

SAN PEDRO BAY PORTS

CLEAN AIR ACTION PLAN

Clean Air Action Plan Implementation Stakeholder Advisory Meeting

MEETING SUMMARY

November 8th, 2023

All meeting attendees participated via teleconference using the Zoom platform or by phone.

Questions or comments were submitted via the Zoom Q/A box and microphone feature.

1. Welcome

- Tim DeMoss, Port of Los Angeles (POLA) Air Quality Environmental Affairs Officer, Lisa Wunder POLA Interim Director of Environmental Management, and Heather Tomley, Port of Long Beach (POLB) Managing Director of Planning and Environmental Affairs made opening remarks.

2. Status Update on the 2022 Emissions Inventories

- The Ports presented the joint results of the San Pedro Bay Ports (SPBP) 2022 Air Emissions Inventory, which measure various air pollutants, specifically particulate matter 10 microns or less in diameter (PM10), particulate matter 2.5 microns or less in diameter (PM 2.5), diesel particulate matter (DPM), nitrogen oxides (NOx), sulfur oxides (SOx), carbon monoxide (CO), hydrocarbons (HC), and carbon dioxide equivalent (CO₂e).
- Unique factors that affected the 2022 SPBP Air Emissions Inventory were explained. For example, the vessel queueing system adopted by the industry was implemented in late 2021, which instituted slow steaming and instructed vessels to wait for berth 150 miles off the coast. This effort combined with other measures eased vessel congestion by mid-2022. Other factors that affected the report included an increased number of Tier III vessel visits, a reduction of cargo throughput compared to 2021, cleaner trucks calling at the Ports with 2014 or newer engine year, and cleaner cargo handling equipment.
- The results of the 2022 SPBP Air Emissions Inventory were promising. Compared to 2021 (which was an anomaly year) DPM, NOx, SOx, and greenhouse gases (GHGs) associated with operations at the San Pedro Bay Ports were reduced by 30%, 31%, 36%, and 19%, respectively, while total twenty-foot equivalent unit (TEU) throughput was down 5%.
- Compared to 2005, DPM, NOx, SOx, and GHG emissions have drastically dropped by 90%, 63%, 97%, and 3%, respectively, while TEUs increased by 34%.
- Port staff acknowledged previous stakeholder feedback to compare annual emissions to a more recent benchmark. Port staff plans to accommodate this request by adding a benchmark year of 2017, in alignment with the 2017 Clean Air Action Plan (CAAP) Update. Future emissions inventories, including the 2023 SPBP Air Emissions Inventory, will compare back to 2017 in addition to 2005 and the previous year.

- Moving forward, the Ports will continue to support technology advancement, apply for grants to fund demonstration and deployment projects, and will continue to collaborate with state and federal agencies on policies and regulations supportive of CAAP goals.
- The Ports will continue to implement their vessel incentive programs, progress Green Shipping Corridors, and make critical investments to support zero-emission (ZE) trucks through Clean Truck Fund Rate investments.
- All emissions inventory reports are available for the public review online at both Ports' websites. POLB's Air Emissions Inventory can be found [here](#), and POLA's can be found [here](#).
- The public was invited to provide comments and ask questions to Port Staff:
 - One commentator expressed frustration that the emissions inventories demonstrate greater reductions in early years compared to later years. Port staff acknowledged that more dramatic reductions occurred in the early years when we were starting from much higher emitting equipment, but chipping away at the remaining emissions is more challenging. In addition, reducing emissions from the ports' operations will occur in a nonlinear fashion going forward, especially as the ports transition to zero emission operations. ZE equipment requires substantial infrastructure that requires years to be installed. Thus, diesel equipment will be replaced with new, cleaner, ZE models, as infrastructure becomes available on a terminal by terminal basis.
 - Another commenter expressed support for comparing Air Emissions Inventory data to the 2017 CAAP Update, and expressed concern that CO2 levels have increased globally. Port staff acknowledged this and highlighted that international cooperation is necessary to reduce emissions worldwide, such as efforts like the Green Shipping Corridors.
 - A commenter asked whether we could try to compare some of the data to the year 2019 due to the United Nations using it as their base year to check emissions and global warming.
 - One participant asked why the data showed a downwards trend in emissions between 2021 and 2022. Port staff responded that it is difficult to pinpoint just one reason or regulation that is responsible for the emissions benefits, noting that there are multiple source categories for emissions and it is most likely a combination of various efforts that resulted in the emissions benefits. More information is available in the Ports' respective Air Emissions Inventories.
 - One attendee requested more information as to what the air quality emissions at the Ports were compared to the surrounding area. Port staff clarified that air quality monitoring is a separate measurement and monitoring effort from the Air Emissions Inventory. Comparison of the Ports' air monitoring data to nearby South Coast Air Quality Management District (SCAQMD) monitors is provided in the annual air monitoring reports, which can be found [here](#). Further, it is important to understand that the Ports' air monitoring networks pick up all regional pollutants, not

