.m.   | Board Room                          |
| <b>Board of Directors Budget &amp; Finance Committee</b><br><i>(At the Call of the Chair)</i>                           | Wednesday  | 23          | 1:00 p.m.   | 4 <sup>th</sup> Floor<br>Conf. Room |
| <b>Board of Directors Mobile Source Committee</b><br><i>(Meets 4<sup>th</sup> Thursday each Month)</i>                  | Thursday   | 24          | 9:30 a.m.   | 4 <sup>th</sup> Floor<br>Conf. Room |

## APRIL 2011

| <u>TYPE OF MEETING</u>  | <u>DAY</u> | <u>DATE</u> | <u>TIME</u>                | <u>ROOM</u>                         |
|---|------------|-------------|----------------------------|-------------------------------------|
| <b>Board of Directors Regular Meeting</b><br><i>(Meets 1<sup>st</sup> &amp; 3<sup>rd</sup> Wednesday of each Month)</i> | Wednesday  | 6           | 9:45 a.m.                  | Board Room                          |
| <b>Board of Directors Regular Meeting</b><br><i>(Meets 1<sup>st</sup> &amp; 3<sup>rd</sup> Wednesday of each Month)</i> | Wednesday  | 20          | 9:45 a.m.                  | Board Room                          |
| <b>Board of Directors Mobile Source Committee</b><br><i>(Meets 4<sup>th</sup> Thursday each Month)</i>                  | Thursday   | 28          | 9:30 a.m.                  | 4 <sup>th</sup> Floor<br>Conf. Room |
| <b>Board of Directors Budget &amp; Finance Committee</b><br><i>(At the Call of the Chair)</i>                           | Thursday   | 28          | Following<br>Mobile Source | 4 <sup>th</sup> Floor Conf. Room    |

NKP – 2/17/11 (9:09 a.m.)  
P/Library/Forms/Calendar/Calendar/Moncal

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

Memorandum

To: Chairperson Nate Miley and Members  
of the Maritime Sources & Ports Committee

From: Jack P. Broadbent  
Executive Officer/APCO

Date: February 15, 2011

Re: Maritime Sources & Ports Committee Draft Meeting Minutes

RECOMMENDED ACTION

Approve attached draft minutes of the Maritime Sources & Ports Committee meeting of September 29, 2010.

DISCUSSION

Attached for your review and approval are the draft minutes of the September 29, 2010 Maritime Sources & Ports Committee meeting.

Respectfully submitted,

Jack P. Broadbent  
Executive Officer/APCO

Bay Area Air Quality Management District  
939 Ellis Street  
San Francisco, California 94109  
(415) 749-5000

**DRAFT 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 SOx 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.

Lisa Harper  
Clerk of the Boards

BAY AREA AIR QUALITY MANAGEMENT DISTRICT  
Memorandum

To: Chairperson Miley and  
Members of the Maritime Sources and Ports Committee

From: Jack P. Broadbent  
Executive Officer/APCO

Date: February 11, 2011

Re: Update on the Port Truck Program

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RECOMMENDED ACTION

None. Informational item, receive and file.

BACKGROUND

On December 7, 2007, as part of its efforts to reduce emissions at California ports, the California Air Resources Board (ARB) enacted an Air Toxics Control Measure (ATCM) to reduce emissions from on-road heavy-duty (>33,000 lbs.) diesel-fueled trucks operating at ports and intermodal rail yards.

On December 17, 2010, the ARB considered a number of significant changes that would expand the trucks subject to this rule and also considered extending the rule deadline for Phase 2 requirements (an explanation of this requirement is provided below). Staff will discuss the December 2010 decisions made by ARB and how they affect grant funding.

DISCUSSION

In December 2010, ARB considered 4 principal amendments to the drayage truck regulation. These proposed amendments were as follows:

1. Inclusion of noncompliant trucks operating outside of port and rail yard grounds that engage in “dray-off” activities under the requirements of the regulation.
2. Inclusion of the drayage truck regulation into the larger on-road truck and bus fleet regulation.
3. Inclusion of Class 7 (>26,000 lbs.) drayage trucks under the Phase 2 requirements of the drayage truck regulation.
4. Delay the Phase 2 regulatory requirements that mandate drayage trucks operate with 2007 MY emissions standard engines from January 1, 2014 to January 2017.

