

# SAN PEDRO BAY PORTS CLEAN AIR ACTION PLAN

## Clean Air Action Plan Implementation Stakeholder Advisory Meeting MEETING SUMMARY

June 24, 2020

All meeting attendees participated via teleconference using the WebEx platform or by phone. Questions or comments were submitted via the CAAP email, WebEx Q/A feature, WebEx chat feature, or WebEx microphone feature.

### 1. Welcome Remarks

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

### 2. Amendment to the 2018 Truck Feasibility Assessment

- The Ports provided a presentation regarding the recent amendment to the 2018 Truck Feasibility Assessment.
  - The Final Truck Feasibility Assessment (Assessment) covering the period of 2018-2020 was released in Spring 2019.
  - The Assessment found that there are currently no zero or near-zero technologies that are fully feasible. Near-zero natural gas trucks are the closest and battery-electric trucks could be feasible soon.
  - In order for a technology to increase its Technology Readiness Level (TRL) the following *minimum* criteria must be met:
    - The findings must identify specific elements of the Assessment to be updated.
    - Supporting data and backup information specific to the requested elements must be provided.
    - The data must be validated by a third party with expertise and involvement with generation of data.
  - After receiving the final report for a South Coast Air Quality Management District (AQMD)/California Energy Commission (CEC) funded demonstration of 12L natural gas trucks utilizing the Cummins Westport ISX12N Engines in drayage service, the Ports, in consultation with AQMD determined that near-zero natural gas technologies for drayage applications has reached TRL 9 (scale from 1-9).

- In May 2020, the 2018 Feasibility Assessment for Drayage Trucks was amended to include the TRL status update for near-zero natural gas trucks.
- Importantly, in order for the near-zero natural gas truck to reach full feasibility in the Assessment, they must still satisfy the remaining criteria including operational feasibility, infrastructure availability, and economic workability.
- One attendee inquired as to whether or not the next feasibility study will assess all infrastructure costs, inclusive of those borne by utility rate payers. The Ports responded that infrastructure costs are included under two areas of the feasibility assessments - infrastructure availability and economic workability. Additional suggestions may be submitted via [caap@cleanairactionplan.org](mailto:caap@cleanairactionplan.org).
- A question was asked regarding whether or not the Assessment includes a comparison of the greenhouse gas (GHG) reduction potential of each truck the resulting improvements to air quality and reduction in pollutants. The Ports responded that the associated GHG and criteria pollutant reductions that would result from near-zero emission technologies are not specifically assessed. The assessment focuses on commercial availability, technical viability, operational feasibility, availability of infrastructure and fuels, and economic workability for near-zero and zero-emissions drayage trucks.
- One attendee requested that all feasibility studies include a list of all zero emissions trucks available for sale, their manufacturers, as well as a separate list of pilot and demonstration trucks and their manufacturers.
- One attendee asked whether or not the CAAP would be revised in the near-term. The Ports responded that the CAAP was recently updated in 2017. There are no near-term plans to update it. The Ports are heavily focused on implementing the strategies contained within.

### **3. Clean Truck Program Update**

- Port staff provided a status update on the Clean Trucks Program and next steps.
  - The Board of Harbor Commissioners for both Ports adopted a resolution in March 2020 that established Clean Truck Fund (CTF) Rate of \$10 per loaded twenty-foot equivalent unit (TEU).
  - The rate will not go into effect until the Ports adopt an implementation tariff to implement the rate.

- Given the impacts of COVID-19, as well as the global trade war, there is uncertainty as to when the rate will go into effect. The Ports are not anticipating implementation of the rate until 2021.
  - Zero-emission trucks will be exempt from the rate throughout the lifetime of the program. Other exemptions are under consideration.
  - The resolution adopted in March called for the development of a comprehensive long-term strategy plan that identifies activities that need to take place to achieve zero-emission trucks by 2035. Port staff have developed a scope, initiated this work, and will report back to their Boards on the status. The Port of Los Angeles will meet with their Board on July 23<sup>rd</sup>, and the Port of Long Beach will meet with their Board on July 27<sup>th</sup>.
  - The Ports are presently working on developing priorities and guidance for the truck incentive program, which will be funded by the dollars collected under the Clean Truck Fund Rate. Since April 2020, the Ports have held weekly discussions with agencies and other stakeholders.
  - In partnership with the California Air Resources Board (CARB) and AQMD, the Ports are developing a Truck Manufacturing Summit in order to identify the actions of policymakers, equipment operators, and other key stakeholders needed to build and transition to a market for zero emissions heavy-duty trucks. The Ports and the agencies have not yet finalized a date.
  - The Ports, in partnership with AQMD, are developing a proposal to the upcoming CARB and CEC grant funding opportunity for heavy-duty trucks. The \$40 million solicitation will fund a 50-100 zero-emission truck pilot. The Ports have developed a concept paper for the truck pilot, which can be found here:  
<https://cleanairactionplan.org/strategies/trucks/>.
- Port staff clarified that the Clean Trucks Program is primarily focused on Class 8 trucks that are used for port operations, rather than medium-duty trucks.
  - The Ports clarified that the zero-emission trucks will be identified at the gate for the purpose of the CTF rate using an RFID system, which can communicate with the Ports Drayage Truck Registry.
  - One attendee emphasized the importance of considering hydrogen as a zero emissions solution for trucks.
  - One attendee asked how the CTF rate will be billed/paid. The Ports responded that they are contracting with a third party, which will develop the rate collection mechanism.

