

The header graphic features a teal background with a faint map of San Pedro Bay on the left. The text "SAN PEDRO BAY PORTS" is in a smaller, white, sans-serif font, and "CLEAN AIR ACTION PLAN 2017" is in a larger, bold, white, sans-serif font.

SAN PEDRO BAY PORTS  
**CLEAN AIR ACTION PLAN 2017**

## **2017 Clean Air Action Plan Update**

### **Response to Frequently Occurring Comments**

Over the past two years, the Ports have engaged in an extensive public process that has included more than 70 stakeholder meetings and three public workshops in October 2015, January 2017, and August 2017, drawing more than 375 people. Updates on CAAP progress and opportunities for community interaction were advertised through press releases, each Port's website, the CAAP website, Facebook, and Twitter.

On November 17, 2016 the Boards held a joint public meeting where the Ports presented a new CAAP 2017 Update Discussion Document ("Discussion Document"), posted on both Ports' and the CAAP website for public review and comment, initially through February 17, 2017 and then extended until the release of the draft final 2017 CAAP Update ("Draft Final") on July 19, 2017.

The Draft Final was released to the public and posted on the CAAP and each Port's website on July 19, 2017 with a public review period of 60 days ending on September 19, 2017.

The Ports received more than 400 letters totaling nearly 1,000 pages from our customers, business groups, regulatory agencies, neighborhood and community organizations, environmental groups, and technology providers. Additionally, more than 80 people provided comments at the August 2017 workshop. All of the comment letters and a link to the public workshop Webcast are available at [www.cleanairactionplan.org](http://www.cleanairactionplan.org).

This document provides a Master Response to Frequent Comments on the 2017 CAAP Update received through October 9, 2017. The comments have been categorized into general themes. The responses to the frequently occurring comments are presented in this summary, in no particular order.

## SUPPORT FOR ZERO EMISSIONS

Many commenters supported and praised the CAAP's focus on zero emissions as an end goal for trucks and cargo-handling equipment and urged a more aggressive timeline with fewer allowances for near-zero emissions technologies.

Specific "Zero Emissions" comments with responses are listed below:

1. The Ports should continue to include zero-emissions deadlines for trucks and cargo-handling equipment.

Response: The 2017 CAAP Update includes goals for 100% zero-emissions for trucks by 2035 and cargo-handling equipment by 2030. These goals are unchanged from the Draft CAAP.

2. We need to move away from continued dependence on fossil fuels like diesel and natural gas. Near-zero-emission technologies, which have engines, continue to rely on fossil fuels. (Other commenters stated that renewable fuels, from sources like landfill gas and dairies, are not fossil fuel based).

Response: The CAAP does not mandate or assume the use of one particular technology or fuel. Operators have choices about the use of the clean technology that meets their operational needs, while also meeting the Ports goals for lower emissions. In addition, the CAAP introduces interim milestones for near-zero emissions trucks and equipment, but continues to support the ultimate goal of zero emissions. Progress toward zero emissions will be made through a variety of efforts including through early pilot deployments and incentives for transition, regular updates to our feasibility assessments to monitor development and identify ongoing challenges, adjustments to the exemptions to the truck rate over time that provide an economic inducement for zero emissions trucks, and requirements to purchase the cleanest feasible terminal equipment.

3. Zero-emission technologies are necessary to meet the emission reduction and community health needs; focusing attention on development of near-zero-emission technologies will divert from that path and slow or potentially stop our progress to getting to zero emissions.

Response: The CAAP contains more details, including implementation timelines, for the near-term efforts to accelerate zero-emissions deployment, such as upcoming zero-emission terminal equipment demonstrations and the pilot of 50-100 zero-emission trucks, anticipated to take place by 2022. Near-zero-emission technologies, which are approximately 90% cleaner than our cleanest existing technologies, are necessary in the interim to reduce emissions and community health risk as soon as possible and to help the region meet its clean-air targets.

4. Significant progress has been made in advancing toward zero emissions, including the demonstration projects that both Ports have underway. Those technologies will be available in the near-term and should be implemented prior to the 2030/2035 timelines.

