PMSA
PACIFIC MERCHANT SHIPPING ASSOCIATION

March 19, 2018

Mary Nichols, Chair
California Air Resources Board
1001 "I" St.
Sacramento, CA 95814
Submitted via www.arb.ca.gov "freightfacilities18"

Re: Item 18-2-6: "Informational Update on Concepts to Minimize the Community Health Impacts from Freight Facilities" (Advance Materials, Revised 3/14/18)

Dear Chair Nichols and Boardmembers:

On behalf of the members of the Pacific Merchant Shipping Association (PMSA), including ocean carriers and marine terminal operators conducting business at California's public ports, we are pleased to submit these comments regarding the "Informational Update on Concepts to Minimize the Community Health Impacts from Freight Facilities." PMSA sincerely appreciates the constructive and practical efforts undertaken by the CARB staff over the past year to address the issues which led to this Update and for maintaining an open dialogue with industry on all related matters.

Specifically:

- Regarding ocean-going vessels while at-berth, PMSA supports the CARB staff position. No Additional Freight-Related Actions are necessary with respect to pursuing amendments of the existing regulation of as already described in the SIP, Mobile Source Strategy, and Sustainable Freight Action Plan, and we will continue to work with CARB staff under this rubric to improve the performance and compliance for those subject to the existing rule and evaluate new fleets.

- PMSA has concerns regarding implementation of the "Cargo Handling Equipment Regulation to Transition to Zero emissions" Concept. This Concept was improved and should provide a framework in which to discuss many of the concerns raised during this Update process. While we are unsure of the basis of or feasibility for projecting the establishment of any regulatory goals at this time, including those identified for 2026 and 2031, we look forward to working with CARB to address the issue of how best to plan for and facilitate investments in a successful long-term transition to a Zero-Emissions cargo handling equipment environment.

- PMSA supports the CARB staff position that the imposition of a statewide Indirect Source Rule for freight facilities is unnecessary.

Regarding Vessel At-Berth Regulatory Amendments

PMSA supports and agrees with the CARB staff conclusion that, with respect to "CARB Actions to Further Reduce Emissions from Freight Sources and Facilities," it is sufficient to follow the Freight-Related Commitments for New Measures in the SIP with respect to strategies for Ships.

In particular, PMSA supports the existing SIP action to direct amendments to the existing At-Berth regulation. When the CARB Board adopted the SIP last March 2017, amendments to the At-Berth Regulation were included as an enforceable state commitment, requiring CARB to "expand the scope of the Regulation to achieve additional emission reductions," which were described as "amendments to the At-Berth Regulation to include other vessel fleets and types."

PMSA and other representatives of the fleets already covered under the current regulations – container, cruise, and refrigerated ships – continue to engage CARB staff about ways to improve compliance, reporting, and ease of implementation for these fleets. The existing SIP direction continues this process and seeks the development of amendments "designed to both address current implementation issues while preserving the intended air quality benefits."

These SIP improvements will be occurring over and above the current CARB at-berth regulations, which as you may be aware, have been in place since 2009, with major phase-in dates of 2010, 2014, and 2017, and with another new and stricter fleet performance requirement becoming effective in 2020 (when existing covered fleets will already be required to plug-in at an 80% rate). This rule along with state, federal and IMO rules requiring cleaner fuels from vessels nearshore and offshore, have resulted in some of the most extremely successful vessel emissions reductions in the world. Impressively, the Port of Los Angeles's latest Air Quality Report Card shows ocean-going vessel emissions reductions from 2005 to 2016 of 40% for NOx, 90% for DPM, and 98% for SOx. The maritime industry investments necessary to achieve these benefits were estimated by CARB to cost approximately $3.3 billion. These benefits have also occurred prior to the new requirements under Annex VI which require new ship construction after 2016 to be for Tier III vessels. Tier III vessels will produce significant NOx reductions and be approximately 80% cleaner than current Tier I ships.

PMSA and its member companies are invested in a successful outcome to the amendment discussion process with CARB staff, wherein the existing rules are improved regarding implementation and compliance by the Board early enough to help facilitate a successful transition to the 80% compliance threshold in 2020. These amendments are necessary for existing fleets on an expedited basis and, if necessary, should be advanced independently of whether or not additional vessel fleets and types are added under the Mobile Source Strategy compliance start target date of 2022.

Regarding Cargo Handling Equipment Transition to Zero-Emissions

PMSA would like to thank the CARB staff for making improvements to the proposed Concept for "Cargo Handling Equipment Regulation to Transition to Zero Emissions" in the Revised Update. In particular, the additional Board consideration of any potential amendments to the existing "CHE" regulations is well-justified by the "Considerations" added in the Revised Update. PMSA is committed to planning for investments in Zero-Emissions (ZE) technology and infrastructure to complement improvements in economic competitiveness and supply chain efficiency, and to the extent that this timeline is intended to achieve such ends we stand ready to participate.

As identified in the Revised Update, the need to examine ROI, ZE technological advancement, infrastructure needs in terms of both planning and funding to support ZE, and labor and automation issues, are tantamount to a successful transition of Port operations to ZE. In the meantime, CARB and industry alike are continuing to explore new and different approaches to ZE and NZE marine terminal applications that show some promise and accelerate cleaner operations but without excessive new costs.

