



## CLEAN PORT INITIATIVE WORKPLAN

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### **Rationale for Components of the Clean Port Initiative Workplan**

The following is a discussion of the policy and legal rationale for the components of the Clean Port Initiative Workplan, including an outline of the AQMD’s role in controlling port pollution.

**International, Federal and State Standards Are Not Sufficient For This Region.** Emissions from sources associated with the ports—marine vessels, harbor craft, cargo handling equipment, locomotives, and trucks—have historically been regulated primarily by international, federal or state authorities. The International Maritime Organization (IMO), an agency of the United Nations, has established NOx emissions limitations and fuel sulfur specifications for oceangoing vessels; the federal Environmental Protection Agency (EPA) has adopted emission standards for new locomotives, new trucks and some vessels; and the California Air Resources Board (CARB) has adopted standards for new trucks and recently voted to adopt standards for cargo handling equipment and marine auxiliary engine fuels.

Unfortunately, neither federal nor international law explicitly require EPA or IMO air quality regulations to be sufficiently stringent to meet the needs of a particularly polluted region such as South Coast, and the rules adopted by those bodies have not met those needs. In addition, actions by CARB and the ports themselves will mitigate air quality impacts, but they have not to date been sufficient to prevent substantial growth in port emissions. Some key facts:

- *EPA has not regulated emissions from foreign flag vessels.* The vast majority of oceangoing vessels calling on local ports—over 90%—are foreign flagged. Their emissions have not been regulated by EPA. A few years ago, the AQMD participated in litigation challenging EPA’s failure to regulate foreign flag vessels, but the court deferred to EPA’s decision to forego such regulation at that time. EPA stated that it will consider adopting emission standards for foreign flag vessels in 2007, but there is no guarantee that it will do so, or that such standards will be adequate for this region. EPA has stated

that there is a question regarding its authority under the Clean Air Act to regulate foreign vessels.<sup>1</sup>

- *International Maritime Organization emissions and fuel standards for foreign flag vessels are particularly weak.* IMO NOx standards for new “Category 3” vessels (e.g. the large container vessels responsible for the greatest share of emissions from local ports) will achieve only a six percent reduction in emissions. IMO fuel rules allow extraordinarily high levels of sulfur content, up to 45,000 parts per million, and actual sulfur content for main engine fuels averages approximately 27,000 ppm.
- *Federal emission standards for locomotives are relatively lenient.* Even the newest locomotives must only achieve a 57% reduction in NOx emissions. In contrast, most on-road and stationary sources are controlled to over 90%. EPA has stated it intends to adopt more stringent locomotive emission standards in 2006, but there is no assurance that such standards will be sufficient for this region to achieve healthful levels of particulates, ozone or toxics.
- *Emission standards for trucks are stringent, but benefits are many years away because the standards generally apply only to new units and trucks have long useful lives.*
- *New CARB marine auxiliary engine and cargo handling rules are important, but are not by themselves enough.* In December 2005, the CARB board voted to adopt fuel sulfur standards for marine auxiliary engines, including those on foreign flag vessels. However, the new rule will limit fuel sulfur only to 5,000 ppm, with the potential to require 1,000 ppm sulfur content by 2010 pending a technology and fuel availability review. By comparison, engines as large as those in locomotives—which are similar in many respects to marine auxiliary engines—will be required by current rules to use fuel with just 15 ppm sulfur. In addition, the majority of marine vessel emissions are created by main propulsion engines, not auxiliary engines (although auxiliary engine emissions are important because they occur at dock in closer proximity to persons in and around the port).<sup>2</sup> The new CARB marine auxiliary engine rule nevertheless is an important step forward and a key precedent for state—and local—regulation of foreign flag vessels. The CARB board also voted in December to adopt emission standards for cargo handling equipment such as yard tractors. This rule is also significant, but it does not require the lowest emitting equipment available.
- *The recently released draft state Emission Reduction Plan for Ports and Goods Movement is an important step forward, but even if fully implemented, may not achieve acceptable levels of health risks in all areas; moreover, the plan may rely on local actions for implementation.* The draft plan includes a far ranging set of measures, but they are as yet only described in general terms and implementing agencies have not been identified. CARB staff has indicated that the plan will achieve significant reductions in health impacts, but that the plan may not be sufficient to achieve acceptable levels of cancer risk. It is worth noting that the draft plan recognizes that action by local bodies

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<sup>1</sup> As stated by EPA, this is an issue of statutory authority under the Clean Air Act. 68 Fed.Reg. 9759 (February 28, 2003). This is not a question of authority of the United States to control emissions from foreign flag vessels. International law recognizes the authority of a nation to adopt environmental standards for vessels that enter the nation’s ports. *United Nations Convention on the Law of the Sea*, Art. 21.1; Art. 25.2 and Art. 211.3.

<sup>2</sup> CARB staff is considering proposing rules governing main engines at some time in the future.

(such as the ports through their lease agreements) is one potential means to implement its measures.

- *The ports have developed ambitious programs and plans but, to date, they have not rolled back emissions or even arrested emissions growth.* Both the ports of Los Angeles and Long Beach have developed emission control programs and plans that will help mitigate air quality impacts. (E.g. Port of Long Beach *Green Port Policy*,<sup>3</sup> Port of Los Angeles *Clean Air Program*<sup>4</sup>). The fact remains, however, that the ports continue to be sources of singularly large and growing quantities of emissions.

**In Conjunction With State, Federal and International Actions, a Regional, Facility-Directed Approach Is Needed.** The Chairman's Port Initiative includes efforts to obtain more stringent state, federal and international controls to address the issues described above. However, rules adopted by international, federal and even state agencies are not likely to fully satisfy local or regional needs because of the lack of statutory mandate that they do so, and the fact that such rules are generally fashioned in the form of category-wide emissions limitations (e.g. applicable to all vehicles of a particular type).<sup>5</sup> Category-wide emission limits are normally based on a balancing of available technology, compliance costs and other factors. They do not require identification of actions that can and must be taken by a *particular facility* which are sufficient to achieve *acceptable local or regional air quality*. Assessment and control of facility impacts is particularly important for facilities such as ports, which include large concentrations of various types of sources creating cumulative impacts in nearby neighborhoods.

The District has substantial experience implementing rules that require identification of actions that a particular facility must take to achieve acceptable local air quality. E.g. Rule 1402 (establishing enforceable health risk limits and deadlines based on actions feasible for a stationary source). Such rules are layered on top of category-wide emissions limits *to protect public health when category-wide limits are not by themselves adequate*.