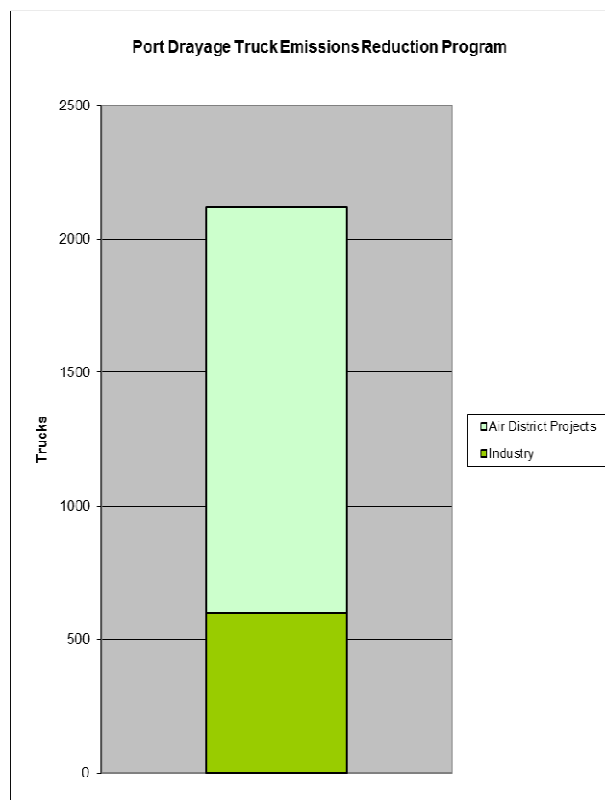
Based on its deliberations, ARB decided to accept amendments 1 through 3, and to reject the 4<sup>th</sup> amendment. This decision has a number of significant impacts:

- **More trucks are now subject to the drayage rule:** Under the provisions above, the drayage truck rule has been expanded to cover Class 7 trucks and any truck that hauls a cargo container from California rail or intermodal facility without that cargo being broken down (i.e. the cargo container opened and its constituents distributed for further transportation).
- **The "dray off" loophole has been closed:** ARB's action has closed the "dray off" loophole which had allowed noncompliant trucks to receive cargo just outside of port boundaries as a circumvention of the regulation. This particular issue will be discussed as part of the briefing provided to the Committee in Agenda Item 6.
- **The Phase 2 requirements of ARB's regulation remain in place:** Perhaps the most significant impact of the ARB's decision will be the renewed requirement that all trucks accessing California ports and intermodal facilities will be required to have 2007 MY emissions standard engines by January 1, 2014.

### **Impacts on Grant Funding**

In August of 2010, the Air District completed its highly successful port drayage truck emissions reduction program. See Table 1 below:

**Table 1 - Port Drayage Truck Emissions Reduction Program Results**



As part of this program, the Air District upgraded 1,522 trucks (1,319 truck retrofits and 203 truck replacements) at the Port of Oakland (Port). Based on ARB's December actions, all of the vehicles retrofitted as part of that program must be upgraded to 2007 MY emissions standard engine trucks by December 31, 2013. This poses a number of challenges for the Air District's grant program:

- **Availability of California Goods Movement Bond (I-Bond) funding:** At present, the Air District is eligible to receive \$65 million from the I-Bond program. ARB has informed staff that drayage trucks currently under I-Bond contracts will not be eligible for the \$30 million to be received in fiscal year 11/12 (dependent on the California bond sales). With only \$35 million available to the Air District the final year of the I-Bond program, staff believes that a) insufficient funds will be available to address upgrading all of the currently retrofitted trucks (staff believes that approximately \$54 million would be necessary to complete this upgrade) and b) a repeat of the crisis that surrounded the implementation of the Phase 1 drayage truck requirements in 2010 is probable.

In response to the 2010 crisis, ARB allocated additional I-Bond funding to address drayage trucks. ARB has committed to engaging in a dialogue with the Air District to address this issue in the upcoming months but to date no concrete commitments have been received on the availability of additional funds for drayage truck replacements.

