SAN PEDRO BAY PORTS

CLEAN AIR ACTION PLAN

Clean Air Action Plan Implementation Stakeholder Advisory Meeting MEETING SUMMARY October 19, 2021

All meeting attendees participated via teleconference using the Zoom platform or by phone. Questions or comments were submitted via the Zoom Q/A feature or Zoom microphone feature.

1. Welcome

- Heather Tomley, Port of Long Beach (POLB) Managing Director of Planning and Environmental Affairs, made opening remarks for POLB.
- Christopher Cannon, Port of Los Angeles (POLA) Director of Environmental Management, made opening remarks for POLA.

2. Status Update on Current Technology Demonstrations

- The Ports provided updates on the Ports' Technology Advancement Program (TAP), the Ports' grant-funded technology demonstrations, and the impacts of COVID-19.
 - Since January 2021, the Ports have received and reviewed six project concepts for the TAP through the Request for Information (RFI) process. Three of the projects were invited to submit full proposals and are under consideration.
 - Updates were provided on the ocean-going vessel (OGV) and harbor craft demonstration projects at POLB.
 - The Ports outlined common challenges experienced in their various demonstration projects as well as successes.
 - The Ports highlighted the completed grant-funded demonstration projects and the total number of commissioned and deployed units of equipment, vehicles, and vessels.
 - The Ports also summarized the COVID-19 impacts that are being experienced across the demonstration projects, including travel restrictions, extended permitting process timeline, slowed equipment production, and increased cost of equipment production.
- The public was invited to provide comments and ask questions to the Ports' staff.
 - One attendee inquired via chat on the type of technology used on the harbor craft currently in demonstration and the engine type. The Ports' staff responded that the system installed onboard the diesel-fueled harbor craft consists of an emission control system, which includes a combined active diesel particulate filter (ADPF), diesel oxidation catalyst (DOC) and a selective catalytic reduction (SCR) system.
 - One attendee urged the Ports to only fund zero-emission (ZE) projects and support battery-powered or green hydrogen-powered marine vessels.

- One attendee inquired whether the ZE switcher locomotive will be batteryelectric or utilize hydrogen fuel cell technology. The Port staff responded that the ZE switcher locomotive will be battery-electric.
- One attendee inquired why the Pasha LNG/Diesel Dual-Fuel OGV demonstrations moved from POLA to POLB. The Ports' staff responded that the project partner, Pasha Hawaii, moved its business operation from POLA to POLB during the course of the project and that is the reason for the change in demonstration location.
- One attendee requested more information about the project submitted to the TAP after January 2021 that includes demonstration of a technology capable of treating ship emissions while at-berth. The Ports' staff responded that because the project is going through the TAP evaluation process and is under consideration, Ports' staff cannot share additional details of the project at this time.
- One attendee inquired whether the ZE trucks experiencing power loss are battery-electric vehicles or fuel cell electric vehicles. The Ports' staff responded that the power loss issue mentioned during the presentation was regarding battery-electric trucks.
- One attendee inquired whether the battery-electric trucks serving the ports were able to make the 60-mile trip to the Inland Empire without charging enroute. The Ports' staff responded that there are currently 28 battery-electric trucks servicing the ports and confirmed that there are trucks available which can complete the 60-mile trip without a charge while loaded. The Ports are seeing that the zero-emission trucks in demonstration at the Ports are achieving 120 to 150 miles per charge while loaded.
- One attendee inquired where the public can access the final reports for the completed projects. The Ports' staff responded that final reports and TAP annual reports can be found on the Clean Air Action Plan (CAAP) webpage in the reports section under the TAP tab. Final reports for grant-funded projects will also be available on the webpage once they have been approved by the funding agency.
- One attendee inquired if there has been an infrastructure assessment done at POLA through LADWP to ensure that chargers are operating at maximum capacity. The Ports' staff responded that charger operation is one of the focuses of the wireless charging demonstration at POLA and other demonstrations funded by the California Energy Commission. Data is collected on the charging systems to evaluate their operation; however, LADWP is not involved in the assessment of the chargers as they only bring power to the site.
- One attendee suggested that the Ports expand their TAP program to support more projects.
- One attendee inquired if there are reports that summarize the performance issues of ZE trucks in demonstration and if raw data can be reviewed. The Ports' staff responded that as part of the grant project there are monthly

