

BAY AREA
AIR QUALITY
MANAGEMENT
DISTRICT

BOARD OF DIRECTORS
AD HOC COMMITTEE ON PORT EMISSIONS

COMMITTEE MEMBERS

NATE MILEY – CHAIRPERSON
TOM BATES
SCOTT HAGGERTY
MARK ROSS

DAN DUNNIGAN – VICE CHAIRPERSON
JOHN GIOIA
YORIKO KISHIMOTO
GAYLE B. UILKEMA
BRAD WAGENKNECHT

MONDAY
OCTOBER 26, 2009
9:30 A.M.

4TH FLOOR CONFERENCE ROOM

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 JULY 16, 2009

4. UPDATE ON EMISSION REDUCTION STRATEGY FOR THE PORT OF OAKLAND

J. Broadbent/5052
jbroadbent@baaqmd.gov

The Committee will receive an update on the emission reduction strategy for the Port of Oakland.

5. REPORT ON THE COMPLIANCE PLAN FOR ENFORCEMENT OF MOBILE SOURCE REGULATIONS

K. Wee/4760
kwee@baaqmd.gov

The Committee will receive an update report on the Air District's Compliance Plan for enforcing CARB mobile source regulations at Bay Area ports and Community Air Risk Evaluation (CARE) areas.

6. UPDATE ON DRAYAGE TRUCK RETROFIT PROGRAM AT THE PORT OF OAKLAND

J. Roggenkamp/4646
jroggenkamp@baaqmd.gov

The Committee will receive an informational update on the implementation of the Drayage Truck Retrofit Program at the Port of Oakland.

7. OVERVIEW OF SHOREPOWER AT THE PORT OF OAKLAND **J. Roggenkamp/4646**
jroggenkamp@baaqmd.gov

The Committee will receive an informational overview on the issues and costs of compliance with the California Air Resources Board's (ARB's) shorepower regulation at the Port of Oakland.

8. 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).

9. TIME AND PLACE OF NEXT MEETING - AT THE CALL OF THE CHAIR

10. ADJOURNMENT

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

(415) 749-5130
FAX: (415) 928-8560
BAAQMD homepage:
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) 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

OCTOBER 2009

<u>TYPE OF MEETING</u>	<u>DAY</u>	<u>DATE</u>	<u>TIME</u>	<u>ROOM</u>
Board of Directors Stationary Source Committee <i>(Meets 3rd Monday Quarterly)</i>	Monday	19	9:30 a.m.	Board Room
Board of Directors Executive Committee <i>(At the Call of the Chair) - CANCELLED</i>	Wednesday	21	9:30 a.m.	4 th Floor Conf. Room
Board of Directors Regular Meeting <i>(Meets 1st & 3rd Wednesday of each Month) - CANCELLED</i>	Wednesday	21	9:45 a.m.	Board Room
Board of Directors Mobile Source Committee – <i>(Meets 4th Thursday of each Month) - CANCELLED</i>	Thursday	22	9:30 a.m.	4 th Floor Conf. Room
Board of Directors Ad Hoc Cme. on Port Emissions <i>(At the Call of the Chair)</i>	Monday	26	9:30 a.m.	4 th Floor Conf. Room

NOVEMBER 2009

<u>TYPE OF MEETING</u>	<u>DAY</u>	<u>DATE</u>	<u>TIME</u>	<u>ROOM</u>
Board of Directors Budget & Finance Committee <i>(At the Call of the Chair)</i>	Monday	2	9:30 a.m.	4th Floor Conf. Room
Board of Directors Personnel Committee Meeting <i>(At the Call of the Chair)</i>	Wednesday	4	9:00 a.m.	4 th Floor Conf. Room
Board of Directors Regular Meeting <i>(Meets 1st & 3rd Wednesday of each Month)</i>	Wednesday	4	9:45 a.m.	Board Room
Board of Directors Mobile Source Committee <i>(Meets 4th Thursday each Month)</i>	Thursday	5	9:30 a.m.	4 th Floor Conf. Room
Joint Policy Committee <i>(Meets 3rd Friday Every Other Month)</i>	Friday	6	10:00 a.m.	MTC Auditorium 101 8 th Street Oakland, CA 94607
Advisory Council Regular Meeting	Tuesday	10	9:00 a.m.	Board Room
Board of Directors Legislative Committee <i>(Meets 2nd Thursday each Month)</i>	Thursday	12	9:30 a.m.	4 th Floor Conf. Room

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NOVEMBER 2009

<u>TYPE OF MEETING</u>	<u>DAY</u>	<u>DATE</u>	<u>TIME</u>	<u>ROOM</u>
Board of Directors Climate Protection Committee <i>(Meets 2nd Thursday each Month)</i>	Thursday	12	Following Board Legislative Cme. Mtg.	4th Floor Conf. Room
Board of Directors Public Outreach Committee <i>(Meets 1st Thursday each Month)</i>	Friday	13	9:30 a.m.	4 th Floor Conf. Room
Board of Directors Stationary Source Committee <i>(Meets 3rd Monday Quarterly)</i>	Monday	16	9:30 a.m.	Board Room
Board of Directors Personnel Committee <i>(At the Call of the Chair)</i>	Wednesday	18	9:00 a.m.	4th Floor Conf. Room
Board of Directors Regular Meeting <i>(Meets 1st & 3rd Wednesday of each Month)</i>	Wednesday	18	9:45 a.m.	Board Room
Executive Committee Meeting <i>(Meets at the Call of the Chair)</i>	Thursday	19	9:30 a.m.	4 th Floor Conf. Room
Joint Policy Committee <i>(Meets 3rd Friday Every Other Month) - RESCHEDULED TO FRIDAY, NOVEMBER 6, 2009</i>	Friday	20	10:00 a.m.	MTC Auditorium 101 8 th Street Oakland, CA 94607
Board of Directors Budget & Finance Committee <i>(At the Call of the Chair)</i> - CANCELLED & RESCHEDULED TO MONDAY, NOVEMBER 2, 2009	Wednesday	25	1:30 p.m.	4th Floor Conf. Room
Board of Directors Mobile Source Committee <i>(Meets 4th Thursday each Month)</i> CANCELLED	Thursday	26	9:30 a.m.	4 th Floor Conf. Room