- **Carl Moyer and MSIF are not available to Port Trucks:** ARB has not revised its Carl Moyer guidelines to allow port drayage trucks to be eligible for funding. This also prevents the Air District from funding replacement projects using Mobile Source Incentive Funds. Additionally, while Transportation Fund for Clean Air (TFCA) monies could be used to match I-Bond funding; those funds are significantly committed to both electric vehicles and shuttles in the upcoming two years.
- **Expanded number of trucks needing help:** Based on staff's review of the drayage truck regulation, it appears to have been significantly expanded to close the dray off loop hole. From an air quality improvement perspective, this is a positive change. This expansion, however, has had the consequence of making even more trucks subject to the rule. For example a truck picking up cargo that has not been "broken down" anywhere in the state of California (miles from ports or intermodal facilities) is still subject to the drayage truck rule based on ARB's amended definition. This means that more trucks will seek grant funding in order to comply with this regulation, even though the current projected funding is insufficient for the trucks that were previously retrofitted.

#### BUDGET CONSIDERATION / FINANCIAL IMPACT

None. The Air District receives funding for the administration of incentives under both the I-Bond and MSIF programs.

Respectfully submitted,

Jack P. Broadbent  
Executive Officer/APCO

Prepared by: Damian Breen  
Reviewed by: Jean Roggenkamp

BAY AREA AIR QUALITY MANAGEMENT DISTRICT  
Memorandum

To: Chairperson Miley and  
Members of the Maritime Sources and Ports Committee

From: Jack P. Broadbent  
Executive Officer/APCO

Date: February 11, 2010

Re: Update on Shore-Power at Bay Area Ports

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RECOMMENDED ACTION

None. Informational item, receive and file.

BACKGROUND

As part of its efforts to reduce emissions at California ports, the California Air Resources Board (ARB) enacted an Air Toxics Control Measure (ATCM) for "*Auxiliary Diesel Engines Operated on Oceangoing Vessels at Berth in a California Port*" in December, 2007. This regulation requires that vessel owners, terminals and California ports work together to reduce the emissions caused when ships run/idle their engines to provide power for onboard activities while docked.

In the Bay Area, Oakland remains the only port subject to this regulation that has not completed the upgrades necessary to ensure compliance with this regulation (an Air District funded project at the Port of San Francisco has ensured their compliance needs have been met). Staff will update the Committee on progress being made to address electrification at the Port, current grant funding available to Bay Area ports, the requirements of the shore power regulation and the requirements associated with available grant funding.

DISCUSSION

Since the last Committee meeting there has been significant progress in the installation of shore power at the Port. The following is an update on two projects (one nearing completion and one in its beginning phase) that will electrify 6 of 18 berths at the Port:

*APL Terminal - 3 berths - Completion in April 2011*

In late 2008, the American Presidents Line (APL) shipping organization through its terminal operator Eagle Marine Services received a \$2.8 million I-Bond grant from the Air District to electrify the three berths at its terminal in Oakland. The Air District also provided approximately \$2 million to upgrade three of the five vessels slated to utilize this shore-power installation via a Carl Moyer grant in mid-2009. To date, all of the work to retrofit the cargo vessels has been completed and the shore-power installation in Oakland is slated for commissioning in March 2011. Please note that this date has slipped from the January date reported at the last C

ommittee meeting. This is due to engineering issues related to the ship retrofits. These issues are being resolved and the project is still scheduled to be completed approximately 2.5 years prior to the requirements of the shore-power regulation.

*Port of Oakland Efforts -3 berths - Completion in September 2012*

On February 2, 2011, the Air District approved a \$5 million Mobile Source Incentive Fund (MSIF) grant for the electrification of three additional berths at the Port. This grant will match approximately \$12.8 million in Federal and Port funds and will install infrastructure at three berths at the SSA Terminals, LLC and Total Terminals International, LLC terminal facilities. These terminal facilities are some of the busiest at the Port accounting for over 500 combined oceangoing vessel visits annually. Currently Air District and Port staff are working on finalizing the grant agreement for this project and this installation is scheduled to be complete by September 2012.

