



South Coast Air Quality Management District

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Mr. Mario Cordero
Executive Director
Port of Long Beach
415 West Ocean Blvd.
Long Beach, CA 90802

Mr. Eugene Seroka
Executive Director
Port of Los Angeles
425 South Palos Verdes St.
San Pedro, CA 90731

Re: Draft Economic Study for the Clean Truck Fund (CTF) Rate and Potential CTF Rate

Dear Mr. Cordero and Mr. Seroka:

Thank you for the opportunity to comment on the Ports' Draft Economic Study for the Clean Truck Fund Rate as well as the potential truck rate which was discussed at the recent workshop. We continue to support all efforts by the Ports that will reduce emissions from port-related operations to improve air quality and public health in neighboring communities and in the South Coast Air Basin (Basin). The Draft Economic Study was conducted to support the development of the Ports Clean Trucks Program (CTP), a central component of the Ports 2017 Clean Air Action Plan Update (CAAP) and one with the potential to achieve the most and quickest emission reductions. As such, the appropriate design and implementation of the CTP, including the truck rate and incentives, is critical for achieving both near-term and long-term air quality objectives outlined in the CAAP for meeting upcoming federal ambient air quality standards, and for protecting public health.

Our comments regarding the Draft Economic Study consist of the following key points: 1) that the Draft Study supports a truck rate significantly higher than the \$10 per TEU rate currently proposed by Ports' staff, 2) concerns regarding the Ports transition from using the term near zero emissions (NZE) trucks to low-NOx trucks, and 3) the need for the Ports to accelerate

deployment of both NZE and ZE trucks as well as consider other strategies to ensure short term NOx reductions.

The Draft Economic Study Supports a Truck Rate in excess of the \$10/TEU rate currently recommended

The Draft Economic Study concludes that “the implementation of CTF rates at the levels modeled, without the provision of a subsidy, will not modify the fleet composition” because the rate levels, even at \$70 per TEU, are not large enough to compensate for the incremental cost of purchasing and operating NZE and ZE trucks. The Study also concludes that a CTF rate between \$35 and \$50 would be needed to provide full subsidies. Given the Study’s own conclusions, it appears that the proposed \$10 per TEU falls significantly short of meeting CAAP’s objectives of transitioning the drayage truck fleet to cleaner technologies.

Further, the projected diversion rates associated with the truck rates modeled are far lower than anticipated, with a maximum projected diversion rate of 1.4% at a \$70/TEU truck rate. While diversion is an important consideration, the Ports’ own analysis does not support that it is an overriding factor, and that there are a multitude of other reasons why cargo will continue to be routed through the San Pedro ports. Given the urgent need to reduce NOx emissions and provide much-needed relief from the associated health impacts, the Ports should take the necessary actions to reduce emissions from trucks visiting their facilities and meet CAAP objectives.

Also, based on our review of the input cost factors in the analysis, the Study may have overestimated the capital cost of clean truck technologies. For example, the Study assumed \$250,000 for the purchase price of a NZE truck which is 20% higher than the average unit price of \$200,000 based on information from truck vendors and manufacturers. Since the capital and operating costs of these clean trucks are key input factors in the Modeled Scenarios, we recommend that most up to date and accurate cost data be used in the final analysis.

Finally, there is a unique window of opportunity to turn over pre-2010 drayage trucks over the next few years and the CTR will play a critical role in that effort. There are approximately 8,000 pre-2010 drayage trucks that are currently registered in the Port Drayage Truck Registry. Under CARB’s Truck and Bus Regulation, these trucks will have to turn over to MY 2010 or newer trucks by January 1, 2023. Without additional incentives, these trucks will turn over to MY 2010+ *diesel* engines. There is therefore a great opportunity to instead turn over these trucks to the cleanest available technologies currently available- natural gas NZE trucks - which are at least 90% cleaner than the rule-compliant diesel trucks, and hopefully ZE trucks in the near future. We believe that an appropriate level of truck rate coupled with a sufficient amount of subsidies and incentives to cover the incremental costs will be essential to encourage Licensed Motor Carriers (LMCs) and individual truck owners to purchase these cleanest available trucks. Based on the proposed \$10 per Twenty-Foot Equivalent Unit (TEU) presented at the workshop, the Ports staff have projected that approximately \$90 million in revenues will be generated annually from the collection of the truck rate. Applying \$100,000 per truck as a potential subsidy, approximately 900 pre-2010 diesel trucks can be replaced with NZE trucks annually,

which is clearly not enough to convert enough trucks to meet even the worst case projections¹ from the CAAP that was approved by both Ports in 2017. Therefore, we recommend that the Ports consider a higher truck rate to take full advantage of this window of opportunity to maximize near-term emission reductions.