DECEMBER 2009

<u>TYPE OF MEETING</u>	<u>DAY</u>	<u>DATE</u>	<u>TIME</u>	<u>ROOM</u>
Board of Directors Regular Meeting <i>(Meets 1st & 3rd Wednesday of each Month)</i>	Wednesday	2	9:45 a.m.	Board Room
Board of Directors Climate Protection Committee <i>(Meets 2nd Thursday each Month)</i>	Thursday	10	9:30 a.m.	4th Floor Conf. Room
Board of Directors Regular Meeting <i>(Meets 1st & 3rd Wednesday of each Month)</i>	Wednesday	16	9:45 a.m.	Board Room
Board of Directors Mobile Source Committee - <i>(Meets 4th Thursday of each Month)</i>	Thursday	24	9:30 a.m.	4 th Floor Conf. Room

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

Memorandum

To: Chairperson Miley and Members
of the Ad Hoc Committee on Port Emissions

From: Jack P. Broadbent
Executive Officer/APCO

Date: October 12, 2009

Re: Ad Hoc Committee on Port Emissions Draft Minutes

RECOMMENDED ACTION:

Approve attached draft minutes of the Ad Hoc Committee on Port Emissions meeting of July 16, 2009.

DISCUSSION

Attached for your review and approval are the draft minutes of the July 16, 2009 Ad Hoc Committee on Port Emissions 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 Ad Hoc Committee on Port Emissions
9:30 a.m., Thursday, July 16, 2009

1. **Call to Order – Roll Call:** Chairperson Nate Miley called the meeting to order at 9:34 a.m.

Present: Chairperson Nate Miley, Vice Chairperson Dan Dunnigan, Committee Members Tom Bates, John Gioia, Scott Haggerty, Yoriko Kishimoto and Mark Ross

Absent: Director Gayle B. Uilkema and Brad Wagenknecht

Others Present: Board Chairperson Pamela Torliatt
2. **Public Comment Period:** None
3. **Approval of Minutes of March 12, 2009:** Director Haggerty moved approval of the minutes of March 12, 2009; seconded by Director Dunnigan; carried unanimously without objection.
4. **Update on Emission Reduction Strategy for the Port of Oakland – Staff Presentation by Executive Officer/APCO Jack Broadbent**

Mr. Broadbent provided an overview of the Emission Reduction Strategy and cooperative steps between the Port and Air District staff, noting that Port and Air District staff is developing an agreement for near term actions to reduce emissions. He reviewed the following actions taken to date:

District Actions:

- Continued efforts with ARB on enforcement, including side-by-side inspections of cargo handling equipment;
- Continued TFCA grants (\$5 million) to retrofit drayage trucks;
- Resumed I-Bond grants for drayage truck retrofits (\$10 million) and shore power projects with APL (\$2.8 million);
- Resumed allocation of Port of Oakland funds (\$5 million) for drayage truck retrofits;
- Awarded Diesel Emission Reduction Act (DERA) funds (\$2 million) for drayage truck retrofits;
- Trucker Outreach Center at the Port of Oakland

Port of Oakland Actions:

- Adopted Maritime Air Quality Improvement Plan;
- Adopted Comprehensive Truck Management Plan;

- Adopted a ban on non-compliant trucks effective January 1, 2010;
- Reauthorized \$5 million in Port funds for retrofitting drayage trucks;
- Continued working with terminal operations on compliance plans for the ARB shore power regulation;
- Submitted applications for state and federal funding

ARB Actions:

- On July 1, 2009, large marine vessels began using low sulfur marine fuels;
- On July 1, 2009, terminal operators submitted shore power compliance plans;
- Terminal operators continued progress in complying with the State's diesel PM requirements;
- Trucking firms began complying with the State's diesel PM requirements for transportation refrigeration units;
- UP and BNSF railways completed installation of idle limiting devices on California-based locomotives;
- Tug and supply vessel owners submitted compliance plans to ARB

Federal Actions:

- Proposed tighter emission limits on new and existing marine diesel engines used for propulsion on ocean going vessels;
- Awarded DERA funding to the Air District for drayage truck retrofits

Director Discussion/Comments:

Director Haggerty voiced support for the Marine Highway Project and questioned costs and impacts of environmental review. Mr. Broadbent explained that the Committee would address funding allocations in the next agenda item and the Marine Highway Project is one example of a near-term action which would form the basis of a short-term strategy, which would be captured in agreements.

Director Gioia questioned and confirmed with staff that agreements would serve to provide clarity of enforcement actions and funding.

Director Haggerty questioned whether the District could require full shoreside power by 2011. Mr. Broadbent said while shoreside power is the cleanest approach, electrifying berths is a significant financial undertaking, and suggested exploration of other technological approaches and control devices on barges.

Richard Sinkoff, Port of Oakland, discussed the Port's actions for shorepower, stating that Port staff will present its plan to the Maritime Committee. He acknowledged that within 3 years they must have 50% of ships capable of plugging in and by 2020, 80% of ships and the cost to provide electricity up to the terminal gate is estimated at over \$200 million. He discussed the challenge of accelerating grid power under CARB's gold standard and said the Port will seek support for shorepower at the Maritime Committee meeting and for their Board to consider a three and a half year planning, design and construction process that allocates \$50 million over the next five years.

Director Kishimoto questioned progress on electrifying the railway system, and Mr. Breen described the projects currently underway and associated grants.

