



South Coast Air Quality Management District

21865 Copley Drive, Diamond Bar, CA 91765-4178
(909) 396-2000 • www.aqmd.gov

Office of the Executive Officer
909-396-2100

February 28, 2006

Sylvia Oey, Manager
Planning and Technical Support
California Air Resources Board
1001 I Street
Sacramento, California 95814

Re: Comments of South Coast Air Quality Management District Regarding California Air Resources Board's *Emission Reduction Plan for Ports and International Goods Movement in California*

The South Coast Air Quality Management District ("SCAQMD") staff appreciates the opportunity to submit comments regarding the *Emission Reduction Plan for Ports and International Goods Movement in California* (plan), released by the California Air Resources Board (ARB) for public review on December 1, 2005.

SCAQMD staff supports CARB's efforts to develop a comprehensive plan to reduce the impacts from the goods movement sector. Port operations and the supporting goods movement transportation system are the major source of emissions and health risk exposure from diesel particulate matter (DPM) in the South Coast Air Basin (Basin). SCAQMD staff has some general comments on the plan as well as more specific recommendations for the individual strategies by source category.

General Comments

- The plan needs to address the impacts from the entire goods movement sector, not just the portion attributable to international trade. Air quality impacts caused by domestic goods movement are significant. In addition, it is difficult to distinguish between goods movement activities that are domestic as opposed to international. Indeed, many infrastructure facilities that need to be controlled serve both domestic and international goods movement. Focusing only on international trade does not make clear the full impacts of emissions from sources utilizing those facilities, nor the full extent of environmental benefits that would be derived from controlling emissions from those facilities.

- For each of the major source categories the plan provides emission reductions for three milestone years: 2010, 2015, and 2020. For the vast majority of strategies, the plan does not provide the assumptions regarding how these reductions were determined. In order to properly evaluate the strategies, SCAQMD staff recommends that the plan include the growth rates, penetration rates, and emission reduction assumptions for each strategy. This might be accomplished by providing a separate appendix summarizing these assumptions for each milestone year.
- CARB should clarify that the growth assumptions in the plan were developed to ensure potential emission growth is adequately addressed, and should not be viewed as an agency endorsement of specific capacity-enhancing projects which would have to undergo appropriate environmental and public decision-making processes (e.g., CEQA).

In addition to the assumptions used to estimate the reductions for each measure, CARB needs to provide a specific implementation mechanism and schedule, and identify the responsible agency in the same manner that control measures are described in the SIP.

- It is our understanding that CARB's intent is to fold this plan into the statewide SIP development effort. SCAQMD staff agrees with this approach, but we recommend that a discussion be added to the plan to state this and make clear more stringent measures will likely be necessary in order to comply with SIP requirements.
- CARB staff should add a clear statement that encourages local initiatives that go beyond the statewide efforts in order to meet specific local needs. The draft plan identifies local actions as one type of potential implementing strategy. We believe that port leases and other local contractual and regulatory mechanisms are an important and need to be supported.
- There is no significant discussion of the need to periodically revisit the plan so as to continually update its provisions to reflect advances in new technology, inventories, forecasts, as well as the need for additional emission reductions identified in future SIP revisions. SCAQMD staff recommends addressing this issue in the final plan.

The plan currently seeks to reduce DPM emissions by 44% in 2020 and reduce NO_x emissions by 30% and 50%, in 2015 and 2020, respectively. In order to adequately address the uncertainty in growth projections, localized impacts and regional SIP reduction needs, and allow tracking of interim progress to determine whether adjustments are needed, CARB should create a tiered reduction target approach, consisting of near- and intermediate-term measures and long-term measures.

- The plan should be implemented by control requirements directed at source-categories, and by strategies directed at facilities. For example, the plan needs to state a goal of achieving acceptable health risks in areas impacted by major facilities such as ports and railyards. The goals currently stated, target emission or risk reductions and do not assure that acceptable health risks will be achieved. In addition, the importance of project approval processes such as CEQA should be recognized in the implementation section of the plan.
- In order to avoid exacerbating the current unacceptable air quality impacts, the plan should specify that the infrastructure improvements (for example, those contemplated in the state Goods Movement Action Plan) should only be initiated if there is assurance that the applicable air quality mitigation strategies will be implemented contemporaneously
- CARB needs to include the estimated costs and health benefits of the individual strategies to the extent possible.

The following details our comments on the individual control strategies by source category.