Response: The CAAP continues to commit to conducting feasibility assessments every 3 years or as new information becomes available beginning in 2018. As zero-emission technologies become feasible, the Ports will work to secure incentive funding for accelerated deployment and/or require their use, as possible. As identified in the revised terminal equipment strategy, operators will need to purchase zero-emissions equipment when feasible as the existing equipment comes to the end of its useful life, or near-zero if feasible or cleanest available if zero-/near-zero emissions is not yet feasible. This strategy aims to accelerate the introduction of zero-emissions equipment as soon as feasible, prior to 2030.

5. If we invest in near-zero technology and infrastructure, it will result in additional, unnecessary expenses, and the full value of those investments will not be available because of the timeline by which we need to convert to zero emissions.

Response: The revised terminal equipment strategy requires new equipment purchases to be zero emissions or, if not feasible, the cleanest available equipment. Because this requirement applies to new purchases, it is expected to minimize stranded assets while hastening the introduction of the cleanest available equipment in the interim. While this strategy may result in additional expenses over time, it will ensure that the Ports are continuing to reduce air pollution in the earlier years as we make progress toward our zero-emission goals.

6. Action must be taken immediately, and we cannot wait until 2035 for cleaner trucks.

Response: The Ports agree that it is important to continue transitioning to cleaner equipment in the early years, while working to develop the infrastructure and transform the fleets to zero emissions over time. For this reason, the CAAP introduces interim milestones for near-zero emissions trucks and equipment but continues to support the ultimate goal of zero emissions. Progress toward zero emissions will be made through a variety of efforts including through early pilot deployments and incentives for transition, regular updates to our feasibility assessments to monitor development and identify ongoing challenges, adjustments to the exemptions to the truck rate over time that provide an economic inducement for zero emissions trucks, and requirements to purchase the cleanest feasible terminal equipment.

## **COST, ECONOMIC COMPETITIVENESS, AND JOBS**

Several commenters expressed concern about the CAAP's impact on economic competitiveness and jobs due to the high cost associated with some strategies, particularly those for trucks and terminal equipment.

Specific "Cost, Economic Competitiveness and Jobs" comments with responses are listed below:

7. The strategies could adversely impact the San Pedro Bay port complex's economic competitiveness and jobs.

Response: The final version of the CAAP Update includes a new CAAP guiding principle affirming our commitment to maintain the port complex's economic competitiveness and jobs. Additionally, the "Economic Competitiveness" section in the final CAAP identifies that the Ports will conduct economic evaluations associated with specific strategy implementation efforts (e.g. truck and vessel rate studies and feasibility assessments). In addition, the Ports will work with the State and other stakeholders to evaluate ways to enhance our economic competitiveness and maintain our market share. Possible economic impacts are discussed in the CAAP supporting document, "Economic and Workforce Considerations for the Clean Air Action Plan Update."

8. The cost to get to zero emissions is very high. The cost estimates are inaccurate and the level of expense is unsustainable. The industry is in no financial position to be able to take on those costs. As a result, shippers will find other, less expensive gateways to move their cargo which will result in loss of local jobs, regional economic impacts, and increased greenhouse gas emissions when the cargo is delivered through less efficient routes. Diversion is already happening - the Ports are losing our market share - and the economic impacts of these environmental requirements will exacerbate that situation.

Response: The document evaluating potential costs of the CAAP strategies<sup>1</sup> was developed using publicly available sources from the State technology assessments, studies by the Ports, historical information on existing programs, and interviews with technology manufacturers and developers to determine the most accurate cost estimates possible. The document has been revised since the original posting. The revised version includes costs for near-zero emissions terminal equipment as well as slight adjustments for the commercialized price of near-zero emissions on-road trucks. With respect to competitiveness and diversion, the Ports will work with the State and other stakeholders to evaluate ways to enhance our economic competitiveness and maintain our market share. Possible economic impacts are discussed in the CAAP supporting document, "Economic and Workforce Considerations for the Clean Air Action Plan Update." In addition, as identified above, the Ports will conduct specific economic evaluations associated with specific strategy implementation efforts.

9. Terminal operators have made investments in clean equipment in compliance with the state regulation and port lease requirements, and the timeline to replace with zero emissions by 2030 will make that equipment obsolete before its full useful life, resulting in stranded assets.