While this transition is being contemplated, emissions from Cargo Handling Equipment at seaports and intermodal rail yards are already controlled, and significantly reduced, under existing CARB regulation which establishes Best Available Control Technology for new and in-use CHE. Under the current BACT rule for intermodal CHE, emissions reductions have been significant, fast, and lasting. The latest Port of Los Angeles 2016 Air Quality Report Card shows that when compared to 2005, CHE emissions reductions are significant both with respect to improving localized community and public health impacts of air toxics (Diesel PM reductions of 91%) and with respect to regional criteria pollutants (NOx down 72% and SOx down 82%).

Similarly, the combined CHE emissions from the Ports of Los Angeles and Long Beach – the largest port complex in the country - are now marginal contributors to criteria pollutants in the South Coast Air Basin: 0.716% of NOx, 0.541% of DPM, and 0.052% of SOx. And, when all major container Ports (LA, LB and Oakland) have their cumulative intermodal CHE emissions compared to statewide GHG totals, their contributions are also a minimal 0.0747% of all other sources.

PMSA supported the adoption of the current CHE regulation when it was enacted. Industry agreed that a BACT rule which was fleet-based, relied on the development of new engine technology and standards, could be phased in incrementally over time, and respected investments by avoiding unnecessary stranded costs, would produce the best results in a cost-effective manner.

The transition to ZE CHE at ports will require substantial additional amounts of public and private investment in infrastructure and equipment prior to, during, and for several

decades post-implementation. There may be multiple paths forward, but the only comprehensive study of the costs of transitioning California's ports to a CHE Zero-Emissions operating environment to-date was conducted by the engineering firm of Moffat & Nichol at the request of PMSA in 2015. The Moffat & Nichol study found that by using mature, available technologies, the total incremental costs associated with a transition to ZE over 3 decades to be approximately $49 billion (Capital Expenses totaling an additional $28 billion and Operating Expenses an additional $21 billion).

CARB should work closely with industry to specifically study and plan for this transition, which could potentially achieve emission reductions of criteria pollutants, air toxics, and greenhouse gases upon implementation of transition to zero-emission operations, if done successfully. Greenhouse gas emissions reductions goals should be set consistent with Executive Order B-30-15 in order to achieve levels 80% below 1990 levels by 2050. These reductions could provide progress towards greenhouse gas targets, contributions to fulfillment of State Implementation Plan commitments to attain federal air quality standards, and potential benefits to reduce community health risk, in a manner which is pro-investment. By contrast, an ill-designed regulatory mandate drives away the very cargo necessary to finance the infrastructure investments which underlie the introduction of the ZE equipment, and in the process also increase global GHGs and damage California's economy, decrease jobs, and lower state tax revenues.

PMSA is committed to planning for such investments and working with CARB on such a plan. We do remain concerned, however, with any excessively accelerated phase-in period (in this case 2026-2031), which would replace our existing BACT regulations for CHE – which have been tremendously successful – with an unknown ZE mandate. Especially when uncertain technology or costs of billions of dollars with high prospects for non-cost-effective outcomes are likely, it is imperative that collaborative planning for future investments be employed. In addition, it is anticipated that most CHE investments can realistically produce only marginal improvements in air quality in the short-term, are less than cost-effective when compared to other existing DPM reductions, demonstrate little likelihood of improvements in public health or community impacts, negligible improvements in state GHGs, and offer no significant contribution towards Clean Air Act attainment in impacted regions of the state.

PMSA is also concerned that this current proposal may not be coordinated with a consideration of new emission standards. As mentioned earlier, PMSA had supported the previous CHE rule which was a fleet-based BACT rule and relied on the development of new engine technology and standards. The CHE Concept here does not appear to set a new engine standard and instead would appear to place the burden solely on the equipment user to find the necessary equipment regardless of whether a market for such equipment exists. This would be a reversal of the traditional approach of establishing new engine standards and matching them with in-use standards.

The costs and complexities of transition to Zero-Emissions CHE in new equipment and supporting infrastructure are substantial when compared to the incremental benefits to be achieved. The investments necessary to move to Zero-Emissions are substantial and will require payback periods over decades. **High costs and complexity do not necessarily mean that ZE investments should not be made; rather, high costs and complexity make it imperative for ZE investments to be made well.**

Regarding Indirect Source Rules for Freight Facilities

PMSA supports and agrees with the CARB staff conclusion that, with respect to Indirect Source Rules, it is inappropriate for the Board to entertain the creation of a statewide ISR strategy, plan or take such action. PMSA also opposes the local and regional implementation of ISRs. PMSA was a signatory on, and incorporates by reference here, the Support letter provided to CARB staff on this position by a multi-industry coalition on February 28, 2018.

In general, introduction of costly regulations too fast or too soon at seaports, which results in further loss of marketshare and diversion of cargo to other North American gateways, will also result in increased emissions of GHGs and erode the cost-effectiveness of current investments in clean technology in California. The only comprehensive study of the potential GHG leakage effects of California's ports loss of business, cargo volumes, and marketshare to other competitors was completed by Starcrest at the request of PMSA in 2017. CARB staff was consulted on study methodology during its development and has been presented with the final results. Starcrest found that, on average, cargo diversion away from the West Coast resulted in an average increase in GHGs of 22% across multiple vessel size, port call, destination, and origination scenarios.

The state must find the most cost-effective and economically competitive path forward to investment in our ports in order to achieve the successful transition to zero-emissions port operations, and PMSA is committed to assisting the state plan for this outcome.

Please do not hesitate to contact me or Thomas Jelenic in our Long Beach office with any questions, comments or concerns regarding this or any other matter.

Sincerely,

Mike Jacob
Vice President & General Counsel