An analogous approach to port pollution, i.e. one that requires the South Coast ports, terminals and related facilities to reduce emissions to the extent necessary to achieve air quality standards and prevent unacceptable health risks, is a matter of equity and public health necessity. Moreover, a control approach directed at the ports may also be most efficacious from a legal standpoint. This is because the ports have the ability to control emissions in a manner that no regulatory agency can, i.e. through conditioning contractual arrangements with operators of terminals and other facilities. The use by the ports of this "proprietary" or "market participant" authority is one way of imposing requirements that a state or local regulatory agency may have difficulty requiring through regulation due to preemptions in federal law (discussed in Addendum A), and that a federal agency may not be able or willing to impose due to limitations

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<sup>3</sup> [http://www.polb.com/environment/green\\_port\\_policy.asp](http://www.polb.com/environment/green_port_policy.asp)

<sup>4</sup> [http://www.portoflosangeles.org/environment\\_air.htm](http://www.portoflosangeles.org/environment_air.htm)

<sup>5</sup> One exception is the June 2005 CARB locomotive MOU, which is intended to reduce health risks near specific railyards. However, the MOU is not a regulation and, more importantly, it does not establish health risk limits, targets or deadlines.

of its grant of rulemaking authority, or due to national policy issues.<sup>6</sup> The AQMD has successfully used this market participant authority in another context (implementing fleet vehicle rules) to impose local requirements despite preemptions in federal law. The ports have also begun to use this authority. For example, the Port of Los Angeles is in the process of approving a lease with P&O Nedlloyd, a shipping company engaged in international commerce, that would require the company to use shore power for ships at berth, alternative fuel yard tractors, and, possibly, employ lower sulfur fuel in vessel main engines.

Finally, any control approach directed at the two ports and their sources should be *regional*, i.e. it should be applied equally to both ports. Emissions from the two ports enter the same air basin, and enforcement and competitiveness issues (which could undermine adoption of sufficient measures) may arise if actions of the two ports are not coordinated. The involvement of the AQMD, as a partnering regional agency, will help ensure a sufficient, coordinated approach.

**Intent of This Workplan.** This workplan is intended to leverage the District’s authorities described below by influencing decisions of the ports and port facility operators, as well as other regulatory agencies. A key means proposed to accomplish this (as embodied in Workplan Action Item 2) is by establishing District rules that will serve as a “backstop” to actions by the ports and other agencies. Such rules would come into effect if the ports and other agencies do not take sufficient actions in a timely manner to curtail emissions. Such backstops will be fashioned in a manner to create incentives for the ports to act in a sufficient and coordinated manner, and to allow the ports to design emission control requirements that are nuanced in a manner that they desire.

Other elements of the workplan seek to minimize the control burden faced by the ports by advocating for stronger national and international control efforts, including those by our Asian trading partners. It is staff’s intent that all of these efforts mesh with and build upon efforts by CARB, EPA and other bodies.

**The District’s Role.** The AQMD holds a unique position, both legally and practically, to influence control of emissions from the ports and port-related facilities. Under state law, the AQMD is —

“the sole and exclusive local agency within the South Coast Air Basin with the responsibility for comprehensive air pollution control, and it shall have the duty to represent the citizens of the basin in influencing the decisions of other public and private agencies whose actions might have an adverse impact on air quality in the basin.” Cal Health & Saf. Code § 40412.

In addition to its responsibility to influence decisions of “other public and private agencies” (a term that clearly encompasses the ports), the District holds regulatory and other authorities to

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<sup>6</sup> The municipalities that own the ports also have traditional municipal “police power” regulatory authorities that can be used to protect the environment.

mandate emission controls. The District has used these authorities to regulate emissions from stationary and “area” (e.g. coatings) sources—sources which, due to a comprehensive rule adoption and implementation program, are now generally controlled to well over ninety percent. The District also, however, has been granted authority to regulate emissions from facilities such as ports that *attract* on and off-road mobile sources, as well as from off-road mobile sources themselves. These authorities, which are further discussed in Addendum A, include the following:

***Indirect Source Controls.*** State law gives the District authority to adopt rules to control emissions from “indirect sources.” The Clean Air Act defines an indirect source as a “facility, building, structure, installation, real property, road or highway which attracts, or may attract, mobile sources of pollution.” 42 U.S.C. § 7410(a)(5)(C); CAA § 110(a)(5)(C). Districts are authorized to adopt rules to “reduce or mitigate emissions from indirect sources” of pollution. (Health & Saf. Code § 40716(a)(1)). The South Coast District in particular is required to adopt indirect source rules for areas where there are “high-level, localized concentrations of pollutants or with respect to any new source that will have a significant impact on air quality in the South Coast Air Basin.” (Health & Saf. Code § 40440(b)(3)). The ports, terminals and related facilities qualify as indirect sources because they attract mobile sources including ships, trains, trucks, and cargo handling equipment. One type of indirect source control rule that could be considered would require the ports, terminals or other indirect sources to meet an emission reduction target, which could be satisfied by operational changes or clean technologies that go beyond the requirements of applicable category-wide rules. Indirect source rules can take other forms as well.

***Nonvehicular (Off-Road) Source Emissions Standards.*** Under California law “local and regional authorities,” including the ports and the District, have primary responsibility for the control of air pollution from all sources other than motor vehicles, including marine vessels, locomotives and other non-road equipment. (Health & Saf. Code § 40000). CARB has concurrent authority under state law to regulate these sources. The federal Clean Air Act preempts states and local governments from adopting emission standards and other requirements for new locomotives (Clean Air Act § 209(e); 42 U.S.C. § 7543(e)), but California may establish and enforce standards for other nonroad sources upon receiving authorization from EPA (*Id.*). Importantly, no such federal authorization is required for state or local fuel, operational, or mass emission limits for marine vessels, locomotives or other non-road equipment. (40 CFR Pt. 89, Subpt. A, App.A; *Engine Manufacturers Assn. v. Environmental Protection Agency*, 88 F.3d. 1075 (DC Cir. 1996).

***Fuel Sulfur Limits.*** With respect to nonroad engines, including marine vessels and locomotives, the District and CARB have concurrent authority to establish fuel limits, such as those on sulfur content. As was noted above, fuel regulations for nonroad equipment are not preempted by the Clean Air Act and do not require EPA authorization.

***Operational Limits (e.g. Vessel Speed Reduction).*** The District has authority under state law to establish operational limits for nonvehicular sources such as marine vessels,

locomotives, and cargo handling equipment (to the extent cargo handling equipment is “nonvehicular”). As was discussed above, operational limits for nonroad equipment are not preempted by Clean Air Act. In addition, the District may adopt operational limits for motor vehicles such as indirect source controls and transportation controls without receiving an authorization or waiver from EPA.

In implementing the above authorities, the District would need to consider limitations imposed by federal law, as discussed in Addendum A. Such limitations need to be analyzed on a case-by-case basis, but would likely not prevent effective controls.

