

## Sample Outline of a Comprehensive Maritime Air Quality Improvement Plan

### I. Goal

An 85% reduction in community health risk experienced by West Oakland residents as a result of exposure to air pollution attributable to Port of Oakland activities. Air pollutants that contribute to this air pollution include: diesel particulate matter, nitrogen oxides, sulfur oxides, reactive organic gas (ROG).

In the absence of reliable health risk data, an intermediate or proxy goal is an 85% reduction in estimated exposures experienced by West Oakland residents of air pollution attributable to the Port of Oakland. An overall emissions reduction goal, such as 85% reduction in all emissions attributable to the Port of Oakland, is also an important goal in this process, but should not be the only goal that is established. Community health risk is not directly proportional to total emissions from the Port, so a 1:1 relationship between emissions reduction and risk reduction should not be assumed. Emission sources that are closest to where residents and workers live and work contribute higher levels of risk, while emissions sources further away, such as ships beyond the Golden Gate Bridge, contribute less to health risks in the community.

#### **A note on methods: Relating emissions to health risk**

Because emissions are not directly proportional to health risk, a simple “weighting” method can be used until more accurate and detailed health risk modeling is completed. Such a weighting method should be agreed upon by a technical workgroup comprised of Port staff familiar with air quality and health risk assessment, the Port’s consultant, relevant AQMD staff, CARB staff, EPA staff, and Alameda County Department of Public Health, and any members of the stakeholder task force who are familiar with air quality and health risk assessment.

As an *example* of what a weighting method might look like we might decide, based on the best available science, to assign the following weighting factors<sup>1</sup> to various sources of emissions [THESE NUMBERS ARE GIVEN ONLY AS AN EXAMPLE]

Trucks: weighting factor of 10-100

Ocean-going vessels while docked: 5-10

Ocean-going vessels while in transit between the Golden Gate Bridge and the Port of Oakland: 2-5

OGV beyond the Golden Gate Bridge: ½

Harbor Craft: 1-10

Cargo-Handling Equipment: 3-10

#### **Time-sensitive deadlines**

By 2012, a 50% reduction from the baseline of 2005 in community health risk attributable to Port activities.

By 2020, an 85% reduction from the baseline of 2005 in community health risk attributable to Port activities.

<sup>1</sup> The challenge here is representing the several ORDERS OF MAGNITUDE difference in health risk as a function of distance between source and receptor. Sources closest to receptors contribute something closer to a factor of 10 to 1000 times the risk that sources further away from receptors do. The numbers given in this example are for illustration purposes only; actual numbers should be developed by the technical work team.

Proxy emission reduction goals can be established; alternately, goals can be stated in terms of a limit on the total amount of Port-related emissions, rather than in terms of reductions relative to a forecast of future emissions or future growth at the Port. Quantitative goals based on a “cap” on total Port-related emissions will be protective of public health even if growth is greater than anticipated.

## **II. Strategies for achieving these goals**

### **A. Source-specific strategies**

*This section describes the specific measures to reduce pollution from the five major source categories of air pollution associated with Port activities. Compliance with regulations (“function 1” will be included in each of these source categorie. It is expected that additional measures will be needed for each category in order to ensure achievement of community health risk reduction goals described in section I above, and these additional measures will be described in each source category section here. This includes the specific measures that emerge from the “proposed initiatives” that have been screened by the work team will ultimately be included. Details regarding standards or regulations that are described in this section may include:*

- What the standard is and who sets it
- Who it applies to
- What compliance looks like

#### **1) Trucks**

Strategies here can be guided either by a numerical emissions reduction goal, such as “reduce diesel particulate matter emissions from drayage trucks by \_\_\_% by the year \_\_\_\_\_,” or in terms of a technology-based goals, such as “ensure that all trucks are meeting EPA 2007 new engine standards by the year \_\_\_\_\_.”

#### **2) Ocean-Going Vessels**

#### **3) Harbor Vessels**

#### **4) Cargo Handling Equipment**

## 5) Rail

### **B. New Project strategies**

As the port expands in the future, any new physical infrastructure or increases in volume of trucks, ships, trains, harbor craft, cargo-handling equipment will create new sources of pollution, creating an added challenge to our efforts to reduce all emissions from a 2005 baseline. The Marine Air Quality Improvement Plan includes an action plan for ensuring that this growth and the development of new projects can take place in a manner that still allows the Port to meet the overall community health risk reduction and emissions reduction goals.

New project strategies include the following critical mechanisms:

#### **1) CEQA process**

##### **a. Determining threshold of significance for health risk**

All new projects that may generate any new sources of air pollution by increasing truck, train, or ship volume will use the following to determine thresholds of significance for health risk when developing an environmental impact review.