Director Ross requested an update on the Comprehensive Truck Management Plan (CTMP) employer / non-employer based system. Mr. Sinkoff discussed the 9th Circuit Court of Appeals decision stating that certain portions of the program that touch on the employment model were

essentially pre-empted by federal law. He said the Port's Board of Commissioners approved the CTMP and is moving forward and considering the full budget.

Director Gioia supported rail as a safer and cleaner opportunity over trucks and suggested that that the Air District play a greater leadership role in enhancing rail capacity and its multiple uses. Director Haggerty agreed, but cited federal regulation as being difficult.

Board Chairperson Torliatt questioned the status of timelines associated with policy decisions of the Maritime Air Quality Improvement Plan (MAQIP). Mr. Broadbent said staff has arrived at an approach with identifying short-term projects that would get to reduced emissions targets and said a more definitive list would return to the Committee.

Director Bates acknowledged steps made by the Port and said he was hopeful that the Port will enter into an agreement with the District. Ms. Roggenkamp and Mr. Sinkoff then briefly discussed working meetings held by the District and Port with the hopes of bringing final agreement to each respective Board.

Director Kishimoto requested an update on the container fee and questioned legislation to develop a new Department of Rail. Mr. Sinkoff explained that a container fee would be a strong disincentive and the Port has applied for federal and state funding to avoid further erosion of business, noting the decline in revenues and shipping.

Director Ross likened the District and the Port's relationship as, "trust but verify" and acknowledged the more recent cooperative progress made.

Director Haggerty questioned the status of the container fee at the Port of Long Beach. Advanced Projects Advisor, Michael Murphy provided an update. Directors then discussed container movement and competition in the northwest.

Public comment:

Mike Bowdon, Eco Transport, an affiliate of the Broe Group and OmniTRAX, Inc., briefly discussed their company's portfolio and potential for a public/private partnership and agreed to continue public comment under the next agenda item.

Doug Bloch, Change to Win, discussed the stakeholder process, was opposed to the 9th Circuit Court of Appeals' ruling that public agencies are restricted from doing anything that affects price, route and service of ports, and noted interest from Congress to update federal transportation law.

Zach Goldman, Change to Win, voiced opposition to how emissions are counted at the Port of Oakland and discussed how he hopes to have the methodology corrected.

Ellen Johnck, Bay Planning Coalition, provided an update on focus groups which were held to move into Phase II of the MAQIP, supported short term actions and an agreement, discussed nationwide legislation to put freight into transportation planning, and briefly discussed regional corridor rail approaches which she said are project and fund-driven.

Richard Sinkoff reiterated the Port's cooperative efforts with District staff, said programs are underway in Phase II and they expect to reach their projected target by January 1, 2010. The shorepower presentation is being made to their Board today, they will be sending a letter to the

District for advice on methodologies for their emissions inventory, are pursuing the MAQIP stakeholder group, and thanked the District for dedicating staff resources.

Brad Edgar, CLEAIRE Advanced Emission Controls, discussed CLEAIRE's efforts in retrofit technology and said he believes the program is working through educational outreach and good leadership.

In closing, Mr. Broadbent acknowledged comments and progress made to date and stated that staff will return to the Committee in the fall with an update on shorepower. Of concern is that CARB may push out the January 1st deadline due to the Long Beach and Los Angeles Ports not being able to meet it; however, staff will alert the Board if this occurs.

Committee Action: None; Information only.

5. Consideration of Funding Allocation for Near Term Emission Reduction Projects at the Port of Oakland – Staff Presentation by Grants Manager, Damien Breen

Mr. Breen provided a background and projects with near-term emissions reduction benefits and noted that the following projects could be implemented quickly with each having a large emissions reductions benefit.

<u>Project</u>	<u>Implementation</u>	<u>Project Description/Benefits</u>
LNG Fuel Shorepower Generator	Third quarter 2009	<ul style="list-style-type: none">▪ Utilized LNG provided shorepower to eliminate ship idling while at Port▪ Reduction in diesel particulate, nitrogen oxides and sulfur oxides
LNG Trucks Fleet	Third quarter 2009	<ul style="list-style-type: none">▪ Establish Bay area LNG drayage fleet▪ Reduction in diesel particulate, nitrogen oxides and greenhouse gases
BNSF Railroad Project	Third quarter 2009	<ul style="list-style-type: none">▪ Provide two new switcher engines to the BNSF Railroad at the Port. Port has committed \$1.3 million to the project and the project is eligible for Carl Moyer Funding.▪ Reduction in diesel particulates and nitrogen oxides.

Mr. Breen reported that the Marine Highway Project would significantly yield major emissions reductions. It is designed to move containers on clean barges between the Ports of Oakland, Stockton and Sacramento rather than trucks, and the San Joaquin Air District has allocated \$750,000 to this project contingent upon funding from the Air District. Staff will return to Board with other project options in the event of non-performance.

Public Comment:

Mike Bowdon, Eco Transport, spoke of strong support from both the Senate Advisory Committee and the U.S. Maritime Administration for goods movement going out over the ocean and sees the Marine Highway Project as a win/win for both truck traffic congestion and emissions reductions.

Director Gioia discussed and confirmed that a barge could hold approximately 350 40-foot containers, the project would take 4900 truck trips off the road, and there would be no more than a cycle of three barges at any one time per day on the Delta. Mr. Broadbent supported the project as having a lot of potential and briefly discussed the allocation of reserve funds.

Director Bates questioned costs for putting goods on barges versus a truck. Mr. Bowdon cited a savings of about 15% and also savings derived from any additional new truck and equipment costs after the January 1st deadline. Mr. Breen also acknowledged the Port of Stockton's renovation project of 700,000 square feet of refrigerated containers to handle agricultural goods.