Incentives Funding

On December 16, 2010, the Air District executed an agreement with ARB to accept \$20 million in Goods Movement Bond Funding (I-Bond) for shore power at Bay Area ports. As expected, this agreement included a supplemental requirements document that includes stringent requirements for the administration of that grant funding. Those requirements are as following:

- Each contract under this program shall require the grantee to achieve surplus emissions reductions by plugging in 10% more vessels than are required by the shore power regulation (see Table 1 below):

**Table 1 - I-Bond Plug-In Rates Vs. Regulatory Requirements**

| Year        | Regulatory Requirement | I-Bond Requirement |
|-------------|------------------------|--------------------|
| Jan 1, 2014 | 50% of vessels         | 60% of vessels     |
| Jan 1, 2017 | 70% of vessels         | 80% of vessels     |
| Jan 1, 2020 | 80% of vessels         | 90% of vessels     |

- Grant recipients must demonstrate their financial ability to match the available grant funding to complete shore power projects within the timeframe of the I-Bond program (this includes a binding certification to be signed by the port Board or Executive Officer).
- Each grant agreement shall include project milestones with specific completion dates.
- Each grantee is required to provide quarterly updates on adherence to project schedule. This report includes: actual start and finish dates of activities, estimated completion dates of project elements, estimated start and finish dates of future activities and a listing of dates that may jeopardize the on-time completion of the project.

- In the event that any milestone dates are not reached, the grantee has the option to either forfeit grant funding or submit a scheduled recovery plan. A recovery plan must be submitted within 15 days of a grantees failure to meet a milestone.
- ARB and the Air District will determine whether the recovery plan meets the requirements of the I-Bond guidelines and whether or not funding will automatically be forfeit due to the fact that the project cannot recover in time to meet the expenditure deadlines.
- All I-Bond funds will be automatically forfeit for projects not fully operational by December 31, 2013.
- All contracts shall contain a nonperformance clause. In the event that the grantee fails to meet the plug-in requirement of the I-Bond contract, they will be penalized 1% of the funding invested for every 1% of nonperformance up to 10%.

In the event, that any funds were forfeit under this program, ARB will require the Air District to reinvest them in on-road trucks as part of its projected Year 3 I-Bond expenditure plan.

#### *Current Solicitation*

In order to expend the \$20 million in I-Bond funding available to the Bay Area ports, the Air District opened a six week solicitation for projects on February 1, 2011. As a requirement of the grant, staff notified the Executive Officers and Directors of all Bay Area ports, shipping lines and terminals of the availability of funding via registered mail. Under the I-Bond requirements the Air District also notified these entities that this funding was available for cargo handling equipment upgrades. Is unclear at present, what entities other than the Port of Oakland may be interested in this funding. As a competitive solicitation, Air District staff will be required to rank projects on a berth by berth basis with funding only going to the most cost-effective projects. Staff is hosting a workshop on February 18, 2011 to answer questions and provide guidance for all those seeking to apply for this funding.

#### BUDGET CONSIDERATION / FINANCIAL IMPACT

None. The Air District receives funding for the administration of incentives under both the I-Bond and MSIF programs.

Respectfully submitted,

Jack P. Broadbent  
Executive Officer/APCO

Prepared by: Damian Breen  
Reviewed by: Jean Roggenkamp



BAY AREA AIR QUALITY MANAGEMENT DISTRICT  
Memorandum

To: Chairperson Miley and Members of the Maritime Sources & Ports  
Committee

From: Jack P. Broadbent  
Executive Officer/APCO

Date: February 14, 2011

Re: Status of Mobile Source Enforcement at the Port of Oakland

RECOMMENDED ACTION:

Informational Report. Receive and file.

BACKGROUND

Diesel particulate matter (PM) poses the largest air toxic health risk to Bay Area residents. In 1998, the California Air Resources Board (CARB) identified diesel PM as a toxic air contaminant (TAC) based on its potential to cause cancer, premature death and many other health problems. The Air District's CARE program studies have shown that diesel PM accounts for over 80% of the TAC cancer risk, with on-road and off-road mobile sources responsible for the majority of the risk.