Other authorities which the District may use to influence emissions reductions from port sources include the following:

***CEQA.*** The California Environmental Quality Act (CEQA) generally prohibits a public agency from approving a project unless it has incorporated feasible alternatives or other measures to mitigate significant impacts. (Pub. Res. Code § 21002). These obligations are enforceable in court. The District will comment on CEQA documents issued for ports and goods movement projects to assure a full and accurate characterization of air quality impacts, and will identify feasible mitigation measures and alternatives that will reduce significant air quality impacts. An example of the use of CEQA litigation to obtain emission controls at the ports is a lawsuit brought by environmental and citizens groups which resulted in implementation of control strategies such as shore power at a terminal operated by China Shipping Company at the Port of Los Angeles.

***General Conformity.*** The federal Clean Air Act prohibits federal agencies from approving or funding any project which does not “conform” to the State Implementation Plan adopted by the District and approved by CARB and EPA to comply with the Clean Air Act. (42 U.S.C. § 7506(c)(1); CAA § 176(c)(1)). The District could limit emission increases from federally-approved or funded projects by specifying emissions budgets for such projects in the SIP. Both direct and indirect emissions are included in the conformity analysis, although there are limitations on the analysis of indirect emissions that would need to be considered on a case-by-case basis. Port terminal expansions can require federal approvals by, for example, the Army Corps of Engineers.

***Transportation Control Measures.*** The South Coast District is authorized to adopt transportation control measures (Health & Saf. Code §§ 40440(b)(4), 40717), subject to certain limitations. Transportation control measures include “any strategy to reduce vehicle trips, vehicle use, vehicle miles traveled, vehicle idling, or traffic congestion for the purpose of reducing motor vehicle emissions.” (Health & Saf. Code § 40717(g)). In the South Coast District, the transportation portions of the SIP are initially developed by SCAG (Health & Saf. Code § 40460(b)). However, the District may adopt transportation control measures in lieu of those submitted by SCAG if the SCAG plan does not meet emission reduction criteria established by the District. (Health & Saf. Code § 40717(b)(3)(C)).

**Transportation Conformity.** The Clean Air Act prohibits federal agencies and Metropolitan Planning Organizations responsible for transportation planning (e.g. the Southern California Association of Governments) from approving or funding any transportation plan, program or project unless it has been found to “conform” to the applicable SIP. (Clean Air Act § 176(c)(2); 42 U.S.C. § 7506(c)(2).) Through its role in adopting transportation control measures and by establishing emissions budgets in the SIP, the District can influence the type and number of transportation projects related to the ports and goods movement that SCAG and federal agencies may approve.

**Funding Programs.** The District controls a significant source of funding from the Carl Moyer Program, (Health & Saf. Code §§ 44275 et seq.). These funds are administered consistent with guidelines approved by CARB. These funds are to be used for the purchase of low-emission vehicles or engines, clean fuel infrastructure, emission-reducing retrofit or add-on equipment, cleaner replacement engines, and development and demonstration of new technologies. (Health & Saf. Code § 44281). In addition, recent legislation has provided new funding to be available for an accelerated vehicle retirement or replacement program. (Health & Saf. Code § 44229). The District also has funds available from fees generated under rules such as its employer-based on-road vehicle mitigation rule (Rule 2202) and its program allowing power plants to purchase emission offsets from the District’s bank. An appropriate share of all these funds may be directed toward reducing or mitigating emissions associated with port operations.

## Workplan Action Items

The seven Action Items in the Chairman's Clean Port Initiative are copied below, followed by staff's proposed workplan to implement each of those items.

- 1. I am calling for a Clean Port Summit meeting between myself, Los Angeles Board of Harbor Commissioners President S. David Freeman and Port of Long Beach Commission President Doris Topsy-Elvord to discuss development and coordination of fast-track measures that we can pursue now to reduce air pollution.***

*Workplan.* Letters of invitation have been sent from the Board Chair to the presidents of the two harbor commissions. A meeting will be sought to take place during January or February of 2006. A key goal of the meeting will be for the AQMD, the Port of Los Angeles and Port of Long Beach to establish a joint schedule of actions for the next 18 months to be presented to their respective boards in March.

We propose that topics for discussion at the meeting include—

- a. Process to develop, with stakeholder input, port-related emissions and/or air quality goals for the 2007 AQMP, and port actions to achieve such goals,
- b. Preliminary discussion of form and substance of port-related emissions or air quality goals for the 2007 AQMP, and port actions to achieve such goals. Such goals and actions would include —
  - “fair share” criteria-pollutant mass emissions limits, rate limits, percentage reduction, or other requirements for ports, terminals and other port-related facilities;
  - health risk and emissions limits for toxic air contaminants,
  - interim progress requirements, and
  - adoption of specified control measures
- c. Preliminary discussion of AQMD actions including rules “backstopping” port actions,
- d. Funding assistance available through AQMD-administered programs,
- e. Development of joint actions to seek more effective state, federal and international standards,
- f. Cooperative efforts with Asian ports, and
- g. Coordination of efforts between the ports and with other efforts, e.g. CARB Emission Reduction Plan for Ports and Goods Movement.

Subsequent meetings may be needed to finalize the schedule of actions.



2. ***I am calling on the ports to accelerate their efforts to reduce their air pollution, using their clear legal authority and technical knowledge of their operations. However, if the ports do not act aggressively and in a timely, coordinated manner to significantly reduce their emissions, I will ask AQMD staff to develop regulations to the maximum extent of its authority to control port sources, including ocean-going ships.***

*Workplan*

- a. First through Fourth Quarter 2006: Development of 2007 AQMP goals, measures and conformity budgets for ports and goods movement sufficient to achieve “fair share” emission reductions,
  - b. First through Fourth Quarter 2006: Development, with stakeholder input, of AQMD backstop rules for ports which, to the maximum extent of the District’s authority, will
    - prohibit emission increases from new or expanded terminals or other port-related facilities unless best available controls are employed and emissions increases are offset,
    - limit health risk from new and expanded port facilities, and, within a reasonable and expeditious time frame, from existing port facilities, so that an acceptable level of health risk is achieved, and
    - reduce facility emissions to levels needed for attainment of criteria pollutant ambient air quality standards, consistent with the AQMP (e.g. through mass emissions limits, rate limits, percentage reduction, or other requirements for ports, terminals and/or other port-related facilities).
  - c. Fourth Quarter 2006: Adoption of above-described AQMD backstop rules for new and expanded facilities, and to limit health risks from toxic air contaminants,
  - d. 2007: Adoption of above-described AQMD backstop rule to reduce facility emissions to levels needed for attainment of criteria pollutant standards,
  - e. Ongoing: Evaluation of port actions; quarterly reports to AQMD Board of such evaluations; implementation of backstop rules if goals are not met,
  - f. Other actions:
    - Second Quarter: Resume AQMD cargo handling rule development.
    - Second through Third Quarter: AQMD staff will develop a list of technologies and strategies constituting best available controls for new and expanded port facilities to be used in connection with CEQA review and AQMD backstop rules
3. ***In recent months the AQMD has used its authority under the California Environmental Quality Act to ensure that air quality impacts of goods movement projects are fully analyzed and mitigated. A prime example of this was AQMD’s comments last year on the proposed expansion of Pier J here in Long Beach. As a result of AQMD’s analysis, the project is being thoroughly re-examined with an eye to reducing its diesel emissions. Starting next year, I am directing staff to prepare a monthly report to the public describing***