Committee Action: Director Haggerty moved to recommend Board of Directors' approval of an allocation of \$750,000 in funding to support emissions reductions projects at the Port of Oakland seaport; and referral to and recommendation by the Budget and Finance Committee to transfer \$750,000 in funding from reserves to the fiscal year 2009/10 budget; seconded by Board Chairperson Torliatt; carried unanimously without objection.

6. Update on Enforcement Strategy for CARB Mobile Source Regulations at the Port of Oakland – *Staff Presentation by Director of Compliance and Enforcement, Kelly Wee*

Mr. Wee said the Committee was last provided with an update in March and presented the enforcement strategy, stating trucks comprise of 69% of emissions/risk at the Port. He updated the Committee on District activities which include ongoing enforcement, additional regulations under evaluation, and partnership efforts between CARB, District staff and the Port of Oakland. He described the Mobile Source Compliance plan which will address the largest emission sources and health risk at the Port of Oakland and concluded his presentation by discussing the District's efforts in enhanced rule making and regulations.

7. **Committee Member Comments/Other Business:** There were none.
8. **Time and Place of Next Meeting:** At the Call of the Chair.
9. **Adjournment:** The meeting adjourned at 11:13 a.m.

Lisa Harper
Clerk of the Boards

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
Memorandum

To: Chairperson Miley and Members
of the Ad Hoc Committee on Port Emissions

From: Jack P. Broadbent
Executive Officer/APCO

Date: October 19, 2009

Re: Update on Emission Reduction Strategy for the Port of Oakland

RECOMMENDED ACTIONS:

None.

BACKGROUND

At the July 16, 2009 meeting of the Ad Hoc Committee on Port Emissions, staff briefed the Committee on the development of a list of near term actions to reduce emissions at the Port of Oakland. Air District staff and Port of Oakland staff have been working jointly to develop the list.

DISCUSSION

The attachment entitled **Joint Work Program: Port of Oakland and BAAQMD -- Near Term Projects to Reduce Emissions at the Port of Oakland (October 19, 2009)** is the current version of the list of near term actions. The actions include:

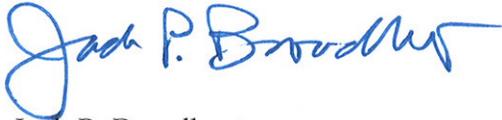
- Outreach activities and compliance support to assist with ARB and BAAQMD enforcement of the CARB regulations applicable to operations at the Port of Oakland to ensure that the emission reductions anticipated by the CARB regulations are realized.
- Specific projects to be implemented jointly to reduce emissions from operations at the Port, including projects to reduce emissions from ships, trucks and switcher engines.
- Measures to track progress, including emission inventory updates and air monitoring.

Staff will continue to work with the Port of Oakland staff to finalize the list of near term measures. The Port Maritime Committee and the Port Board of Commissioners are scheduled to receive an update on the list of measures in November 2009. The Executive Officers of the Port and the Air District will make a formal commitment to implement the Joint Work Program.

BUDGET CONSIDERATION / FINANCIAL IMPACT:

On September 16, 2009, the Board of Directors transferred \$750,000 into the FY 2009/2010 budget for the marine highway project. Other grant funds will come from our existing grant programs, including TFCA, Carl Moyer, and Mobile Source Incentive Funds. Staff costs are covered by the FY 2009/2010 budget.

Respectfully submitted,



Jack P. Broadbent
Executive Officer/APCO

Prepared by: Jean Roggenkamp

Joint Work Program: Port of Oakland and BAAQMD
Near-Term Projects to Reduce Emissions at the Port of Oakland
Draft –October 19, 2009 – For Discussion Only

Regulatory: Outreach Activities	
Description	To ensure compliance with CARB mobile source regulations and air toxic control measures (ATCM) through a wide range of activities, including the dissemination of informational materials, meetings with the owners or operators of regulated sources, signage, and other means of outreach support.
Scope	<ul style="list-style-type: none"> • CARB Drayage Truck Rule (Trucks) • CARB Idling Limits (Idling) • CARB ATCM: Transport Refrigeration Units (TRU)
Roles	BAAQMD (Lead, Outreach for ATCMs, Compliance and Enforcement Division) Port (Support of BAAQMD outreach activities, as identified below)
Cost	TBD
Funding	TBD
Schedule	Present through 2014
Activities	<p>The activities listed below encompass a full range of outreach activities. The relevant rules and ATCMs are identified in parentheses after each activity.</p> <p>I. Information Dissemination</p> <ul style="list-style-type: none"> • Develop multilingual compliance assistance materials (Trucks, Idling, TRU) • Distribute compliance materials (Trucks, Idling, TRU) • Web-based information sharing, including links to CARB and BAAQMD websites (All) • Provide e-mail contact information from public meeting rosters (where not otherwise prohibited by federal preemption or privacy/security) (Trucks, Idling, TRU) <p>II. Workshops and Meetings</p> <ul style="list-style-type: none"> • Conduct workshops and meetings with Marine Terminal Operators (MTOs) and Port tenants (All) • Conduct workshops and meetings with truck drivers, owners and motor carriers (e.g. Trucking Working Group) (Trucks, Idling, TRU) • Convene Port Maritime Stakeholder Group (All) <p>III. Signage</p> <ul style="list-style-type: none"> • Use of digital signboards re: idling restrictions, availability of grants funds at OT411, etc. (Trucks, Idling, TRU) • Fabrication of anti-idling signs (Idling) • Installation of permanent signs/placards (Idling) <p>IV. Facilities (e.g. OT411 Outreach Center) (Trucks, Idling, TRU)</p> <ul style="list-style-type: none"> • Assist truck owners with registering their vehicles in the CARB Drayage Truck Registry (Port, BAAQMD)

Regulatory: Enforcement Activities	
Description	The California Air Resources Board has the lead responsibility for compliance and enforcement of mobile source air quality rules. The BAAQMD enforces rules and regulations, including applicable state and federal law, to achieve and maintain state and federal ambient air quality standards. Both CARB and BAAQMD will conduct investigations and conduct enforcement actions to ensure compliance with mobile source