- and/or quarterly, and final reporting requirements that include analysis of the raw data collected, and discussion of the successes and challenges identified throughout the project. Raw data is not typically provided in lieu of monthly, quarterly, or final reports.
- One attendee inquired if there are any battery-electric or fuel cell harbor craft or ships in demonstration. The Ports' staff responded that there are no projects currently funded under the TAP that are demonstrating batteryelectric or fuel cell harbor craft or ships. The Ports are highly interested in and supportive of such projects. POLA is supporting the study of a hydrogen fuel cell tugboat, including the infrastructure and design, being developed in partnership between Crowley and CALSTART.

3. Status Update on Ocean-Going Vessel Strategies

- The Ports provided updates on the OGV measures and efforts under the CAAP, including vessel speed reduction programs, ship incentive programs, TAP demonstrations, and vessels at berth.
 - The Ports presented the OGV contribution to overall Port emissions, OGV emission reductions since 2005, and changes to OGV calls since 2005.
- The public was invited to provide comments and ask questions to Port staff.
 - Various attendees commented on the large number of OGVs at-anchorage. One attendee suggested the creation of a just-in-time arrival and slow-steaming program for OGVs calling the Ports. The Ports' staff responded that the Ports are currently engaging state and federal agencies and stakeholders to improve velocity throughout the supply chain.
 - One attendee inquired on the quantity of Tier III vessels calling the Ports. The Ports' staff responded that in 2020, 18 vessels with certified Tier III engines called POLA. As for POLB, in 2020, there were 15 Tier III vessel calls.
 - Several attendees urged the Ports to help accelerate the deployment of ZE OGVs.
 - One attendee inquired if the Ports are considering incentivizing OGV speed reduction beyond 40 nautical miles to aid with current congestion. The Ports' staff responded that the vessel speed reduction (VSR) programs are currently under review and additional boundaries with the program will be considered. All potential modifications to the VSR programs are being evaluated to ensure that they do not result in decreased participation. The Ports will engage stakeholders in the process as they evaluate the VSR programs.

4. Status Update on the 2021 Feasibility Assessments for Drayage Trucks & Cargo Handling Equipment

 The Ports' consultant, Gladstein, Neandross, and Associates (GNA), provided updates on the 2021 Feasibility Assessments for drayage trucks and cargo handling equipment (CHE).

- GNA outlined the structure of the feasibility assessments, including the basic parameters evaluated, the fuel-technology platform considered, and the sources of information used.
- GNA highlighted changes in the way information will be presented between the 2018 and 2021 feasibility assessments.
- GNA presented on the progress seen in the CHE and drayage truck types evaluated in the feasibility assessments.
- The draft feasibility assessments will be released for public review and comment in late 2021.
- The public was invited to provide comments and ask questions to Port staff.
 - One attendee inquired if the Ports will uphold their pledge to transition to ZE CHE and ZE drayage trucks by 2030 and 2035, respectively. The Ports' staff responded that both Ports remain committed to the ZE goals outlined in the CAAP. The Ports are taking steps to understand the infrastructure needed and to make sure the equipment can be properly demonstrated and deployed to meet those targets. The feasibility assessments are critical for the Ports and stakeholders to understand the development status of technologies and where challenges remain.
 - Several attendees commented that interim milestones and a plan are necessary in order for the Ports to meet their ZE goals and assess their progress. The Ports' staff responded that ultimately the terminals will decide on how they will transform their operations to ZE by 2030. The feasibility assessments will provide the terminals with information on the status of technology to help them make informed decisions. Terminal by terminal master planning is necessary.
 - One attendee inquired if the commercialization elements in the feasibility assessments match those being used by the California Air Resources Board (CARB) in evaluating commercial availability. GNA responded that the commercialization elements defined in the 2017 Feasibility Assessment Framework were used for the 2021 updates to the Feasibility Assessments. The reports will include a comparison of the Technology Readiness Level ratings to other assessments, including those from CARB. However, the reports do not specifically compare the commercial availability elements to commercialization elements that may have been developed by CARB since 2017.