*environmental impact reports and other CEQA documents for projects related to goods movement. I want the public and decision-makers to have a clear picture of the cumulative effect of all such projects that may lead to greater use of diesel engines. Finally, I request the AQMD staff to make full use of the CEQA process for such projects to ensure that their impacts are thoroughly mitigated.*

*Workplan*

- a. Commencing February 2006: monthly reports to Board regarding CEQA analysis of goods movement projects
  - b. First Quarter 2006: develop and commence enhanced CEQA review of port and goods movement projects, including:
    - a. Identification of key projects at early stages, e.g. notice of preparation
    - b. Determination of projects that are worthy of enhanced review due to—
      - o Emission impacts
      - o Precedent for other projects
      - o Lack of regulatory requirements adequately addressing emissions
      - o Environmental justice impacts
    - c. For projects identified for enhanced review:
      - o Intensive review of adequacy of all CEQA documents, including air quality impact analysis and feasible alternatives and mitigation measures to reduce significant impacts.
      - o Presentation of evidence and District's position regarding mitigation measures and alternatives that are feasible for this project.
      - o Presentation of legal analysis supporting the lead agency's obligation to implement the identified mitigation measures and alternatives.
      - o Review of lead and responsible agency actions in response to AQMD comments to determine whether or not further District action is needed.
- 4. *I would like AQMD staff to work with the ports to conduct air quality monitoring, not only outside of the boundaries of the ports, but also within port terminals. Considerable numbers of truckers, dock workers and others breathe the air within the ports. They are the closest to many emissions sources and we should assess the pollution impacts they face.***

*Workplan.* The proposed Monitoring efforts consists of the following five tasks:

- a. Formation of a Clean Port air monitoring partnership
- b. Review and coordination of past, current, and planned monitoring efforts

- c. Air monitoring protocol preparation
- d. Conduct air monitoring and analysis, including within the ports
- e. Data analysis/reporting

The five tasks are outlined in Addendum B. Tasks a, b and c will be completed in the second quarter of 2006. Tasks d and e will be ongoing commencing in the second quarter of 2006.

**5. *I am calling on the U.S. Environmental Protection Agency to adopt strict emission standards for marine vessels. If EPA fails to do so, AQMD will ask California's Congressional delegation to sponsor legislation or take other action to force EPA to take aggressive action.***

*Workplan*

*Background:* The AQMD has had a long history of attempting to influence the federal government to stringently regulate national and international transportation sources. These efforts included litigation in the early 1990's seeking a "federal implementation plan" to regulate these sources; attempts through the 1990's to "assign" emission reduction responsibilities to the federal government as part of the state implementation plan process; and numerous communications and meetings. These efforts largely have not been successful, although they may have influenced certain federal rulemakings to an extent. More recently, in 2003, the AQMD filed court papers supporting litigation challenging the adequacy of EPA regulations limiting emissions from large "Category 3" marine vessels (e.g. container ships). The DC Circuit court subsequently upheld EPA's regulations, but noted that EPA had committed to consider adopting more stringent regulations by April 2007—including regulations applicable to foreign flag vessels. The District submitted comments to EPA last year urging adoption of stringent emission standards for foreign flag Category 3 vessels. In addition, the District submitted extensive comments to EPA—which were coordinated with CARB and many other air agencies in the country—urging EPA to adopt stringent emission standards for locomotives. The latter comments were in connection with an Advance Notice of Proposed Rulemaking issued by EPA regarding proposed locomotive rules.

AQMD will follow up on these actions commencing in the first and second quarters of 2006 by—

- a. Developing federal legislative proposals to mandate stronger federal emission controls for marine vessels and locomotives, as approved by the Board after consideration by the Legislative Committee.
- b. Working with the national associations of state and local air pollution control agencies, business, labor, community, and environmental groups to seek consensus and concerted action for stringent federal and international controls.
- c. Briefing congressional representatives regarding these issues.

- d. Proposing a joint resolution of the California Legislature urging adequate federal controls on national and international transportation sources (carryover item from 2005 legislative agenda).
  - e. Scheduling face-to-face meetings with top EPA staff to impress upon them the needs of this region for effective regulations, and to assess their intentions.
  - f. Evaluating EPA's actions and publicizing the District's views.
6. ***Focusing on the top three busiest ports in Asia, I would like AQMD staff to develop a proposal for corresponding emission reduction measures here and at those Asian ports. I would then like AQMD to coordinate an international summit with Asian port officials to discuss how to implement these measures.***

*Workplan*

- a. First Quarter 2006:
  - o Research past and ongoing cooperative environmental efforts between the United States and Asian ports and nations. The purpose of this research will be to identify contacts and actions that could be built upon. For example, the Port of Los Angeles recently entered into an agreement with the U.S. Department of Transportation Maritime Administration to provide assistance to Asian ports such as Shanghai in managing air pollution from marine vessels and ports. Other efforts have been undertaken by the federal Environmental Protection Agency and the U.S. State Department.
  - o Research air quality needs of Asian port cities.
  - o Develop key goals for emission control actions that could benefit through joint action by Asian interests and local ports. These may include, among other things, fuel quality specifications and use of shore power.
- b. Second Quarter 2006:
  - o Convene parties involved in contacts with Asian ports, including carriers and local ports, to plan meetings with Asian port leaders.
  - o Conduct summit meetings with leaders of Asian ports, including other parties as appropriate. Key goal: implementation of emission control actions that would benefit ports on both sides of the Pacific, particularly measures which are relatively difficult to implement unilaterally.
- c. Fourth Quarter 2006/First Quarter 2007: Conduct an international conference concerning joint emission control strategies between Southern California and Asian ports. The Executive Officer will release an RFP to hire a consultant to assist in design and funding of the conference, and bring the recommended consultant to the Board for approval in March.