Joint Work Program: Port of Oakland and BAAQMD
Near-Term Projects to Reduce Emissions at the Port of Oakland
Draft –October 19, 2009 – For Discussion Only

	rules and ATCMs.
Scope	<ul style="list-style-type: none"> • CARB Drayage Truck Rule (Trucks) • CARB Idling Limits (Idling) • CARB ATCM: Transport Refrigeration Units (TRU)
Roles	<ul style="list-style-type: none"> • BAAQMD (Lead, Enforcement of ATCMs, Compliance and Enforcement Division) • Port (Support of BAAQMD compliance activities, as identified below)
Cost	TBD
Funding	TBD
Schedule	Present through 2014
Activities	<p>The activities listed below encompass a full range of compliance support activities. The relevant rules or ATCMs are identified in parentheses after each activity.</p> <p>I. Reporting</p> <ul style="list-style-type: none"> • Encourage MTO reporting consistent with the Drayage Truck Rule (Trucks) • Collect reports and provide reports to CARB with a copy to BAAQMD (Trucks) <p>II. Operations</p> <ul style="list-style-type: none"> • Serve as liaison between field-based inspection staff and stakeholders (i.e. MTOs, truckers, motor carriers) (All) • Assist in resolving compliance questions (All) • Issue warnings to MTOs RE: excessive queues/idling <p>III. Facilities</p> <ul style="list-style-type: none"> • Terminals to develop turn-away procedures for non-compliant trucks (Trucks) • Utilize existing reefer capacity outlets at Marine Terminals for TRUs (3,309 480v outlets; 257 240v outlets. Total: 3,566) (TRU) <p>IV. Leases</p> <ul style="list-style-type: none"> • All Port leases require compliance with all applicable laws, rules and regulations and Port policies, including but not limited to, environmental rules and regulations (All) – (i.e. applies to existing leases as leases come up for renewal or new leases are negotiated) <p>V. Port Tariff (non-compliant DTR truck ban)</p> <ul style="list-style-type: none"> • Port to confer with BAAQMD on implementation of truck ban to facilitate BAAQMD enforcement of DTR (Trucks)

Project: LNG-fueled generators for shore power	
Description	<p>Pursue use of LNG-fueled generators for shore power for the terminal operators and carriers that choose that technology to comply with the CARB shore power regulation.</p> <p>Note: While no terminal operators at the Port of Oakland reported including dockside generators in their July 1, 2009 compliance plan submittals to CARB, Port and BAAQMD staff will continue discussions with terminal operators and carriers that are interested in integrating LNG generators in their overall compliance strategy for shorepower.</p> <p>A recent use of the LNG-fueled generators by APL during emergency repair work on the APL Korea demonstrated a potential use of this technology.</p>

Joint Work Program: Port of Oakland and BAAQMD
Near-Term Projects to Reduce Emissions at the Port of Oakland
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Project: Vessel speed reduction	
Description	Limit the maximum speed of ocean-going vessels near California’s coast to reduce NOx, SOx , diesel particulate matter and green house gas (GHG) emissions.
Roles	<ul style="list-style-type: none"> • CARB is currently preparing rule-making studies and conducting public workshops, and will consider adopting a regulation. • BAAQMD (Enforce VSR regulation if adopted, Compliance and Enforcement Division) • Port (Evaluate feasibility of a voluntary program. Lead regional review and response to CARB proposals via discussions with the Harbor Safety Committee and other interested parties; Support of BAAQMD compliance activities if VSR regulation is adopted.)
Cost	TBD
Funding	TBD
Schedule	Present through 2010
Activities	<p>The activities listed below encompass a likely range of activities if the regulation is adopted by CARB.</p> <p>I. Information dissemination</p> <ul style="list-style-type: none"> • Distribute compliance materials to carriers • Web-based information sharing, including links to CARB and BAAQMD websites • Most information is expected to be distributed through CARB Marine Notice advisories to owners or operators of ocean-going vessels visiting California ports or through the U.S. Coast Guard. <p>II. Workshops and Meetings</p> <ul style="list-style-type: none"> • Contact with carriers is expected to be through CARB. • Regional discussions will be conducted in conjunction with, but not limited to, the Harbor Safety Committee, the Pacific Merchant Shipping Association and the San Francisco Bar Pilots Association on a potential voluntary program. <p>III. Other</p> <ul style="list-style-type: none"> • The enforcement reporting requirements will be described in the regulation, when it is adopted.

Project: Short Sea Shipping	
Description	Marine highway project (“short sea shipping”) between the Port of Oakland and the Ports of West Sacramento and Stockton to use barges to reduce truck trips on regional freeways.
Roles	<ul style="list-style-type: none"> • BAAQMD (Project support) • Port (Project support) • Project leads are the Ports of West Sacramento and Stockton and terminal operators that are equipped to participate in this effort.
Cost	TBD
Funding	Private financing in an unspecified amount from a private company project proponent. Up to \$30 million in federal TIGER grant funding (application submitted by the Ports of Oakland, West Sacramento and Stockton/letter of support submitted by BAAQMD). \$750,000 from the BAAQMD (contingent on success of TIGER grant application, the project’s utilization of clean tugs and service ramp-up milestones). \$500,000 from the San Joaquin Valley APCD (tentative, contingent on San Joaquin Valley

Joint Work Program: Port of Oakland and BAAQMD
Near-Term Projects to Reduce Emissions at the Port of Oakland
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	AQMD Board's approval). \$950,000 from the Port of West Sacramento and \$2.25 million from the Port of Stockton (including waterfront land value)
Schedule	Spring/Summer 2010
Activities	BAAQMD – provide funding Port – submit a joint TIGER grant application to the US Department of Transportation with the Ports of West Sacramento and Stockton.

