

SAN PEDRO BAY PORTS

CLEAN AIR ACTION PLAN

Clean Air Action Plan Implementation Stakeholder Advisory Meeting

MEETING SUMMARY

October 3, 2019

1. Welcome Remarks

- Heather Tomley, Port of Long Beach Acting Managing Director of Planning

2. Clean Trucks Program

- Port staff provided an update on the Clean Trucks Program and next steps.
- The Ports are in the process of developing the Clean Truck Fund (CTF) Rate. A second public workshop to inform stakeholders is tentatively scheduled to be held in late October. The Ports plan to propose a rate amount for adoption by the respective Boards in November.
- One attendee asked if the low-NOx trucks being incentivized by the Ports were diesel or natural gas, since the negative health impacts of diesel particulate matter make switching to natural gas important for immediate reductions in harmful pollutants. The Ports responded that the low-NOx trucks are natural gas.
- One attendee asked if there was jeopardy to the CTF Rate Study if the Feasibility Assessments are dynamic. The Ports responded that the CTF Rate Study is not contingent upon the Feasibility Assessments, and that we have committed to updating the Feasibility Assessments at least once every three years, but will continue to evaluate the technology to see if any significant changes could trigger an update in the interim.
- The comment was made that while there has been a lack of availability of low-NOx trucks, the low-NOx engines are now being produced more quickly and truck availability is improving.
- One attendee asked the purpose of the CTF Rate Study. The Ports responded that the purpose of the study is to evaluate the impacts of different rates on the marketplace, potential cargo diversion, and the potential to generate a fund for incentives. It will not include the Ports' proposal, but will be used by the Ports in their development of the proposed rate. The Ports plan on doing a presentation on the results of the Rate Study, along with a presentation on the proposed rate itself, at a second public workshop. The Ports indicated that the workshop would be held later in October. The respective Boards, however, will make the final determination on the rate.
- One attendee asked when beneficial cargo owners can provide comments on the rate. The Ports responded that as soon as the rate proposal is made public, comments can be provided to the Ports.
- The Los Angeles Clean Technology Incubator commented that they did a study on zero emission heavy-duty truck technology and found that there are 50-100 zero emission truck pilots that will be conducted over the next few years, and that the California Air

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Resources Board (CARB) and California Energy Commission were looking into funding additional pilots. The Ports responded that a concept paper for a 50-100 truck demonstration project was currently in development and once completed would be used to help secure funding for the project.

3. Current Technology Demonstrations

- Port staff presented status updates on the Ports' respective grant-funded demonstrations, as well as on current efforts of the Ports' joint Technology Advancement Program (TAP).
- The Port of Long Beach has received grant funding from local, state, and federal agencies for equipment and infrastructure demonstrations. To date, one electric yard tractor has been delivered, commissioned, and is in service. Additional pieces of equipment will be coming on line in the coming months.
- The Port of Los Angeles similarly has numerous grant-funded demonstrations underway. There are currently electric yard tractors and an electric top handler in use, and the ShoreKat land-based at-berth emissions control system has been used against four ships. Additional vehicles and equipment will be delivered and commissioned in the coming months.
- One attendee wanted to know how long the demonstrations lasted. The Ports responded that the grants all have different start and end dates, and different demonstration periods, but that the funding agencies typically have demonstration periods of about 12 months.
- One attendee asked for a status update on the older TAP projects. The Ports responded that in some cases the projects have been completed, as is the case with the Maersk project. In other cases the projects have stalled, and the Ports will report out when more information is available.
- An attendee asked for further information on the Tier III ocean-going vessel (OGV) projects at both Ports. The Port of Los Angeles responded that the Pasha OGV travels the Hawaii/Oakland/San Pedro Bay triangle route and will have diesel/natural gas dual fuel capabilities. When the ship operates on natural gas it reaches Tier III standards. The Port of Long Beach responded that the Matson OGV similarly travels the same triangle route, but has diesel engines with selective catalytic reduction aftertreatment of NO_x.
- One attendee asked if the dollar amounts reported in the presentation represented only the grant amounts or the total project costs. The Ports responded that the amounts presented are only the grant amounts, and that there is significantly more in total funds going to these projects.

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4. Feasibility Assessments

- Port staff presented on the current status of the technology feasibility assessments for on-road trucks and cargo handling equipment.
- The final Cargo Handling Equipment assessment was posted to the CAAP website on September 20, 2019. The final Truck Feasibility Assessment was posted to the CAAP website on April 3, 2019.
- One attendee wanted to know if the consultants conducting the Feasibility Assessments did actual testing of the equipment to evaluate its functionality. The Ports responded that while there were no specific test drives conducted for these assessments, the consultants did take into consideration current demonstrations and technology provider information when evaluating the technologies.
- One attendee requested a more formal response to the request for more frequent updates to the assessments. The Ports will discuss the issues internally to determine what can be committed to given that each Ports' respective Boards agreed to a three-year update frequency.