7. ***Finally, I would like AQMD to call on the state Legislature in 2006 to adopt a shipping-container fee or some other mechanism that is sufficient to fund cleanup at the ports.***

## *Workplan*

AQMD staff will closely follow the various efforts now underway to establish funding mechanisms for control of emissions from ports and goods movement, and present the Board's positions. These efforts include the following:

- a. *SB 760 (Lowenthal)*. The Board has a support position on this bill which would establish a \$30 per container fee to be used for port environmental mitigation, congestion relief and security.
- b. *Bond Proposals*. AQMD staff recently provided background testimony regarding air quality impacts of goods movement in hearings on SB 1024 (Perata, Torlakson), which would authorize a vote on an infrastructure bond of approximately \$11 billion. The bond would allocate approximately \$400 million statewide to the Carl Moyer program. This bill will be considered by the Legislative Committee in January for a Board position.
- c. *State Goods Movement Action Plan*. The District's Executive Officer serves on an advisory body assisting the state in developing this plan of infrastructure projects to improve the efficiency of goods movement, and air quality controls to mitigate the impacts caused by transport of goods. Part of this effort seeks to develop means to fund such projects and air pollution controls.

## Clean Port Initiative Workplan

### Addendum A

#### OVERVIEW OF AQMD AUTHORITIES RELATING TO PORT SOURCES

##### Indirect Source Controls

State law gives the District authority to adopt indirect source control measures. “Indirect sources” are not defined in state law, but under the federal Clean Air Act (“CAA”) are defined as a “facility, building, structure, installation, real property, road or highway which attracts, or may attract, mobile sources of pollution.” (42 U.S.C. § 7410(a)(5)(C); CAA § 110(a)(5)(C)).

Districts are authorized to adopt rules to “reduce or mitigate emissions from indirect sources” of pollution. (Health & Saf. Code § 40716(a)(1)). The South Coast District in particular is required to adopt indirect source rules for areas where there are “high-level, localized concentrations of pollutants or with respect to any new source that will have a significant impact on air quality in the South Coast Air Basin.” (Health & Saf. Code § 40440(b)(3)). The ports, and their terminals, railyards and other facilities, would qualify as indirect sources because they attract mobile sources including ships, trains, trucks, or cargo handling equipment. As discussed below under Transportation Control Measures and Emissions Standards for Nonvehicular Sources, the Clean Air Act does not preempt indirect source regulation related to motor vehicles or nonroad equipment.

One type of indirect source control which might be adopted would be a rule requiring port facilities to meet an established emission reduction target, which could be satisfied by operational changes or, in the alternative, through utilizing advanced clean technologies that go beyond the requirements of other applicable rules. An indirect source rule could also allow the payment of a mitigation fee as an alternative method of compliance rather than directly meeting the emission reduction target. The fees would then be used to obtain emission reductions to help mitigate emissions from the ports. An indirect source rule also could require the port facilities to mitigate their emissions by obtaining offsetting emission reductions from other sources, as long as localized impacts do not result.

##### Emissions Standards for Nonvehicular Sources

Under California law “local and regional authorities,” which includes air quality management districts, (Health & Saf. Code § 39037) have “primary responsibility for the control of air pollution from all sources, other than emissions from motor vehicles.” (Health & Saf. Code § 40000). Except as specified in state law, the control of emissions from motor vehicles is the responsibility of the California Air Resources Board (CARB). (*Id.*) Areas where the District is given responsibility relative to emissions from motor vehicles include indirect source controls and transportation controls, discussed below. CARB is given specific authority to develop and adopt emission standards for off-road or non-vehicle engine categories, including locomotives and marine vessels. (Health & Saf. Code § 43013(b)). However, to the extent these categories do not include motor vehicles, the air districts retain concurrent authority under state law to adopt

emission standards for such sources. (Manaster & Selmi, *Environmental Law and Land Use Practice*, §41.06(2).)

Under the federal Clean Air Act, states and local governments are preempted from adopting emission standards for new locomotives. (Clean Air Act § 209(e); 42 U.S.C. § 7543(e)). In addition, states and local governments are preempted from adopting standards for all other nonroad engines, but this preemption (unlike the preemption for new locomotives) can be overcome by receiving authorization from the Environmental Protection Agency (EPA). (*Id.*) This implied preemption extends to standards for used nonroad engines as well as new ones. (*Engine Manufacturers Association v Environmental Protection Agency*, 88 F.3d. 1075 (D.C. Cir. 1996)). EPA is required to grant an authorization for nonroad engine controls unless it makes specified findings, such as that California does not need the standards to meet compelling and extraordinary conditions. (*Id.*) EPA may take the position that nonroad engine controls need to be adopted or at least submitted by CARB. However, given the concurrent authority of the District under state law, the District may adopt emission standards for nonroad engines, including marine vessels, but these rules would not be effective until authorization has been granted by EPA, either directly or through CARB adoption and/or submission. Recently the District and CARB have worked cooperatively to have a fleet rule for transit buses in the South Coast submitted to EPA for approval.

### **Fuel Limits**

As noted above, CARB has primary authority under state law over emissions from motor vehicles, including emissions from vehicle fuels. However, the District has authority to specify the content of diesel fuel for motor vehicles offered for sale in the District. Such requirements are not effective until approved by CARB. (Health & Saf. Code § 40447.6). With respect to nonroad engines, including marine vessels and locomotives, the District believes that the District and CARB have concurrent authority, as discussed above under emission standards. EPA regulation provides that fuel regulations for nonroad vehicles are not preempted by Clean Air Act Section 209(e), and such interpretation has been upheld by the courts. (40 CFR Pt. 89, Subpt. A, App.A; *EMA v. EPA*, *supra*, 88 F 3d. 1075). The Clean Air Act does not in any other section preempt fuel requirements for nonroad engines and vehicles. There is a preemption for motor vehicle fuels, but this preemption does not apply to states that have been granted a waiver of motor vehicle preemption under Section 209 of the Clean Air Act, i.e. California. (Clean Air Act § 211(c)(4); 42 U.S.C. § 7545(c)(4)).

### **Operational Limits**

Since the District has primary responsibility for regulating sources other than motor vehicles, the district may establish operational limits for sources such as marine vessels, locomotives, and cargo handling equipment, to the extent such equipment is nonvehicular. EPA has interpreted the Clean Air Act not to preempt state and local governments from adopting use and operational restrictions on nonroad engines. (40 CFR Pt. 89, Subpt. A, App. A: "... states are not precluded under Section 209 from regulating the use and operation of nonroad engines, such as regulations on hours of usage, daily mass emissions limits, or sulfur limits on fuel...") The Court of

Appeals for the D.C. Circuit has upheld this interpretation as consistent with the Clean Air Act. (*EMA v. EPA, supra*, 88 F.3d 1075).