Project: Ambient air quality monitoring	
Description	The BAAQMD has established a permanent monitoring station in West Oakland. Additionally, the BAAQMD is conducting the West Oakland Monitoring Study (WOMS), an intensive ambient air quality monitoring program to assist in better characterizing pollution sources and health risks. The Port is assisting BAAQMD by helping to locate and secure a temporary monitoring site on Port property. The Port is also providing funding to the BAAQMD toward the cost of an additional off-site monitor for the summer and winter 2009 monitoring periods. Data collected from the monitors will be accessible to the public via both agencies' websites, as will the WOMS draft and final reports. The Air District is responsible for operating the monitors, collecting the data and publishing the results of the monitoring.
Roles	<ul style="list-style-type: none"> • BAAQMD (Project lead) • Port (Project support)
Cost	TBD
Funding	BAAQMD – approx. \$500,000 (WOMS only). Port - \$19,400 – summer 2009 (WOMS) Approximately \$16,000 – winter 2009/10 (WOMS)
Schedule	Present through 2010

Project: Drayage Truck Retrofit and Replacement Program	
Description	Provide cash grants and other assistance for diesel particulate matter (DPM) filters or truck replacements for drayage truck owners. Available funding can support retrofits for 800 trucks and replacement of 200 trucks.
Roles	BAAQMD (Project lead) Port (Project support) Both BAAQMD and Port employees are staffing the OT411 information center to assist truckers in applying for grant assistance
Cost	Up to \$22 million
Funding	\$5 million – Port operating budget \$5 million – Air District (TFCA funding) \$10 million – Prop 1B grant (through CARB) \$2 million – DERA grant (through US EPA)
Schedule	Present through January 1, 2010

Project: Emissions inventory update	
Description	Update the 2005 Seaport Air Emissions Inventory to calendar year 2008.

Joint Work Program: Port of Oakland and BAAQMD
Near-Term Projects to Reduce Emissions at the Port of Oakland
 Draft –October 19, 2009 – For Discussion Only

Roles	<p>Port (Project lead) – The Port is working with a consultant (Environ) to update the 2005 Seaport Air Emissions Inventory to calendar year 2008. Depending on funding availability, a second phase of the Project may inventory seaport-related GHG.</p> <p>BAAQMD (advice) - Along with CARB, provide advice on methodology to ensure that the emissions inventory will be consistent with and comparable to the 2005 inventory and HRA factors.</p> <p>The Air District will provide timely review of working drafts of the inventory, as well as in-kind technical assistance as needed. The Air District may assist the Port in presenting the inventory to local residents and businesses, as well as other government agencies.</p>
Cost	Port -- c. \$95,000
Funding	Port -- operating budget
Schedule	Present through 2010

Other Opportunities Under Consideration		
Project/Action	Recommended Time Frame	Notes
Review and update work program annually	Annual update	Staff from Port and BAAQMD to meet periodically to update the work program.
Designation of West Coast as an Emission Control Area by the International Maritime Organization.	Commence Fall 2009	Port and BAAQMD to join with other businesses and agencies to support this effort. In advance of the 60th session of the Marine Environmental Protection Committee (MEPC 60), currently scheduled for March 2010, the Port and BAAQMD will urge support within the maritime industry for adoption of the ECA, with an emphasis placed on gaining support from major business interests in the Bay Area, as well as Port customers.
Funding/implementation of landside shore power systems.	2010-2013	<p>Port is including funding for off-terminal infrastructure in its five-year capital program (budget approval is pending). BAAQMD to support Port TIGER/ARRA grant applications. BAAQMD has funded the installation of shorepower at three APL berths. Ports America has proposed an initial implementation of shorepower by 2012 in its Concession and Lease Agreement at Berths 20-24.</p> <p>Total cost est. \$90M.</p> <p>BAAQMD staff to discuss additional funding for this measure at an upcoming Mobile Source Committee meeting.</p>
Provide match funding for 2 low-emission switcher engines at the Port-owned rail yard leased by BNSF.	On-going	Port has planned a \$1.3 million grant to match BNSF investment. BAAQMD is considering additional funding to offset private match costs. BAAQMD/Port in discussions with BNSF.

Joint Work Program: Port of Oakland and BAAQMD
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<p>Coordination on Technology Advancement projects possibly including, but not limited to:</p> <ul style="list-style-type: none"> • Electric Yard hostlers • Electric and/or Hydraulic hybrid drive trains for cargo handling equipment and vessel assist tugs. • Hybrid on-road trucks • NOx controls on ocean-going vessels 	<p>Commence in 2010</p>	<p>This measure is to assist the Port and its tenants in understanding, demonstration or developing new technologies that will further lower emissions of NOx, CO2 and PM10. Reduction in NOx from ocean going vessels is of particular interest, in addition to the primary interest in reducing diesel PM.</p> <p>Port to consider joining the ongoing San Pedro Bay Technology Advancement program or developing a complementary effort.</p> <p>Air District to consider possible funding options.</p> <p>Both agencies to collaborate with project sponsors in seeking other underwriting sources.</p>
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BAY AREA AIR QUALITY MANAGEMENT DISTRICT
Memorandum

To: Chairperson Miley and Members
of the Ad Hoc Committee on Port Emissions

From: Jack P. Broadbent
Executive Officer/APCO

Date: October 14, 2009

Re: Report on the Compliance Plan for Enforcement of Mobile Source Regulations

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. In addition, the comprehensive West Oakland health risk assessment determined that the community is exposed to diesel PM concentrations that are nearly 3 times higher than the average background diesel PM in the Bay Area.

The District has a strong stationary source enforcement program which spans more than 5 decades. However, mobile source enforcement has traditionally been under CARB's purview. Only recently, CARB's diesel PM air toxic control measures (ATCMs) allowed air districts the opportunity to have a larger role in mobile source regulation enforcement.

