MEETING SUMMARY
October 14th, 2020

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

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

2. San Pedro Bay Ports Annual Emissions Inventory
   a. The Port of Long Beach and the Port of Los Angeles (Ports) reported on the combined Air Emissions Inventory results for 2019, although each port publishes separate reports that can be found on their respective websites. The emissions inventory methodology was summarized, the container throughput and containership arrivals were reported, the emission reductions observed compared to the baseline year of 2005 (88% DPM, 60% NOx, 97% SOx, 17% GHG) and year over year (4% DPM, 5% NOx, 4% SOx, 5% GHG) were reported, and the high level concepts the Ports will pursue to achieve further emission reductions were discussed.
   b. The public was invited to provide comments and ask questions of port staff. Questions included:
      - One participant asked for the particulate matter (PM) reductions year-over-year for POLA alone. The Ports clarified that the numbers presented were the joint POLA/POLB numbers. For POLA alone, PM$_{2.5}$, PM$_{10}$, and DPM were down 5% year-over-year.
      - One attendee inquired whether the Ports are exploring with South Coast Air Quality Management District (AQMD) and California Air Resources Board (CARB) whether the large cargo volumes during the summer months have worsened ozone levels. The Ports responded that the emissions data for both ports for 2020 will not be analyzed until 2021 in accordance with the annual emission inventory schedule. However, the Ports have been working to identify differences in air quality as a result of the disruptions of COVID-19.
      - One attendee asked the Ports to comment on the substantial increase in dwell time for containerized traffic that the Ports are experiencing. The Ports responded that they will reach out to their business and operations team and provide more information at a later time.
      - Several participants asked if the emission reductions were broken down by source category. The Ports responded that the reductions are broken down by sources and can be viewed separately in each Port’s emission inventory report.
One attendee inquired as to why emission reductions have slowed since the 2017 CAAP update. The Ports responded that the “low hanging fruit” has been taken in the early stages of the CAAP implementation, such as the initial Clean Truck Program, transition to low sulfur fuel, and the initial Vessel Speed Reduction program. Because there was a significant amount of older, dirtier equipment operating on dirtier fuels, the Ports were able to get large reductions just by changing fuels and moving to new, cleaner engines. There are continued emissions benefits of new programs and moving toward zero emission (ZE) technologies will allow the Ports to continue to see benefits, but these are not commercially available technologies and require more development.

There were several questions about vessels in the inventory. The Ports clarified that there are no data available on the emissions produced per ship call, but port staff do have information on emissions by source category, which allows for an analysis of emission reductions on a TEU basis. That analysis shows that the emission reduction efforts for vessels are resulting in a decrease in emissions/TEU over time.

A couple of attendees suggested that future emissions inventories expand on ocean-going vessels emissions efficiency to include a breakdown by growth of ship size and ship fleet turnover to cleaner tiers.

One attendee inquired if the effects of the Governor’s executive orders on shore power usage will be factored into the 2020 emissions inventories. The Ports responded that the results will be captured in the 2020 emissions inventories.

3. Status Update on Current Technology Demonstrations
   a. The Ports provided an update on the Ports’ Technology Advancement Program (TAP), the Ports’ grant funded technology demonstrations, and COVID-19 impacts:
      • The Ports are reviewing three proposals for the TAP and will provide additional information at subsequent meetings.
      • An update was provided on the yard tractor demonstrations at both ports (both natural gas and ZE), the ZE top handler demonstrations, eRTG at POLB, and the POLA Shore-to-Store project including the Kenworth Toyota hydrogen fuel cell ZE trucks and the Shell hydrogen fueling stations.
      • The Ports also summarized the COVID-19 impacts that are being experienced across the demonstration projects, including slowed equipment production, limited terminal access, and travel restrictions.
   b. The public was invited to provide comments and ask questions of port staff.
      • One attendee inquired about the source of funding for the demonstration projects (public vs. private). The Ports indicated that the technology demonstration projects are mostly funded from public funds (e.g., CARB funds, California Energy Commission (CEC) funds); however all projects require match share from partners (ports, terminals, technology providers, etc.) that is usually a minimum of 50% of the total project cost.
      • One participant wanted to know how the electric top handlers at POLB were being used. POLB staff responded that the one at LBCT is primarily
used for the train operation, while the two at Pier J are mainly used for yard cargo work and may be used for train operation.

- Another participant was interested in hydrogen fuel cell demonstrations at the Ports. The Ports responded that there are some new hydrogen fuel cell proposals that have been submitted to the TAP, and more updates on those would be provided next quarter. There is also an electric-fuel cell top handler that will be demonstrated at Fenix Marine and is expected to arrive early next year to begin demonstration.

- One attendee asked if the Ports offer funding incentives for near-zero or zero emissions freight handling equipment, such as locomotives or rail car movers. The Ports responded that they currently offer funding for demonstration projects that are approved through their TAP. The Ports’ TAP focuses on projects that reduce emissions from port operations, specifically ships, cargo handling equipment, harbor craft, trucks, and locomotives.

- One attendee inquired whether the Ports are engaged with LA Department of Water and Power and Southern California Edison for on-site renewable and energy storage to support new loads for the zero emission equipment demonstrated through the TAP. The Ports responded that they have engaged their power providers for their projects and future needs.

4. **Clean Truck Program Update**
   a. The Ports provided a presentation on the Clean Truck Program (CTP) including:
      - Review of the 2017 CAAP Update CTP goals and a status update on the implementation.
      - Summary of the truck population in the Port Drayage Truck Registry.
      - Update on key regulatory activities at CARB (Advanced Clean Truck Rule, Low NOx Omnibus Rule) and the governor’s recent Executive Order.
      - Discussion of the Ports’ development of the CTP long-term implementation strategy document and the status of the draft that will be released for public comment.
      - City of Los Angeles’ private financing forum that occurred on September 29, 2020 to consider opportunities/models for private investment to support the CTF Rate to help finance ZE trucks leading the 2035 CAAP goal.
      - Truck OEM Summit progress, which is planned as two smaller workshops culminating with a public summit, with dates being finalized and anticipated to occur in the next 4-6 weeks.
      - Upcoming 50-100 truck demonstration solicitation from CEC and CARB, and the partnership between the Ports and South Coast AQMD to develop a concept ahead of the release of the solicitation, expected in the next month.
   b. The public was invited to provide comments and ask questions of port staff. Questions included:
      - One participant asked if the ZE trucks currently operating at the ports are battery electric or hydrogen fuel cell. The Ports responded that currently the ZE trucks are predominantly battery electric with one hydrogen fuel cell truck.
• Another participant asked how long “near zero” or natural gas trucks would be able to operate in the ports. The Ports responded that the goal is for all trucks to be ZE by 2035.

• Several participants asked about the implementation of the CTF Rate and the metrics that would be used to decide when to begin implementation. The Ports noted that we are committed to moving forward with the rate and that the situation is being monitored closely, but given how dynamic things are, it is not clear when the implementation of the rate would begin. Port staff are monitoring a multitude of metrics.