### **General Conformity**

The federal Clean Air Act prohibits all federal agencies from approving or providing financial assistance to any activity which does not conform to the state's implementation plan adopted by the District and approved by CARB and EPA pursuant to the Clean Air Act. (42 U.S.C. § 7506(c)(1); CAA § 176(c)(1)). Activities other than transportation plans, programs and projects are governed by EPA's General Conformity regulation, 40 CFR §§ 51.850 *et seq.* Pursuant to this regulation, general conformity projects can be found to conform if (1) they are specifically listed in the state implementation plan, (2) the total of direct and indirect emissions from the project is fully offset within the same nonattainment area (for ozone or nitrogen dioxide), or (3) total emissions from the project together with all other emissions in the nonattainment area would not exceed the emissions budget specified in the applicable state implementation plan (SIP). (40 CFR § 51.858). Thus, the District could limit increased emissions from federally-approved or financed projects at the ports by specifying emissions budgets or specific lists of projects in the SIP. Both direct and indirect emissions are included in the conformity analysis, although there are limitations on the analysis of indirect emissions that would need to be considered on a case-by-case basis.

### **CEQA**

The California Environmental Quality Act (CEQA) requires public agencies approving projects to determine whether the project will have a significant effect on the environment, and to prepare an environmental impact report (EIR) if there is substantial evidence that the project may have a significant effect. (Pub. Res. Code § 21080). An EIR is required wherever it can fairly be argued on the basis of substantial evidence that the project may have a significant environmental impact. (*No Oil, Inc. v. City of Los Angeles*, (1974) 13 Cal. 3d. 68, 75). Lead agencies may not approve projects as proposed if there are feasible alternatives or feasible mitigation measures available which would substantially lessen the significant environmental impacts of the project. (Pub. Res. Code § 21002). "Feasible" means "capable of being accomplished in successful manner within a reasonable period of time, taking into account economic, environmental, social, and technological factors." (Pub. Res. Code § 21061.1). In some cases, fees contributed to a fund to provide mitigation for projects of the type under consideration will be a feasible mitigation measure. (*San Franciscans for Reasonable Growth v City and County of San Francisco* (1989) 209 Cal.App.3d. 1502). CEQA documents must also analyze a range of reasonable alternatives to the project, or to the location of the project, that would feasibly attain most of the project objectives but would avoid or substantially lessen any of the significant effects of the project. (CEQA Guidelines § 15126.6(a)). The lead agency must always analyze the "no project alternative." (CEQA Guidelines § 15126.6(e)). In determining a reasonable range of alternatives, the fact that an alternative may require a legislative enactment does not necessarily justify its exclusion from the EIR. (*Citizens of Goleta Valley v Board of Supervisors*, (1991) 52 Cal. 3d. 553, 573.).



The District will comment on negative declarations and EIRs issued by the ports for development projects and will assure that CEQA documents accurately describe and characterize air quality impacts of the projects, and in addition will suggest specific feasible mitigation measures and alternatives that will reduce the significant air quality impacts of the project. The District will seek to ensure that the lead agency adopts any mitigation measures in enforceable form, as required by CEQA. (Pub. Res. Code § 21081.6). Thus, the District can influence port development through its role as a commenting agency and, potentially, through CEQA litigation.

### **Transportation Control Measures**

The South Coast District is authorized to adopt transportation control measures pursuant to Health & Safety Code sections 40440(b)(4) and 40717, subject to certain limitations. Transportation control measures include “any strategy to reduce vehicle trips, vehicle use, vehicle miles traveled, vehicle idling, or traffic congestion for the purpose of reducing motor vehicle emissions.” (Health & Saf. Code § 40717(g)). In the South Coast District, the transportation portions of the SIP are initially developed by SCAG (Health & Saf. Code § 40460(b)). However, the District may adopt transportation control measures in lieu of those submitted by SCAG if the SCAG plan does not meet emission reduction criteria established by the District. (Health & Saf. Code § 40717((b)(3)(C))). A number of transportation control measures are listed in Clean Air Act section 108 (42 U.S.C. § 7408), but the list is not exclusive. These include trip reduction measures, programs to reduce idling; and programs to limit or restrict vehicle use in downtown areas or other areas of emission concentration, which would include port areas.

While local governments are preempted from adopting emission standards for motor vehicles under the Clean Air Act, this preemption does not extend to controls on the use and operation of motor vehicles, such as indirect source controls and transportation controls. (Clean Air Act § 209(d); 42 U.S.C. § 7543(d)). The District may adopt operational limits for motor vehicles; i.e. indirect source controls and transportation controls, despite CARB’s primary authority over motor vehicles, and without receiving a waiver from EPA because the code specifically authorizes adoption of transportation control measures and indirect source controls.

### **Transportation Conformity**

The Clean Air Act prohibits federal agencies and Metropolitan Planning Organizations responsible for transportation planning (the Southern California Association of Governments or SCAG) from approving or funding any transportation plan, program or project unless it has been found to conform to the applicable SIP. (Clean Air Act § 176(c)(2); 42 U.S.C. § 7506(c)(2)). Also, the transportation plan or program must implement the transportation measures in the applicable plan. (*Id.*) Therefore, transportation projects related to the port or designed to increase capacity at the port may not be approved or funded by federal agencies unless they conform to the SIP. Through its role in adopting transportation control measures and developing emissions budgets in the SIP, the District can influence the type and number of transportation projects related to the ports that SCAG and the federal agencies may approve.

## **Funding Programs**

The District has available to it a significant source of funding each year from the Carl Moyer Program (Health & Saf. Code §§ 44275 *et seq.*). These funds are to be used for the purchase of low-emission vehicles or engines, clean fuel infrastructure, emission-reducing retrofit or add-on equipment, cleaner replacement engines, and development and demonstration of new technologies. (Health & Saf. Code § 44281) In addition, recent state law has provided new funding to be available for expenditure on the Lower-Emission School Bus Program, previously unregulated agricultural sources, and an accelerated vehicle retirement or replacement program adopted by the California Air Resources Board. (Health & Saf. Code § 44229). Also, the District has funds available from fees generated under rules such as its employer-based on-road vehicle mitigation rule and its program allowing power plants to purchase emission offsets from the District's bank. An appropriate share of all these funds would be directed toward reducing or mitigating emissions associated with port operations. Finally, as stated in item seven of the Port Initiative Workplan, the District will consider supporting efforts in the state legislature and through other appropriate means such as bond measures to raise funds to reduce or mitigate emissions associated with the ports.