Following up on presentations in March and July 2009 to the Committee, staff completed the District's Mobile Source Compliance Plan. The goal of the Plan is to reduce diesel particulate matter health risk in CARE impacted areas, with special focus on the Port Of Oakland and West Oakland, using a robust enforcement program.

Staff have completed several logistical actions to ensure timely and effective Plan implementation, including: obtaining security clearances for Port access; attending mobile source training and conducting monthly familiarization inspections with CARB; beginning outreach; inspecting trucks that will receive District grant funds; and continuing to enforce mobile source requirements already under District purview. Plans are underway for a strong enforcement presence at the Port of Oakland to ensure compliance with the January 1, 2010 Drayage Truck Rule compliance deadline.

DISCUSSION

The Mobile Source Compliance Plan (MSCP) lays out the District's comprehensive strategy for enforcement of specified CARB ATCMs and related mobile source statutes and/or agreements. The MSCP includes the following key elements: an overview of the Compliance Assistance & Enforcement Program; the Memorandum of Understanding (MOU) between CARB and the District; discussion of Diesel PM and Mobile Source(s) impacts on CARE Areas; the Mobile Source Regulations addressed in the Plan; and an Implementation Schedule. The MOU is a critical component of the MSCP as it serves to clarify our authority and define the roles and responsibilities of each agency.

The District has prioritized its current efforts and those planned based on the overall level of emissions and their contribution to elevated health risk posed by a particular mobile source category. Included are several regulations (or statute or agreement, collectively "rules") which address categories which represent the highest emission sources/risks: trucks (3 rules); diesel equipment (4 rules); ships and boats (4 rules); locomotives (1 rule); and off-road vehicles (1 rule).

The Bay Area Air District is the first in the State to enter into a comprehensive mobile source enforcement partnership agreement with CARB. By implementation of the MOU and the Compliance Plan, the District will reduce diesel PM exposures, provide leadership on mobile source enforcement, and improve air quality for the communities we serve.

Staff will present the Mobile Source Compliance Plan to the Committee.

BUDGET CONSIDERATION/FINANCIAL IMPACT:

The FYE 2010 estimated costs for implementation of the MSCP are two FTE. The FYE 2010 budget allocated \$ 201,347 in General Revenue for conducting CARB Mobile Source regulations enforcement in CARE impacted areas with focus on the Port of Oakland.

Respectfully submitted,



Jack P. Broadbent
Executive Officer/APCO

Prepared by: Barbara Coler

Reviewed by: Kelly Wee

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
Memorandum

To: Chairperson Miley and Members
of the Ad Hoc Committee on Port Emissions

From: Jack P. Broadbent
Executive Officer/APCO

Date: October 19, 2009

Re: Update on Drayage Truck Retrofit Program at the Port of Oakland

RECOMMENDED ACTION:

None, receive and file.

BACKGROUND

Since May of 2009, the Bay Area Air Quality Management District (District) has operated a drayage truck retrofit program for trucks serving the Port of Oakland. This program is funded by a combination of monies: \$5 million provided by the Port, \$15 million in District funding from the TFCA and Goods Movement Bond (I-Bond) programs, and \$2 million from the United States Environmental Protection Agency (USEPA) via the American Resource and Recovery Act (ARRA) Diesel Emissions Reduction Program (DERA). Utilizing this funding, the Board of Directors set the ambitious goal to retrofit and replace 1,000 Port drayage trucks. This program is now in its final leg. Staff will provide the committee with an update on its progress to date.

DISCUSSION

The Port Truck Retrofit Program has had a number of starts and stops to program rollout described by the chronology below:

- August 15, 2008 - the District receives over 1,200 applications for Port truck retrofits and replacements totaling \$28 million for a solicitation of \$15 million (\$5 million in Port funds, \$5 million in I-Bond funds and \$5 million in TFCA funds).
- November 19, 2008 - the Board of Port Commissioners (Port Commissioners) passed a resolution postponing the use of \$5 million in Port funds to retrofit trucks under the joint I-Bond program until after the adoption of its Comprehensive Truck Management Program (CTMP).
- December 23, 2008 - the District was notified by the ARB that due to the State of California's fiscal year budget crisis, that I-Bond program funding was frozen.
- March 18, 2009 - the Board authorized to move forward with the drayage to program using \$5 million in TFCA funding.
- June 16, 2009 - Port of Oakland Commissioners vote to reinstate \$5 million in funding to program via an amended memorandum of understanding (MOU) with the District.
- June 26, 2009 - ARB reinstate his I-Bond funding

- July 2009 - District is awarded \$2 million in American Resource and Recovery Act funding from the United States Environmental Protection Agency (USEPA) for retrofits and Replacements at the Port.

Program Successes to Date

Despite the delays in some of the funding, and the four sets of administrative guidelines to which the program is subject, it has been extraordinarily successful. To date the program has:

- Issued over 780 retrofit contracts to drayage truck owners.
- Is projected to have over 350 retrofits devices installed on the Oakland drayage trucks by the end of October.
- Has assisted over 3, 000 truckers at its Oakland outreach center (OT 411) with information on grants and the upcoming regulation.
- Encumbered approximately \$13 million in Air District, Port, USEPA and I-Bond funding

Staff is currently working on the replacement drayage truck portion of the program and is expecting to issue approximately 170 contracts for truck replacements in November 2009. These truck replacement contracts will encumber the remaining \$9 million of program funds. While staff hopes that many of the trucks can be in place by ARB's January 1, 2010 regulatory deadline, it is also discussing options with the ARB for truckers who have not received their replacement truck by that time.