- One attendee asked if there will be a requirement that the 3<sup>rd</sup> party administrator for the truck incentive program will be an independent 3<sup>rd</sup> party and not a subsidiary or affiliated with a terminal operator or shipping line. The Ports responded that the 3<sup>rd</sup> party administrator of the funds will most likely be AQMD, and will not be a party with a conflict of interest.
- An inquiry was received regarding the anticipated revenue from the CTF rate. The Ports responded that based on historic numbers for cargo volumes for loaded containers, the Ports initially anticipated approximately \$90 million. The pandemic as well as the global trade tariff have impacted cargo volumes moving in and out of the Ports. The amount generated will be based on cargo volume and will fluctuate from year-to-year.
- An attendee asked whether or not the Ports had an estimate regarding the total investment needed by different stakeholders and where the funding will come from. The Ports responded that they will need both public and private investment to make zero-emissions a reality. The CAAP always indicated that the CTF rate alone would not generate enough revenue to fund the entire transition. The Ports anticipate billions of dollars will need to be invested.
- One attendee requested an update on charging infrastructure for trucks. The Ports noted that infrastructure is a regional challenge and many partners are looking at this, including the Southern California Association of Governments and Southern California Edison.
- A question was asked regarding public engagement on the Comprehensive Long-Term Plan for drayage trucks. The Ports responded that they plan to share a draft, targeting the end of summer. The July Board updates will also be webcast and archived on both Port websites.
- An attendee suggested the near-zero emission truck exemption under the CTF rate should be at least through 2031 and beyond.
- One attendee suggested the near-zero exemption for the CTF rate should include the 2014 CNG first generation trucks.
- A concern was raised that misclassified truck drivers would pay the CTF rate. The Ports responded that the CTF rate will be charged to the Beneficial Cargo Owners (BCO).
- One attendee suggested the Truck Manufacturers Summit should be exclusive to zero emission manufacturers and the CTF rate should be spent exclusively on zero emission technologies and trucks.

#### **4. Status Update on Current Technology Demonstrations**

- The Ports provided updates on the Technology Advancement Program (TAP) and technology demonstration projects in progress.
  - The TAP Program Guidelines were recently updated to include a new Request for Information (RFI) and Concept Paper process. Concept papers can be submitted at any time. Three concept papers are currently under review for consideration.
  - The Ports presented a new, \$3.2 million project with AQMD to reduce NO<sub>x</sub> emissions from ships in transit through demonstration of a water-in-fuel retrofit system designed and developed by MAN Energy Solutions.
  - Other TAP demonstrations were discussed, including the Centerline Electric Drive Tugboat Design, Nett Technologies BlueMax™ NOVA 320e Harbor Craft Demonstration, Effenco Active Start-Stop™ Technology Demonstration, and the AQMD/DOE Zero Emission Cargo Transport Demonstration II (ZECT II).
  - The Port of Long Beach has received grant funding from local, state, and federal agencies for equipment and infrastructure demonstrations. To date, four electric yard tractors have been delivered, commissioned, and are in service. Additional pieces of equipment will be coming on line in the coming months, including electric rubber-tire gantry cranes.
  - The Port of Los Angeles similarly has numerous grant-funded demonstrations underway. There are currently electric yard tractors, renewable natural gas yard tractors, and electric top handlers in use. The ShoreKat land-based at-berth emissions control system continues to be operated. Additional vehicles and equipment will be delivered and commissioned in the coming months.
  - The Ports have experienced COVID-19 related impacts to the technology demonstrations. These include delayed data collection and on-site terminal testing due to limited access and travel restrictions, paused demonstrations due to low freight volumes, and closure of some partner businesses and facilities. COVID-19 impacts will be tracked on an ongoing basis.
- The Ports clarified that they are technology neutral, and equally interested in hydrogen fuel cell projects as they are in battery-electric.
- The Ports clarified that the technology demonstrations are mostly focused on reducing criteria pollutants due to the negative health impacts to our

local community. The Ports are also interested in reducing greenhouse gas emissions to address our global footprint.

- The Port of Los Angeles clarified that the Shell hydrogen station funded by their ZANZEFF project will supply gaseous hydrogen at a rate of 1000kg/day.
- One attendee inquired how the Port of Long Beach is going to expand cold-ironing and other forms of electrification of ships to reduce emissions. Port staff responded that they are following the development of the At Berth Regulation and will work with CARB to fulfill any Port requirements accordingly.
- An attendee asked whether or not regulatory agencies are working with the Ports and industry towards implementation of a regulation that would bring cleaner ships to California. The Port responded that they are not aware of any rulemaking under development which would require cleaner ships to come to California.
- One attendee questioned whether the Port of Long Beach had explored creating a Joint Powers Authority with the City to create a Community Choice Aggregation program. The Port of Long Beach responded that the City of Long Beach would need to initiate a Community Choice Aggregation program.

**All presentation slides can be found on the CAAP website and accessed using the following link: <https://cleanairactionplan.org/documents/6-24-20-stakeholder-advisory-meeting-presentation.pdf>.**