The Distinction between NZE Trucks and Low-NOx Trucks and Impact on Emission Reductions

In the Draft Economic Study, NZE trucks are also referred to as low-NOx trucks. We note that the Ports staff now uses the term “low-NOx trucks” in recent presentations and discussions in lieu of NZE trucks, which was originally referenced in the CAAP. However, the final San Pedro Bay Ports Clean Truck Fund Rate Study, which is attached to the draft Economic Study, uses the term NZE which is defined to be a truck with an engine that meets the 0.02 g/bhp-hr optional low NOx engine emission standard². CARB staff is currently considering an additional regulation with a range of low NOx heavy-duty engine emission standards that would vary depending on the model year and phase-in schedule. Specifically, the NOx standard being considered for Model Year 2024 through 2026 engines is in the range of 0.05 to 0.08 g/bhp-hr while the NOx standard for MY 2027 and newer engines is expected to be in the range of 0.015 to 0.03 g/bhp-hr. CARB is expected to finalize these standards within the next few months.

We are concerned with the Ports’ apparent transition from NZE to low-NOx trucks for the CTP and its potential impact on near-term emission reductions. If the Ports were to qualify low-NOx trucks for the CTF rebates and incentive funding instead of, or as well as, NZE trucks, emission reductions from the CTP implementation could be significantly lower than what was initially anticipated in the CAAP. Given that there are NZE trucks commercially available today and CARB’s proposed MY 2027 low-NOx standard could also be at or close to 0.02 g/bhp-hr NOx, we recommend that the Ports consider qualifying only trucks meeting 0.02 g/bhp-hr NOx or better for the CTF rebates as well as incentives in the Clean Trucks Program.

The Need for Short Term NOx Emission Reductions through Accelerating NZE and ZE Truck Deployment

As you know, South Coast Air Basin is facing a daunting challenge to meet the 2023 and 2031 attainment dates for the federal 8-hour ozone standards, which require significant NOx reductions in the next several years. It is therefore critical to focus all efforts to achieve both near- and long-term emission reductions through accelerated deployment of commercially available clean technologies to attain these standards. This is also consistent with the objective of the Ports CTP, as stated in the 2017 CAAP, to “transition the current drayage truck fleet to near-zero technologies in the near-term and ultimately to zero-emission technologies by 2035.”

Based on the Ports Truck Technology Feasibility Assessment, there are commercially available NZE drayage trucks with CARB-certified natural gas engines at 0.02 g/bhp-hr of NOx, whereas fully commercialized ZE trucks are still a few years away. Therefore, we recommend the Ports

¹ The worst-case scenario presented in Scenario 1 from the Emission Reductions chapter of the 2017 CAAP shows 69% of the drayage truck fleet being NZE, with associated NOx emission reductions of 80% by 2024.

² CARB’s existing Optional Low NOx Standard Regulation can be found in the California Code of Regulations, Title 13 Section 1956.8.

allocate most, if not all, of the CTP revenues in the near term to subsidize these NZE trucks to provide much needed relief and health benefits to communities around the Ports that are disproportionately impacted by the port-related goods movement activities as well as to maximize emission reductions for the 2023 attainment date.

In addition to utilizing the truck rate and incentives to accelerate the deployment of NZE and ZE trucks, we recommend that the Ports consider additional strategies to maximize both the near-term and long-term emission reductions. Under Scenario 1 of the Draft Economic Study (Figure 7.1), the Ports 2023 restriction on new truck registration alone (i.e., new registered trucks have to be NZE or ZE trucks) would result in over 10% deployment of NZE or ZE trucks in 2023 and about 80% in 2031. If this projection reflects the anticipated deployment of cleaner trucks without any subsidies based on natural turn-over, we would recommend that the Ports consider implementing this new truck registration requirement earlier in 2022 instead of 2023. Finally, to avoid any delays in near-term deployment of cleaner NZE and ZE trucks, we recommend that advanced funding to subsidize NZE and ZE trucks become available as soon as the truck rate implementation begins in Fall 2020, based on the anticipated revenues from the CTP. Without such accommodation, it may take an additional six months or even longer before cleaner trucks are actually on the road.

Finally, we also recommend that the health impacts of the Port trucks be considered in determining the final truck rate.

Thank you again for the opportunity to comment. We are fully committed to continuing to work collaboratively with the Ports and other stakeholders to successfully implement the CAAP strategies and measures as they are critical in meeting clean air standards.

Sincerely,

A handwritten signature in black ink, appearing to read "Wayne Natri", with a stylized flourish at the end.

Wayne Natri
Executive Officer