Ocean-Going Vessels

The plan appropriately relies on a wide range of strategies such as shore-based power, cleaner fuels, implementing a west coast Sulfur Emission Control Area, rerouting cleaner ships, expanding the vessel speed reduction program, and retrofitting ship engines with low-emission technology such as slide valves and selective catalytic reduction (SCR). However, except for shore-side power and vessel speed reduction, the plan is unclear regarding the amount of emission reductions from each of these strategies that will be used to meet the reduction targets. These figures need to be specified to ensure public understanding and the ability to track implementation.

- The plan should state a stronger commitment to technologies such as SCR in order to grasp the opportunity presented by the large number of new ships currently on order. Mandating SCR at the design stage of these new ships takes advantage of the lower cost and greater flexibility of installing controls into new ships rather than requiring retrofits.
- The marine diesel oil sulfur content of 0.5 percent for main engines specified in the cleaner fuels section should be decreased to 0.2 percent or lower. Main engines are a significant source of emissions from ocean-going vessels and the plan should reflect the most stringent levels possible. Finally, while the plan calls for an expanded vessel speed reduction program by increasing participation rates, the SCAQMD staff

recommends increasing the distance from which the speed reduction is applicable from 20 to 40 nautical miles in order to minimize the onshore emission impacts. Direct emissions to that distance and beyond are transported by the sea breeze onshore to impact coastal areas within the SCAQMD and residential areas of Ventura County. In addition, secondary formation of ozone and aerosol particles well downwind of the speed reduction zone contributes to violations of the federal and California ambient air quality standards.

Cargo Handling Equipment

- The plan substantially relies on the implementation of the CARB's recently-adopted cargo handling rule to achieve its targeted emission reductions from this source category. At the time of rule adoption we commented to CARB that there were several areas which should be addressed to make the rule more effective. One of these areas is the purchase requirements for new equipment. The SCAQMD staff recommends that the plan should specify that CARB will proceed with a phase II rulemaking of the cargo handling equipment rule to require all new equipment purchases, at least at specified large facilities or those with significant local health impacts, to meet the lowest emission level available for the equipment type and year of purchase. Similarly, this same rulemaking could potentially address the upgrade to 85 percent DPM control that is referenced in the plan as being one of the 2015 emission reduction strategies.

Heavy-Duty On Road Trucks

- The draft plan calls for a port truck modernization program whereby all pre-2003 trucks are replaced with 2003 or newer model year trucks by 2015. We understand that CARB staff has recently modified this proposal to instead require a retrofit rather than a replacement program in order to address the overestimated in-use NOx emission benefit of post-2003 diesel trucks. In order to compliment this program, SCAQMD staff recommends that the plan should place a strong commitment to move towards trucks operating on alternative fuels (e.g., LNG) unless equivalent emission reductions could be obtained in the same time-frame from low-emission diesel trucks.

Rail

- Proposed strategies for reducing the air quality impacts from rail operations include upgrading switcher locomotives, retrofitting engines with DPM control devices, use of alternative fuel locomotives, and concentrating Tier 3 locomotive engines in the state. In regards to the Tier 3 locomotive strategy, we encourage CARB staff to not rely so explicitly on rulemaking by EPA. That important rulemaking has apparently been delayed from EPA's initial schedule, and there is no assurance regarding the stringency of standards EPA will adopt. In fact, the rail industry filed comments on

EPA's advance notice of proposed rulemaking arguing against some key control techniques EPA stated it would consider. Instead, the CARB plan should specify the level of control needed to be achieved through new locomotive, retrofit and fuel-based technologies in the short- and intermediate-term. While federal law includes restrictions on state and local authority to regulate locomotive emissions, implementation strategies other than possible EPA regulations need to be kept on the table. In particular, the state is contemplating spending large sums of funds to upgrade and expand rail infrastructure (actions that will directly financially benefit the railroads). The state needs to keep open the option of using the negotiating leverage it will have due to these expenditures to seek application of the best possible controls to locomotives using new and expanded facilities. Technologically, the plan should include technologies such as SCR as a means of reducing the emissions from new and in-use locomotives. In addition, interstate locomotives should be required to use CARB diesel fuel as currently required for intrastate locomotives starting in 2007.

Thank you again for the opportunity to provide these comments. SCAQMD staff looks forward to continuing working with CARB staff to refine and develop additional strategies for the goods movement sector that achieve the greatest feasible control of emissions and health risks.

Sincerely,



Barry R. Wallerstein, D.Env.
Executive Officer, SCAQMD