## **Air Toxics Regulations**

As noted above, the District has primary authority for regulation of emissions from all sources other than motor vehicles. The California Supreme Court has held that this includes the authority to adopt and enforce regulations to control toxic emissions from nonvehicular sources, even in cases where there is no CARB-adopted Air Toxics Control Measure that is applicable. (*Western Oil and Gas Association v Monterey Bay Air Pollution Control District*, (49 Cal.3d 408 (1989))). The District has the duty under state law to enforce the prohibition on emissions which endanger the health or safety of the public or cause a public nuisance. (Health & Saf. Code § 41700). In furtherance of that duty, the District may adopt rules and regulations to limit the emissions of toxic air contaminants, which are not criteria pollutants regulated by the state or federal Clean Air Acts. (*See* Health & Saf. § 40702, empowering the District to adopt rules and regulations necessary or proper to carry out the duties imposed by law on the District.) As a practical matter, it is envisioned that District rules will likely target both criteria pollutant and air toxic pollutant emissions.

## **Preemption and Commerce Clause Issues**

Clean Air Act preemption issues are discussed above under individual authorities. However, there are specific preemption issues related to railroad operations and marine vessels which will need to be considered in connection with each individual rulemaking. A brief introduction of these issues is presented here.

The Interstate Commerce Commission Termination Act of 1995 (49 U.S. C. §§10101-11908) provides for preemption of state and local rules related to rail transportation. However, both the courts and the Surface Transportation Board, which administers the ICCTA, have determined

that not all regulation is preempted; such that regulations which do not unreasonably interfere with rail operations may be upheld. (*Green Mountain R.R. Corp v. State of Vermont*, 404 F3d 638 (2d Cir. 2005); *Borough of Riverdale Petition for Declaratory Order-The New York Susquehanna and Railway Corp*, STB Fin. Dkt. No. 33466, 1999 WL 715272, 4 S.T.B. 380; 1999 STB LEXIS 531 (Sept. 10, 1999)). Whether any given regulation interferes with rail operations in violation of the ICCTA is a fact-bound inquiry that will depend on the specific circumstances of each case. (*Id.*)

The Ports and Waterways Safety Act (33 U.S.C. §§ 1221-1232 (Title I); 46 U.S.C. §§ 3701-3718 (Title II)) has been held to preempt state regulation of tanker vessels which would affect the design or construction of the ship. (*U.S. v Locke*, 529 U.S. 89 (2000)). There is also a provision of law which requires the Coast Guard to issue safety-related regulations for the design, construction, alteration, repair and operation of marine vessels subject to Coast Guard inspection. (46 U.S. C. § 3306). Shipping interests contend that measures that conflict with such Coast Guard regulations would be preempted. However, the U.S. Supreme Court has also said that despite the PWSA, states may regulate their ports and waterways, “so long as the regulation is based on the peculiarities of local waters that call for special precautionary measures.” (*Locke, supra*, 529 U.S. at 109). Moreover, there is precedent for upholding local regulation of vessels to further air pollution control purposes. (*Huron Portland Cement Co. v Detroit*, 362 U.S. 440 (1960)) With respect to marine vessels, there is also the issue of to what extent state or local agencies can regulate foreign-flagged vessels or vessels operating outside the territorial limits of the state. There are cases upholding extraterritorial jurisdiction, such as *Gillis v State of Louisiana*, 294 F.3d. 775 (5<sup>th</sup> Cir. 2002), and jurisdiction over nonresidents, e.g. *State of Alaska v. Bundrant*, 546 P2d. 530 (1976). There are also cases applying U.S. law to foreign-flagged vessels, such as *Patterson v Bark Eudora*, 190 U.S. 169 (1902), referring to the ability to impose conditions on the ability of foreign vessels to enter local ports. The United Nations Convention on the Law of the Sea, Article 211 Paragraph 3 also recognizes the right of coastal states to impose environmental requirements as a condition of entry of foreign vessels into port. *See also*, Art. 21.1 (coastal states may adopt laws and regulations applicable to foreign vessels in territorial seas for the preservation of the environment and control of pollution); Art. 25.2 (“In the case of ships proceeding to internal waters or a call at a port facility outside internal waters, the coastal State also has the right to take the necessary steps to prevent any breach of the conditions to which admission of those ships to internal waters or such a call is subject.”).

The Commerce Clause of the U.S. Constitution gives to the federal government the ability to regulate interstate and international commerce. This provision has been interpreted to limit state and local governments from adopting regulations which would unduly interfere with interstate or international commerce. Rules that on their face discriminate against interstate commerce may be upheld only if the rule serves a legitimate local purpose that cannot be served as well by available nondiscriminatory means. (*Maine v Taylor*, 477 U.S. 131 (1986)). However, nondiscriminatory regulations that create only an incidental burden on interstate commerce are valid “unless the burden imposed on such commerce is clearly excessive in relation to the putative local benefits.” (*Pike v. Bruce Church, Inc.* 397 U.S. 137 (1970)). With respect to foreign commerce, a regulation which frustrates the ability of the federal government to “speak with one voice” in international relations may be invalid. (*Japan Line, Ltd. v County of Los Angeles*, 441 U.S. 434 (1979)). There is precedent, however, for upholding certain measures

affecting international commerce despite the one-voice doctrine. (*Barclays Bank PLC v Franchise Tax Board*, 512 U.S. 298 (1994)). Finally, resolution of Commerce Clause issues is generally highly fact-dependent, commonly involving a balancing of local benefits versus impacts on commerce. Any District regulations will be drafted in a manner to minimize potential for a violation of the Commerce Clause or other provision of federal law.

**Clean Port Initiative Workplan  
Addendum B**

**AIR QUALITY MONITORING COMPONENT**

**Overview**

This element of the Clean Port Initiative is to conduct air monitoring in and around the ports including both on-dock sites, as well as residential areas surrounding the ports. This effort will include the review and coordination of past, current, and planned air monitoring activities and other air monitoring activities in and around port areas by all parties. This information will be used to site the air monitoring equipment within the port facilities and in the surrounding communities. To the extent possible, monitoring will integrate current and planned air monitoring efforts and results will be used to assess the impacts of port-related emissions on the community and on workers at the ports.