Current Issues

While the program continues to be successful, there continue to be implementation issues for grantees and vendors, and administrative issues for the District. These are as follows:

- There is currently a 6 to 8 weeks delay in the manufacturing of ECS hybrid retrofits, the device for which the most grants have been issued. This is slowing device installation considerably.
- Many drivers have missed installation deadlines and are now seeking contract amendments to allow them to install retrofits later this year.
- ARB imposed a number of new administrative hurdles on the District in order to receive Goods Movement Bond funding. While these requirements have been met, ARB have been slow to respond to the District on when actual funding will be delivered.
- Over 800 retrofit grant applicants were unsuccessful in getting funding and staff is spending a significant amount of time dealing with their concerns and questions.

Staff remains confident that these issues can be overcome and that the program will achieve the 1,000 trucks retrofitted or replaced.

BUDGET CONSIDERATION / FINANCIAL IMPACT:

None. The Port Truck Retrofit Program distributes funds from the Port, the Goods Movement Bond, DERA and TFCA to the District and then to eligible equipment owners. Staff costs for the administration of the Program are included in the FY 2009/2010 budget.

Respectfully submitted,



Jack P. Broadbent
Executive Officer/APCO

Prepared by: Damian Breen

Reviewed by: Karen Schkolnick

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
Memorandum

To: Chairperson Miley and Members
of the Ad Hoc Committee on Port Emissions

From: Jack P. Broadbent
Executive Officer/APCO

Date: October 19, 2009

Re: Overview of Shorepower at the Port of Oakland

RECOMMENDED ACTION:

None, 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. The regulation offers a number of different compliance scenarios to terminal operators and vessel owners and requires reporting from each affected port. Staff will give an overview of the regulation and discuss the costs and issues with compliance at the Port of Oakland (Port).

DISCUSSION

Who Is Subject to the Regulation at the Port?

The Port's operation depend on the import and export of cargo. While the regulation offers a number of different exemptions, cargo fleets whose vessels visit Oakland more than 25 times in a year are subject to the requirements of the regulation. This means that all of the major terminals and vessel fleets visiting Oakland are subject to the rule's requirements. In many cases the vessel fleets and terminals in Oakland are owned by the same parent companies.

What Does the Regulation Require?

The regulation requires that vessel fleets and terminals choose between two emissions reductions options as follows:

Grid-based Shorepower - This is where a ship is hooked up directly to the California electrical grid system and is drawing power directly from a utility company.

Alternative Compliance - Ships have the ability to:

- Get power from onshore generators (such as the LNG generator funded by the District as a demonstration project in 2007). These generators have to be equivalent to the electrical grid in terms of emissions.
- Capture and treat emissions from the vessel's auxiliary engines as an alternative to utilizing electricity for onboard operations.

- The vessel itself can have an onboard engine that can provide power to the vessel but this engine has to be equivalent to the electrical grid in terms of emissions.
- The vessel could use a special fuel but again would have to meet an equivalent emission standard to the electrical grid.
- Other methods that would reduce emissions equivalent to the ship being powered by the electrical grid.

Under the regulation, terminals and vessel fleets were required to report to the ARB by July 2009, if they were going to choose an alternative compliance path. Based on the reports submitted, all of the facilities at the Port of Oakland have chosen to utilize grid-based shorepower to comply with the regulation. Additionally, by choosing this option, 50% of the vessels visiting the Port of Oakland must be able to plug into grid-based shorepower by July 2014.

Costs

The Port estimates that it will cost approximately \$90 million to provide grid-based shorepower to all but two terminals at its facility. The two terminals not included in the calculation are Ports America, who are required to provide their own electrical infrastructure under a concession agreement with the Port and the APL shipping line who is utilizing a combination of private and District funding (\$4.8 million - \$2 million from the Carl Moyer program and \$2.8 million in Goods Movement Bond funding (I-Bond)) to electrify their Berths and vessels.

Issues

Infrastructure:

Installation of shorepower infrastructure is complicated at the Port of Oakland due to a number of factors. These include the fact that both the Port and PG&E are the electrical utility providers for the majority of terminals in Oakland. This requires both entities to negotiate on the provision of actual power to the dock. No unified solution to the shorepower question at the Port has been presented by both entities to date. Additionally, there is a long lead time associated with planning and purchase of the infrastructure equipment and the actual construction and placement of it generally takes years. While engineering studies have been performed by the Port of Oakland, no equipment has been ordered to date.

Grant Funding:

Federal Funding - In order to fund some of the \$90 million required, the Port has applied for \$26 million in the United States Department of Transportation (USDOT) TIGER monies. These dollars are being leveraged against \$51 million from the Port's own capital improvements budget. However, the USDOT solicitation is nationwide and expected to be very competitive. The Port will not be notified until February 2010, as to whether or not it has been successful in this application. In the event that they are successful, they will have only until 2012 to spend this funding, a short turnaround for projects of this magnitude.

District Funding - The District has made Carl Moyer program (CMP) and Mobile Source Incentive Funding (MSIF) available to Port terminals via its annual solicitations in these programs. While staff has had several meetings with terminal operators and vessel owners, to date only APL has chosen to avail itself of District funding. Due to the surplus requirements of

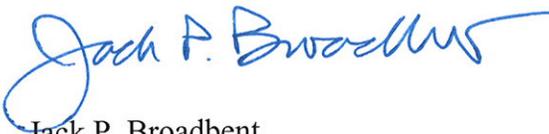
the CMP and MSIF programs, this funding will no longer be available to applicants following December 2011.

In addition to this funding, shorepower is an eligible category under I-Bond. This funding source has different surplus requirement to the programs mentioned above which could provide additional time for funds to be used at the Port. However, due to a California state budget crisis funding from this revenue stream has been uncertain. The District continues to work with ARB to secure more of these funds for this and other projects.

BUDGET CONSIDERATION / FINANCIAL IMPACT:

None. Informational report.

Respectfully submitted,



Jack P. Broadbent
Executive Officer/APCO

Prepared by: Damian Breen
Reviewed by: Karen Schkolnick