just Port-related mobile sources. Uncontrollable factors such as fire and dust could be picked up by the air quality monitors as well.

3. Status Update on the Clean Trucks Program

- The Ports provided a status update on the implementation of the Clean Truck Program and the Clean Truck Fund (CTF) Rate.
- The CTF Rate is charged to the Beneficial Cargo Owner or their agent for loaded containers entering/exiting the Ports on trucks that are not ZE or exempted under the Ports' respective low NOx truck exemptions. The funds are used to support the transition to ZE drayage trucks.
- The Ports reported that they are collecting between \$2.5 million to \$4 million monthly at each port through the CTF Rate since implementation started on April 1, 2022. Through September 2023, the Ports have collected approximately \$116.1 million. Approximately \$74 million has been allocated to ZE trucks and infrastructure at both Ports to date.
- Each year, the Ports develop their individual CTF Rate Spending Plans for approval by their respective Boards of Harbor Commissioners. Both Ports are prioritizing ZE truck vouchers, with some funds going to infrastructure and pilot/demonstration projects during year 1. The year 2 fund apportionment earmarks a majority for infrastructure projects, while continuing to fund truck vouchers and pilot/demonstration projects at a lower level.
- POLA reported updates on the Request for Proposals (RFP) for ZE Truck Deployment released in late 2021. This project aimed to deploy 10 or more ZE trucks and associated infrastructure before the end of 2022. POLA's Board approved two proposals for a total of \$6 million to fund 22 trucks. One project has deployed all 10 trucks. A second project has ordered their 12 trucks with expected delivery around December 2023.
- The Ports gave an update on the collaboration with California Air Resources Board (CARB) to provide supplemental funding to Hybrid Voucher Incentive Project (HVIP) vouchers using CTF Rate funds through the ZE Truck Voucher Incentive Program. Port staff delivered progress updates regarding their respective CALSTART contracts. The POLB contract was executed in April 2023. POLA's amended contract was executed September 2023. CALSTART has been developing the administrative processes and the supplemental funding is scheduled for release on November 14, 2023. Each port will provide up to \$30 million for this round of voucher funding.
- An update was provided regarding solicitations for development of public charging for drayage trucks, which may be partially funded using CTF Rate dollars. The first solicitation through POLB for additional charging at the Terminal Access Center was released July 6 and closed October 2. The second solicitation for the Pier B/Carrack Avenue site is expected to be released in 2024. POLA's RFP for a site located in Wilmington was released July 20 and closed October 18.