*To be filled in with specifics relating new pollution sources to the achievement of 85% risk reduction.*

##### **b. CEQA mitigation measures**

*To be filled in with specifics, including details on the mitigation measures that proposed for the Vision 2000 projects.*

#### **2) Construction processes**

All new projects will utilize the following standards and technologies during the construction process to minimize pollution:

*To be filled in with specifics that are agreed upon by task force members. EXAMPLES of measures that can be included here are:*

- All construction Equipment is to be updated or retrofitted with best available control technology
- Dust control
- Where possible, non-diesel fuel used on the Project
- No idling of any construction-related, delivery, waste hauling or any other trucks related to the construction project for longer than 15 minutes
- Cover of Pile Driving Equipment, to reduce noise level and vibration
- Planting of Trees
- Air and dust Monitoring

In addition, all new projects will utilize the following good neighbor and standing public participation processes:

*To be filled in with specifics that are agreed upon by task force members. EXAMPLES of measures that can be included here are:*

- Regular meetings or reports to the impact residents or community about project

- Engineers of such project to work with, local public health department or State Department of Health Services, tracking and monitoring
- Community review of design

### **C. Other strategies**

*This section is where strategies that do not fall under either source-specific strategies, project-specific strategies, or any of the categories below (implementation, funding, monitoring & enforcement) can be included. See section IV. of “Proposed lists of Primary Interest and Secondary Interest Air Quality Initiatives” for some possibilities.*

## **III. Implementation, monitoring, funding & enforcement**

This section includes all relevant information about how the overall strategies described in section II above, as well as the specific measures, will be implemented, how progress toward completing each strategy and towards overall health risk reduction goals will be tracked, what adaptive management systems will be in place to provide for corrective actions should there be a shortfall in progress, what enforcement measures may be taken, and the overall budget and anticipated sources of funding is expected for full implementation of this Air Plan.

### **A. Implementation Strategies & Mechanisms**

Implementation mechanisms can be developed for and organized by each source listed under “source-specific strategies” above, and by new projects. They may also be developed for the Port overall, or for other stakeholders that are not specifically listed above.

Strategies & mechanisms for implementing CARB regulations and other legal requirements related to emissions will be described in this section, as will strategies for implementing other measures described in section II above to ensure attainment of our overall community health risk reduction goals.

Some examples of strategies that will be used to attain MAQIP goals and strategies include:

1. Port-wide rules or “tariffs”
2. Lease agreements
3. Standards in concession agreements
4. CEQA mitigations for new projects
5. Creation of effective incentive programs

This section will also include a forecast or projection of future emissions from the Port, and a projection of emissions reductions as a result of implementing the measures adopted in this plan.

### **B. Tracking, Monitoring and Reporting Mechanisms**

Tracking or monitoring takes place at two levels: tracking progress in implementing each of the measures or strategies described in section II above, and tracking the progress in terms of actual emissions reductions.

This section also includes an “adaptive management” framework for developing plan corrections/revisions if progress goals are missed, and describes penalties for failure to prepare the required adequate plans, for instance restricted ability to issue permits (“construction ban”), and (6) actual air quality monitoring data showing the air quality standards have in fact been met.

Tracking, monitoring, and reporting will be done through a standing committee that:

- ✓ Includes designated seats for environmental, community, labor and other groups
- ✓ Includes government agency and inter-agency representatives
- ✓ Has the power to set violations, penalties, grievances, compliance and monitoring.

### **C. Budget and Funding Mechanisms**

This section will include an estimated budget for implementing the measures adopted in this plan, and description of funding sources to implement these measures.

EXAMPLES of funding sources include:

- 1) Proposition 1B goods movement mitigation funding
- 2) Any revenues derived from levying a fee on containers should legislation be passed in the state of California requiring a fee on each container that is imported to and exported from any port in California (including the Port of Oakland) in order to fund mitigation and other projects.
- 3) If such legislation is not enacted by January 1, 2009, revenues will be developed within and administered by the Port of Oakland by levying such a fee independent of state requirements.
- 4) Partial revenues derived from any concession agreements entered into by this Port and trucking companies.
- 5) Other publicly financed incentive programs, including the Carl Moyer program.
- 6) Other privately financed or public-private incentive programs.

### **D. Enforcement Mechanisms**

This section describes the relevant agencies, roles, and mechanisms for enforcing regulations and other legal requirements that apply to each source category. This description includes how these agencies will work together to coordinate implementation, monitoring, enforcement, and any other relevant functions.

This section also describes the mechanisms for enforcing any commitments or additional requirements that emerge as a result of this plan. Concrete enforcement provisions can and should be spelled out in each of the implementation mechanisms described before, including port-wide rules (“tariffs”), lease agreements, and concession agreements with trucking companies. Enforcement provisions may include, but should not be limited to:

- a. Regular reporting requirements and clear penalties for failure to meeting deadlines or information content of reports
- b. Disinterested third party review of reporting and underlying data
- c. Independent periodic inspections to confirm reported actions are being undertaken
- d. Clear and significant financial penalties for failure to meeting reporting requirements or to undertake planned actions