5. Status Update on the Clean Truck Fund Rate

- The Ports provided a presentation on the Clean Truck Fund (CTF) rate.
 - A summary of the truck population in the Ports Drayage Truck Registry (PDTR) was provided.
 - Port staff presented on the steps for development and implementation of the CTF rate, spending plan and priorities for the CTF rate, and proposed changes to each Port's Tariff.
- The public was invited to provide comments and ask questions to Port staff.

- Several attendees urged that the Ports ensure that trucking companies are in compliance with labor laws and not misclassifying truck drivers so that the CTF rate is not forced onto truck drivers. The attendees also urged that companies that have been found to be misclassifying their drivers not be granted access to the Ports or awarded incentive funds. The Ports' staff responded that the issues raised are also the concern of both Port's respective Board of Harbor Commissioners (Board). The Harbor Commissioners do not want truck drivers and owners to bear the burden of the CTF rate. As a result, the collection mechanism for the CTF rate was designed in such a way that Beneficial Cargo Owners (BCOs) must establish credit accounts and pay the CTF rate before the cargo can be released.
- Several attendees commented that the drayage fleet must transition to ZE as soon as possible and by incentivizing low NO_x trucks the Ports will prolong the transition to zero emissions.
- Several attendees commented that the CTF rate is too low to aid in a speedy transition to ZE trucks and to improve air quality.
- A couple of attendees shared the belief that there is a disconnect between the two Ports on the CTF rate exemption and CTF rate spending priorities. The Ports' staff responded that the two Ports are aligned on the CTF rate amount, and the need to exempt low NO_x trucks if registered in the PDTR by the end of 2022. The differences between the two programs are that the exemptions expire on different dates, and the two Ports have identified different priorities for use of the funds. Exemptions and priorities outlined in the presentation for each port are based on stakeholder input and their respective Boards' direction. These priorities and proposed amendments to the Tariffs will be taken to the ports respective Boards for consideration. Any changes to the rate exemptions or spending priorities will be at the discretion of the two Ports' Boards.
- One attendee asked for a clarification on POLB's exemption for low NO_x trucks in their proposed amendment to the Tariff. The Ports' staff clarified that the proposal at the time of the CAAP Stakeholder Meeting was for any low NO_x truck that is added to the PDTR by the end of 2022 to be exempt from the CTF rate until the end of their useful life, consistent with California Senate Bill 1.
- One attendee inquired if the responses to surveys gathered during the CTF rate public workshops will be presented. The Ports' staff responded that a final report of the workshops will be included in the information presented to the Boards leading up to their consideration of the Tariff.

6. Additional Comments & Questions

- Participants provided additional comments and questions regarding port-related topics.
 - One attendee asked for an update on the status of the Memorandum of Understanding (MOU) with the South Coast Air Quality Management

- District (South Coast AQMD). The Ports' staff responded that the discussions with the South Coast AQMD are ongoing and that the Ports remain committed to the MOU process. Monthly status reports are provided at South Coast AQMD's Marine Ports Committee meeting.
- One attendee urged the Ports to significantly increase their investments in cleaning up pollution from all port-related sources and suggested a fee on all cargo.
- One attendee inquired if there are any public documents that show the current drayage trucks by model year. The Ports' staff responded that the annual emission inventories published by both ports include a chapter on heavy-duty vehicles, where a model year distribution is provided.