To address diesel PM from these sources, staff developed the District's Mobile Source Compliance Plan and in late fall 2009, the District entered into a Memorandum of Understanding (MOU) with CARB to enforce mobile source diesel PM regulations and air toxic control measures (ATCMs). The Plan is now being implemented and mobile source enforcement is fully underway. Consistent with the goals of the Plan, the target areas for enforcement and compliance assistance efforts are Ports and CARE areas, with special focus on the Port of Oakland and West Oakland.

Prior to commencing enforcement, logistical steps are completed by staff to ensure that enforcement actions are consistent, timely and effective. These steps include both strategic and tactical planning; classroom and field exercise trainings; conducting compliance assistance activities; joint inspections with CARB; and when appropriate, independent inspections by District staff. Staff also inspect all trucks that were to receive District grant funds. Engaging in partnerships with CARB, the Port of Oakland and other stakeholders has contributed to the success of the program to date.

## DISCUSSION

Enforcement of the Drayage Truck Regulation (DTR) is the highest priority regulation for the mobile source enforcement program coupled with a strong presence at the Port of Oakland and the adjacent railyards. After CARB's five-month delay due to the extension for additional grant funding, from late May 2010 through January 31, 2011, staff completed 1,435 DTR inspections and issued 35 violations, resulting in a 98% compliance rate. Inspection staff conducted extensive compliance assistance efforts with truckers to ensure they were aware of the upcoming DTR compliance deadline (e.g., over 2,000 DTR brochures were handed out to truckers at the Port on a "long haul" day in September 2009; notices were sent to email trucker listserves; and staff provided multilingual one-on-one assistance). Staff also inspected all trucks that were to receive District grant funds for retrofit or replacement. Approximately 1,775 trucks were inspected for the DTR grant program.

Staff has also targeted enforcement in areas suspected of "dray-off" activity (container switch loading from a compliant truck to a non-compliant truck for transport to its destination). Multilingual compliance assistance materials are posted in areas where this activity has been discovered at the Port at the former Oakland Army Base property. Staff also collaborated with CARB on DTR proposed amendments to include prohibitions on "dray-off" activities.

In April 2010, staff commenced enforcement of the State commercial idling ATCM, which prohibits idling for more than 5 minutes for diesel vehicles weighing greater than 10,000 pounds. Staff also developed signage and vehicle dashboard stickers in 5 languages (English, Spanish, Chinese, Punjabi and Vietnamese); signs are posted at and adjacent to the Port of Oakland, other Ports and in CARE areas. As of January 31, 2011, staff completed 125 inspections and issued 21 violations, resulting in a 83% compliance rate.

In June 2010, staff commenced enforcement of a State regulation for Transport Refrigeration Units (TRUs). TRUs are powered by diesel engines and are used to heat or cool perishable products (e.g., food, pharmaceuticals, and chemicals). They can be transported on semi-trailers or railcars, or integrated into shipping containers, or mounted on truck vans. The ATCM requires, among other things, application for and permanently affixing the CARB ID number on the unit and engine performance standards (phased in over several years). From June 2010 through January 31, 2011, staff completed 116 inspections and issued 22 violations, resulting in a 81% compliance rate.

Staff conducted joint inspections with CARB on ships (combining enforcement of 2 regulations which limit fuel sulfur and onboard incineration) and boats - commercial harbor craft (requires registration and engine emissions standards). Staff continue to enforce mobile source requirements under District purview for equipment, locomotives and port truck terminal idling.

The Air District is the first in the State to develop a comprehensive mobile source enforcement program. Using enforcement and compliance assistance actions, the District will reduce diesel PM exposures, is providing leadership on mobile source enforcement and will improve air quality for the communities we serve.

Staff will update the Committee on the Air District's enforcement of CARB mobile source regulations at the Port of Oakland, other Bay Area ports and in CARE Areas. Staff will also discuss CARB's proposed changes to the Drayage Truck Regulation to clarify that clean truck standards also apply to all trucks either destined for, or originating from a Port or Intermodal Railyard, that are hauling containers, including empties or trailer chassis. This broader definition will provide strong enforcement tools to mitigate higher pollution "dray-off" activities in areas adjacent to ports.

Respectfully submitted,

Jack P. Broadbent  
Executive Officer/Air Pollution Control Officer

Prepared by: Barbara Coler  
Reviewed by: Kelly Wee