5. Air Emissions Inventory Results

- Port staff provided the results of the San Pedro Bay Ports Air Emissions Inventory.
- While container throughput is up 24% since 2005, emissions continue to decrease.
- It was noted that while the average number of containers per call continue to increase, total container ship calls are declining.
- Both Ports' Emissions Inventories are available on their respective websites.
- One attendee wanted to see the year-over-year change as opposed to the comparisons to 2005. The Port of Los Angeles responded that their posted Emissions Inventory report does include year-over-year calculations, and that while the Port of Long Beach does not include this analysis, the general emissions trends should be similar between the two Ports.
- One attendee noted that while there has been a reduction in emissions, there is an urgency to do more due to the severe health impacts of diesel emissions on the community.

6. At Berth Emission Reduction Updates

- Port staff provided updates on at berth emissions from OGVs. The presentation included a description of the emissions profiles from vessels, at berth emission reduction strategies, and current requirements for emission reductions at berth.
- CARB's new At Berth Regulation was discussed, including the proposed regulatory structure and the Ports' recommendations to CARB on the proposed regulation.
- One attendee asked about the impact of the International Maritime Organization's (IMO) 2020 regulations on diesel fuel sulfur content. The Ports responded that the regulation will not have any direct impact here due to the current requirement for vessels to use low sulfur fuel. However, the IMO regulation will have a dramatic global impact.

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- One attendee noted that there is the potential to get another 20% emission reduction from OGVs by moving to all Tier III engines. The Ports noted that there is a new build requirement for Tier III vessels, but existing vessels are grandfathered.

7. Open Question and Answer Session

- One attendee asked if there is a survey or map that shows the statistics of the incidence of cancer and type of cancer around the Ports, and what, if anything, was being done about coke exports. The Ports responded that the Office of Environmental Health Hazard Assessment has the California Communities Environmental Health Screening Tool (CalEnviroScreen), which identifies California communities by census tract that are disproportionately burdened by, and vulnerable to, multiple sources of pollution. In addition, the South Coast Air Quality Management District (SCAQMD) has the Multiple Air Toxics Exposure Study (MATES), which is a monitoring and evaluation study conducted in the South Coast Air Basin (Basin). MATES is continually updated and includes a monitoring program, an emissions inventory of toxic air contaminants, and a modeling effort to characterize risk across the Basin. Regarding coke exports, the Port of Long Beach responded that there was a lease extension for the terminal that exports coke about five years ago, but the volumes of exports were not available at the time of the meeting.
- One attendee asked if there were high level discussions occurring with labor to ensure that labor is not adversely impacted by CAAP implementation, specifically as related to plugging in the equipment. The Ports responded that both Ports are engaged in studies to consider the future of labor in the face of the transition to zero emissions. With regard to the issue of plugging in the terminal equipment, the Ports indicated that the issue is currently being handled on a terminal-by-terminal basis depending on their operational constraints and the technology being deployed.
- One attendee asked for a status update on the rail improvements in order to achieve the CAAP goal of 50% of all cargo moved by rail. The Ports responded that both ports are working to improve rail use, studying the ability to improve efficiencies, and expanding rail yards.
- Several attendees asked about trucks and what was being done to help drivers get into new trucks that work, as well as turn over the truck fleet not only around the Ports, but in the whole region. The Ports responded that the Ports are taking care to structure the CTF Rate in such a way as to minimize the impact to drivers as well as generate a fund to assist in purchasing new vehicles. Trucks have a large impact on the emissions inventory and so a lot of focus is on reducing truck emissions, but that doesn't mean it has to hurt drivers and the Ports are doing what they can to help get the technology commercialized. The overall approach will need to be regional, and the SCAQMD is supplementing the Ports efforts by working on warehouse requirements as well as other programs.
- One attendee asked the Ports to characterize the largest obstacles to getting to the 2030 goals. The Ports responded that while the terminal equipment is coming along, the bigger hurdle right now is the on-road zero emission trucks and the size of the drayage

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truck fleet. Given the regional infrastructure challenge as well, the equipment technology needs to be developed while the infrastructure is being upgraded and installed.

- One attendee asked if there was a need to better prioritize the money the Ports have or if additional money was needed to aid the transition to zero emissions. The Ports responded that there is not enough money committed from the Ports and other government programs, and as such public-private partnerships will be needed. In addition, while public funds are needed in the early stages to advance the technology, as standardization and commercialization move forward, the price of the technology will need to come down to a point where it will make business sense for companies to invest in this equipment due to the favorable return on investment.
- An attendee expressed concern over the time it is taking to do these demonstrations with equipment that's not yet commercialized. Current equipment is harming the community and there is a need to eliminate diesel equipment in the near term.
- One attendee noted that CARB provided the Ports with a letter indicating that the Ports can adopt a rate today based on the optional standard, and could fund both zero and near-zero trucks today. The question was asked whether this letter would influence the speed of rate adoption and if the rate would be based off the cleanest standard. It was additionally noted that any standard adopted by CARB will not come into effect until 2024, and it will take additional time for the trucks meeting these new standards to come into the marketplace. The Ports responded that they are moving as fast as possible, but that the rate would be based on the manufacturing standard adopted by CARB next year, per Board direction. What will be incentivized is up to the Ports' discretion and is still to be determined, but the Ports understand the need to incentivize the cleanest trucks available today.