- The Ports continue working with the Mobile Source Air Pollution Reduction Review Committee (MSRC) to support charging/fueling infrastructure projects that will be ZE drayage trucking focused. Port staff has evaluated submitted proposals that will support drayage. The proposed total project cost of selected projects is \$140.5M, with a requested funding amount of \$28.5M (\$14.26M per port). The final selections and funding amounts must be approved by each Ports' Board of Harbor Commissioners.
- The Ports continue coordination with CARB. They met with CARB enforcement staff to locate sites for placement of remote sensing equipment to support the Clean Truck Heavy Duty Inspection and Maintenance (HDI&M) regulation.
- Port staff supported CARB for a two-day truck outreach event at the Terminal Access Center in October 2023, which included TWIC on-site enrollment. Over 125 participants engaged with CARB staff to discuss the recently adopted Advanced Clean Fleets and HDI&M rules. The Ports are planning to host another in-person event with CARB before the end of the year.
- Looking forward, both ports will continue to monitor implementation of the CTF Rate and respective spending plan roll outs, and will continue to coordinate with CALSTART and CARB on the truck voucher supplement program.
- The public was invited to provide comments and ask questions to Port Staff:
 - One commenter expressed urgency to reduce DPM emissions and encouraged the industry to transition to ZE trucks and ZE cargo handling equipment as quickly as possible. Another participant echoed this sentiment and added the suggestion of supporting shipments by rail over truck in order to expedite emission reductions. Port staff acknowledged locomotives as an efficient mode of transport, and explained that currently 25% of containers are moved by trains, and 75% moved by trucks. In order to increase container capacity for locomotives, rail infrastructure needs to be expanded. Expansions can take significant time, but both Ports are actively working on rail enhancement and expansion projects.
 - Multiple commentators asked if there are plans to increase the CTF rate. Port staff are monitoring the implementation of the CTF Rate, including the demand for the incentives and the allocation and spending of the funds. There are no plans to bring a rate increase before the Board for their consideration in the near-term.

4. Status Update on the 2030 Zero Emission Cargo Handling Equipment Goal

- The Ports presented a status update on the 2030 ZE Cargo Handling Equipment (CHE) Goal
- Port staff described the significant collective efforts of the Ports, the terminal operators, and equipment manufacturers to spur technology advancement, demonstrate equipment, and plan and build out the required infrastructure. This work comes at significant cost. The two ports expect it will cost billions of dollars to achieve the ambitious goal for ZE CHE by 2030. Thus, grants for CHE related projects have been and will continue to be critical to success.

- The Ports conducted feasibility assessments for CHE in 2018 and 2021, which evaluated the current state of ZE technology. Some of the ways these reports analyzed feasibility was to look at operational and technical feasibility, infrastructure, safety, workability, and other similar factors. Port staff reported that some technologies have demonstrated commercial viability, while others still need significant advancement. Development of the next assessment is slated to start in 2024 for release in early 2025.
- More than \$360 million in grant funding has been secured by the Ports to implement ZE demonstration and deployment projects. Additional funding has been provided by the Ports to support commercialization of CHE through their joint Technology Advancement Program (TAP).
- Three POLA ZE projects were highlighted as part of the presentation:
 - Pasha Green Omni Terminal's Demonstration focus was testing ZE technology throughout the entire scope of terminal operations with yard tractors, forklifts, on road trucks, charging infrastructure, and microgrid.
 - Everport Advanced CHE Projects completed demonstration. The projects focused on the operational viability of ZE battery electric top handlers and yard tractors supported by both standard and Smart Charging options.
 - WBCT Advanced Infrastructure Development focused on demonstrating the scaling of CHE charging infrastructure, inductive charging pads in conjunction with 10 battery electric yard tractors and a peak shaving battery system.
- POLB has received both state and federal grants totaling over \$328 million to further the development and deployment of ZE equipment, vehicles and advanced energy systems in Port operations.
 - POLB was awarded a \$30 million Port Infrastructure Development Program grant from the U.S. Maritime Administration for the Middle Harbor Terminal ZE Conversion Project in 2022. The grant will fund 60 pieces of ZE CHE and support charging infrastructure.
 - In 2023, POLB was awarded \$224.9 million from the California State Transportation Authority Port Freight and Infrastructure Program. This award will fund three new competitive grant programs for ZE terminal equipment, ZE locomotives, and cleaner harbor craft. In addition, \$73 million will be allocated towards specific ZE terminal equipment projects, \$10 million towards a ZE capable tugboat, and \$34.5 million towards ship-to-shore power projects.
- Port staff acknowledged the various challenges with infrastructure demonstrations, citing that real estate on terminal is limited, and certain ZE initiatives such as inductive chargers in dedicated ZE drayage queuing lanes take space that would otherwise be used as a driving/ turning lane for trucks. Most current ZE CHE also has a limited use time before it needs to be charged again. The goal is for ZE equipment to make it through 2 full 8-hour shifts before having to fully recharge/refuel.
- POLA is in the process of planning for terminal infrastructure projects. They worked with Los Angeles Department of Water and Power (LADWP) and Electric

Power Resource Institute (EPRI) to complete a study on grid upgrades. POLA is in the process of meeting with all of its major container terminals and collecting information to publish a ZE Terminal Transition Plan in Spring 2024.