**Background**

The AQMD has a long history of ambient air monitoring in the communities surrounding the ports. Prior to the development of Rule 1158 – Storage, Handling, and Transport of Coke, Coal and Sulfur, air monitoring was conducted in the port area to assess the impact of coke and coal storage and movement. Since the adoption of Rule 1158 ongoing monitoring has occurred in the Wilmington-Long Beach area to assess the effectiveness of the rule. As part of the 1998-99 MATES-II, air toxics monitoring was conducted in the Wilmington area. A similar location in the southwest part of Long Beach (adjacent to Wilmington) is part of the current MATES-III. Additionally, the particulate air quality is monitored at the AQMD South Long Beach station. In addition to the AQMD air monitoring programs, there have been several air monitoring programs conducted by CARB and other researchers in the San Pedro, Wilmington, and Long Beach areas. Of particular note are the CARB monitoring conducted at the Hawaiian Avenue School as part of its SB 25 statewide air toxics monitoring program and the current particulate monitoring being conducted by the Port of Los Angeles at four locations in and around the port. In addition, the National Institute for Occupational Safety and Health conducted a study regarding on-dock worker exposure to diesel equipment during move/load/unload operations at the ports. Recently, the Port of Long Beach approved funding to conduct air monitoring over the next three years. Figure 1 shows the location of these sampling/monitoring locations as well as those used in other recent studies.

The proposed work plan contains five tasks:

1. Formation of a Clean Port Air Monitoring Partnership
2. Review and coordination of past, current, and planned monitoring efforts
3. Air monitoring protocol preparation
4. Conduct air monitoring and analysis

5. Data analysis/reporting

The five tasks are discussed further in the following sections.



**Figure 1.** Air Monitoring Locations from Various Studies Conducted in the Port Area

**Task 1. Formation of a Clean Port Air Monitoring Partnership**

An advisory group will be formed to solicit input from the community and port staff on the proposed air monitoring program. The input and comments from the advisory group will assist staff in preparing an air monitoring protocol as part of Task 3. In addition, the advisory group will serve as a forum to communicate on the development of the air monitoring program and progress between the AQMD and interested stakeholders. It is proposed that the advisory group be made up with representatives from:

- Labor Organizations;
- Local Community Groups;
- California Air Resources Board;
- U.S. Environmental Protection Agency;
- Office of Environmental Health Hazard Assessment;

Port Tenants;

Railroads;

Trucking Industry;

Ports of Los Angeles and Long Beach; and

Academia.

All meetings of the advisory group will be open to the public and community members will be encouraged to participate.

### **Task 2. Review and Coordination of Past, Current, and Planned Monitoring Efforts**

Prior to the development of an air monitoring protocol, staff will review historic and current air monitoring activities conducted by the EPA, CARB, the ports, and others. For example, CARB has conducted community monitoring in the port area as a part of its SB25 statewide monitoring program. Desert Research Institute is currently conducting an air toxic measurements study in the port area for the Health Effects Institute. The Port of Los Angeles is currently conducting monitoring at four locations in and around the port. Recently, the Port of Long Beach is proposing to conduct air monitoring over the next three years at two locations in and near its port. In addition to reviewing these efforts, the AQMD will review the design of these monitoring programs. This information will serve as the basis for the monitoring protocol to be provided for comment to the Clean Port Monitoring Partnership.

### **Task 3. Air Monitoring Protocol Preparation**

A monitoring protocol that describes how the air monitoring will be conducted will be prepared based on comments and input from the technical working group. The air monitoring protocol will serve as the basis to conduct the air monitoring program. The protocol will identify locations to conduct the air monitoring, the various air toxics compounds and air quality pollutants to be measured, sampling frequency, the instruments and process in which air samples are collected and analyzed, and the reporting of the air monitoring data. Air toxics compounds currently being measured under MATES-III and as part of the special EPA National Air Toxic Monitoring Study will be measured as part of this effort. Table 1 provides a list of the chemical species proposed to be measured.

**Table 1.** Examples of air toxic species to be monitored. (This list is not all inclusive.)

<b>Target Pollutants</b>		
Benzene	Carbon Tetrachloride	Chloroform
1,3-Butadiene	Propylene Dichloride	Trichloroethylene, TCE
Methylene Chloride	Tetrachloroethylene (Perchloroethylene)	Beryllium and Compounds
Vinyl Chloride	Arsenic and Compounds	Lead and Compounds
Cadmium and Compounds	Hexavalent Chromium	Acetaldehyde
Manganese and Compounds	Nickel and Compounds	Elemental Carbon
Formaldehyde	Organic Carbon	PM <sub>10</sub>
Total Carbon		

Sampling frequency is an important aspect of the air monitoring program. While the AQMD routine monitoring for particulates is conducted on a one-in-six day basis (as required by EPA), and CARB’s routine air toxic monitoring is conducted on a one-in-twelve day basis, staff believes that more frequent sampling will be needed to appropriately quantify air quality impacts in the port area. Sampling frequency under MATES-III is one-in-three days. As such, staff believes that a one-in-three day sampling frequency would be appropriate for a significant portion of the monitoring program. At times, there may be a need to conduct additional monitoring. The protocol will discuss the sampling frequency for the program.

As part of the proposed monitoring program, air monitoring will be conducted within the ports’ facilities to address workers’ exposure. The protocol will address the types of monitoring to be conducted for this element. Prior to finalizing the monitoring protocol, a public workshop/consultation meeting will be held to solicit additional public input.

**Task 4. Conduct Air Monitoring and Analysis**

Under this task, the air monitoring program will be conducted. This task consists of several activities prior to the actual field measurement program. Based on the air monitoring protocol developed under Task 3, staff will develop a timeline and cost schedule to conduct the air monitoring program for the AQMD Governing Board’s approval. As part of the cost schedule, additional air monitoring equipment, laboratory supplies, and potentially temporary personnel resources needed for the program will be identified for the AQMD Board’s consideration. As staff prepares the timeline and cost schedules for the program, staff will be evaluating proposed monitoring locations to determine the appropriateness and availability of space to conduct the air monitoring. Staff believes that air monitoring over a minimum one-year period will be needed to properly assess air quality impacts in the port area. Staff will work and coordinate with participating stakeholders on the locations and time schedules to conduct the air monitoring.



## **Task 5. Data Analysis/Reporting**

Progress on the development of the monitoring protocol, comments from the advisory group and the general public will be provided to the AQMD Governing Board Mobile Source Committee on a quarterly basis. There may be a need to provide additional progress reports in the early stages of the program development. In addition to the progress reports, an annual progress report will be prepared as part of the overall Clean Port Initiative report to the Board.

As part of the public outreach, a public workshop will be held in the port area to discuss the results of the air monitoring program. A technical report will be prepared describing the data collected in the air monitoring program and a summary of the results and findings. As part of the report, data collected under this program will be compared to air quality data collected from the AQMD air monitoring network and other special studies conducted in the past.

### **Cost Impacts**

Based on experience in developing special air monitoring programs, staff estimates that four to six complete platforms will be needed to conduct the program. Staff believes that much of the costs should be cost-shared with other stakeholders such as the ports and the state. As such, staff will actively seek additional external funding sources to help offset these costs to the greatest extent possible. As part of the monitoring protocol development, staff will develop a cost schedule for the Board's consideration.

