

SAN PEDRO BAY PORTS

CLEAN AIR ACTION PLAN

Clean Air Action Plan Implementation Progress Report Second Quarter 2019

ACCOMPLISHMENTS

GENERAL

- The Ports held their sixth CAAP Implementation Advisory Working Group meeting on June 25, 2019 at the Banning's Landing Community Center in Wilmington, California. Future meetings will continue to occur on a quarterly basis.

TRUCKS

- **2018 Tariff Modification.** As of October 1, 2018. All new trucks entering the Port Drayage Truck Registry (PDTR) must meet 2014 model year or better. As of the end of the second quarter, 1,800 "2014 Model Year" or newer trucks have been added to the PDTR since the tariff change went into effect.
- **Feasibility Assessment for Trucks.** The Feasibility Assessment report evaluates the current snapshot of emerging zero-emission and near-zero emission fuel-technology platforms based on five essential parameters (commercial availability, technical viability, operational feasibility, infrastructure availability, and economic workability). The Final Drayage Truck Feasibility Report was completed and added to the CAAP website in the second quarter on April 5, 2019.
- **Truck Rate Study.** The Ports selected Davies Transportation Consulting, Inc. to conduct the economic study for the truck rate (Study) and work is underway. The goals of the Study are to analyze potential for cargo diversion over a range of rates, examine the potential effect on the local drayage industry, and identify potential revenues that might be generated. The Study is expected to be completed in Third Quarter 2019.
- **Rate Collection Mechanism.** In anticipation of the Truck Rate, the Ports released a Request for Proposals (RFP) in First Quarter 2019 which included minimum requirements for how to collect a rate from Beneficial Cargo Owners. The Ports released the RFP in early March. The Ports tentatively selected a contractor and plan to bring separate contracts to their respective Boards of Harbor Commissioners (Boards) for consideration in Third Quarter 2019.
- **Large-Scale Zero Emission Truck Deployment Pilot Project.** The Ports have developed a conceptual level scope for demonstrating a large-scale deployment of 50 to 100 zero-emission trucks in drayage truck operations. This project will also evaluate the ability of truck manufacturers to produce and support large numbers of zero-emission trucks as well as the infrastructure requirements to support larger deployments. The Ports are finalizing the Scope of Work, and have begun the preparation of a Concept Paper which will be utilized to help the Ports to secure the necessary funding. The Concept Paper is expected to be completed Third Quarter 2019.
- **Early Deployment and Demonstrations.** The Ports continue to manage several grant-funded demonstrations of zero-emissions trucks, including over 20 hydrogen fuel-cell or battery electric trucks as part of supply-chain pilots. The Ports have also committed to

supporting regional demonstrations. This includes a near-zero natural gas drayage trucks deployment project through a California Energy Commission (CEC) grant secured by South Coast Air Quality Management District (AQMD) that is expected to fund up to 140 low NO_x trucks. AQMD has begun contracting with trucking companies to deploy the low NO_x trucks which are expected to be deployed before the end of 2019.

TERMINAL EQUIPMENT

- **Feasibility Assessment for Terminal Equipment.** The Ports' released a Draft Cargo Handling Equipment (CHE) Feasibility Assessment to the public on April 26, 2019 accepting comments through May 31, 2019. The comments are being reviewed and updates are being made where appropriate in the Final CHE Feasibility Assessment which is expected to be completed and added to the CAAP website in Third Quarter 2019.
- **Early Deployment and Demonstrations.** The Ports continue to manage several grant funded demonstration projects, including electric yard tractors, electric top handlers, and electric rubber-tired gantry cranes, as well as innovative approaches to charging infrastructure and demonstrations of supporting electrical infrastructure, including micro-grid controls with distributed generation and battery storage. The POLB had its very first battery-electric yard tractor delivered for the C-PORT project and associated infrastructure commissioned. In the POLA, Pasha has placed 2 battery-electric yard tractors in service and has demonstrated the ShoreKat treatment system while vessels are at berth. Additionally, Everport received 2 battery electric Taylor top handlers (the first 2 in the world) and 5 battery-electric yard tractors.

SHIPS

- **Vessel Speed Reduction Enhancements.** The Ports are continuing outreach to the shipping lines to explore ways of enhancing participation at the 40 nm marker for vessel speed reduction. 94% of vessels visiting the Ports in Q2 slowed down to 12 knots within 20 nautical miles of Point Fermin, and 90% of vessels slowed within 40 nautical miles.
- **Ship Incentive Programs.** The Ports continue to collaborate with other West Coast ports, as well as our local air district on ways to enhance participation in our clean ship incentive programs.
- **At Berth Regulation.** The Ports are actively working with CARB on the currently proposed draft regulatory language for the new At Berth Regulation. Staff worked diligently this quarter on providing a third comment letter, to be sent in Q3 2019, and continue to seek new ways to support this effort.

OTHER

- **Technology Advancement Program (TAP).** In 2018, the Ports issued a call for projects (CFP) through the TAP. Four proposals were tentatively selected by the Ports and project contracts are being prepared and are expected to go to the Boards in 3rd quarter with projects commencing soon after in 2019. These projects consist of two Pasha ocean going vessel projects (one repower and one new build), an electric-drive tugboat project with Harley Marine Services, and a yard tractor anti-idle system upgrade at APMT.
- The Maersk Ship Efficiency Project, demonstrating a series of retrofits designed to reduce fuel consumption by ships, was completed. The final report is available on the Clean Air Action Plan Website.

- The 2018 TAP Annual Report was finalized and has been posted on the Clean Air Action Plan website.

PLANNED ACTIONS NEXT QUARTER

- Hold a public workshop to solicit feedback on the Ports' Clean Trucks Program Rate
- Complete the Truck Rate Study and add it to the CAAP Website.
- Present contracts for consideration by the Boards of Harbor Commissioners for the provision of rate collection services at the Ports
- Complete the Final CHE Feasibility Assessment and add it to the CAAP Website.
- Present funding recommendations and contracts for consideration by the Boards of Harbor Commissioners for four TAP Projects and begin implementation.