- Planning for the future, the Ports will be seeking grant funding from local, state and federal sources to implement additional ZE deployment projects in order to reach the 2030 Goal laid forth in the CAAP.

5. San Pedro Bay Ports and South Coast Air Quality Management District Approach to \$3 Billion U.S. Environmental Protection Agency (EPA) Clean Ports Program

- The Ports along with South Coast Air Quality Management District (SCAQMD) presented on the new EPA Clean Ports Funding Program.
- The Inflation Reduction Act of 2022 allocated \$3 Billion for ZE Port projects and climate and air quality plans. This funding is administered by the EPA.
- The notice of funding opportunity (NOFO) is anticipated in February of 2024. Proposed maximum awards are \$2-\$3 million for planning and \$500 Million for ZE implementation projects.
- The Ports participated in the EPA Clean Ports Program First Look Workshop held on October 31, to obtain further information on the application process. Some legislative requirements were detailed revealing insights into what may be included in the NOFO, but no formal guidelines were released by the EPA yet.
- SCAQMD staff presented on the benefits of SCAQMD, POLB, and POLA working together. The collaboration will enable these entities to maximize grant funding awards for regional freight projects, to thread a common narrative to conserve resources, and to holistically address air emissions.
- The Ports' focus will be to prioritize CHE, ship-to-shore power, harbor craft, infrastructure, and related studies, while SCAQMD will focus on locomotives, trucks, infrastructure, and R&D studies.
- Port staff and AQMD emphasized the importance of stakeholder engagement, and plan to leverage CAAP stakeholder meetings, AB617 community meetings, ongoing meetings with environmental and community groups, and Sustainable Supply Chain Advisory Committee meetings for this effort.
- This presentation was concluded with some guiding questions for discussion which are as follows:
 - Do you support the proposed collaborative approach?
 - What project types are most important to you?
 - How can we ensure sufficient stakeholder input is collected during the application development?
 - What types of engagement with stakeholders would you like to see throughout project life?
 - How can we promote community benefits through our projects?
- Interested parties were encouraged to reach out to the Ports at caap@cleanairactionplan.org or SCAQMD at EPACleanPortsGrant@aqmd.gov with project and engagement ideas.

- At this point, the public was invited to provide comments and ask questions to Port Staff:
 - One attendee asked if the Ports were on track to achieve the CAAP target for GHG emissions 40% below 1990 levels by 2030. Port staff responded that there is still significant work to be done, but there are a lot of ongoing projects that will bring the Ports closer to that goal, such as the Ports' ship incentive programs, Green Shipping Corridors, the joint Technology Advancement Program, the Ports' grant funded clean technology projects, and implementation toward the ZE goals. Additionally, the Ports noted the record levels of funding available to support decarbonization at Ports today, and that recently adopted rules such as the At Berth Regulation, which the tenants are implementing, will play an important role.
 - Another participant asked about having metrics for yard equipment to gauge progress, and if the Ports are on track to meeting 2030 CAAP goals. Port staff answered that the infrastructure master planning work currently being done will help to identify meaningful targets, because infrastructure is the most important factor when it comes to the transition to ZE CHE. Further, the Ports shared in a prior presentation that design of ZE terminals is already underway.
 - A few commentators noted the spike in air pollution from the ships waiting at berth due to the COVID-19 pandemic and expressed concern over any future potential spikes in emissions from ships at anchorage. One suggestion from a member of the audience was to explore the possibility of offshore charging which is a concept supported by Maersk.
 - A community participant in the meeting commented that shipping, specifically ship pollution is of importance to them.

- Due to the meeting running over schedule and to be respectful of everyone's time, further public comments were encouraged to be sent to caap@cleanairactionplan.org.