Response: The revised terminal equipment strategy identifies requirements to bring in the cleanest available equipment at the time of purchase, consistent with the terminal operators procurement plans, minimizing stranded assets. If zero-emissions equipment or the supportive infrastructure is not available at the time of a new purchase, operators may buy near-zero if feasible or cleanest available equipment. The Ports will continue to work with terminal operators

---

<sup>1</sup> EnSafe, Inc. "Preliminary Cost Estimates for Select 2017 Clean Air Action Plan Strategies." November 2017. Available at [www.cleanairactionplan.org](http://www.cleanairactionplan.org).

through leases and pursuit of grant funding to accelerate the timeline for replacement of equipment in support of our 2030 zero emission goal.

## **SUPPORT FOR NEAR-ZERO EMISSIONS**

Many commenters urged the Ports to consider near-zero emissions as an end goal rather than zero emissions and to accelerate timelines for introducing near-zero emissions technologies.

Specific “Near-Zero Emissions” comments with responses are listed below:

10. Near-zero-emission technologies will provide dramatic emission reductions and will cost significantly less than zero-emission technologies. From a cost effectiveness standpoint, which calculates dollars spent per ton of emissions reduced, these technologies will be much more cost effective. The Ports should consider near-zero-emission technologies as an end goal.

Response: The final CAAP contains two changes related to near-zero-emission technologies. First, the final CAAP strategy for trucks moves the initiation of the proposed rate on trucks from 2023 to 2020 with exemptions for near-zero and zero-emissions trucks. This change is expected to accelerate the deployment of near-zero emission trucks prior to 2023. Second, the revised terminal equipment strategy requires that operators purchase zero-emission equipment if feasible at the time of replacement, or near-zero or the cleanest available equipment otherwise. This change is expected to accelerate deployment of near-zero-emissions terminal equipment in the early years, until zero-emission options are deemed feasible.

11. Near-zero emission trucks can provide emission reductions in the near-term because the technologies are closer to commercialization. Many comments recommended turnover within the next 5 years.

Response: See response to comment 10. The final CAAP strategy for trucks moves the initiation of the proposed rate on trucks up to 2020 with exemptions for near-zero and zero-emissions trucks, which is expected to accelerate the deployment of near-zero emission trucks prior to 2023.

12. The infrastructure needed to support near-zero-emission trucks, specifically natural gas fueling infrastructure, has been expanding throughout the region and is largely in place. Further, as near-zero technologies are developed that use diesel fuel, this infrastructure is well established. Hydrogen fueling and electrical charging for heavy duty trucks and equipment is not currently available.

Response: The feasibility assessments will evaluate infrastructure availability in addition to other criteria when determining feasibility.

13. Zero-emission technologies do not exist today and are not expected to become feasible within timeframes identified.

Response: The CAAP continues to commit to conducting feasibility assessments every 3 years or as new information becomes available beginning in 2018, for both trucks and terminal equipment. These assessments will identify the state of the technology development and other factors related to feasibility, so that we can be aware of any remaining challenges with achieving our goals, and continue to focus our efforts on overcoming those challenges, or identifying if any adjustments need to be made. As zero-emission technologies become feasible, the Ports will work with marine terminal operators to accelerate their deployment, including through securing incentive funding and/or requiring their use through various mechanisms that could include leases or other agreements. As identified in the revised terminal equipment strategy, operators will need to purchase zero-emissions equipment when feasible as the existing equipment comes to the end of its useful life, or near-zero if feasible or best available if zero-/near-zero emissions is not yet feasible. This strategy aims to accelerate the introduction of zero-emissions equipment as soon as feasible, prior to 2030.

#### **AFFORDABILITY OF NEW TECHNOLOGY AND TRUCK DRIVER EQUITY**

A number of commenters brought up issues related to the affordability of new advanced technology trucks for the drivers and the working conditions of drivers.

Specific “Affordability of New Technology and Truck Driver Equity” comments with responses are listed below:

14. Many truck owners are still paying off their trucks to comply with the first phase of Clean Trucks Program and the CARB regulation – 47% of trucks already have MY2010 engines in compliance with the state’s requirement which becomes effective in 2023 - and they do not have the ability to pay for new, more expensive trucks. These expenses will push those truck owners out of the business.

Response: The Ports recognize the concerns that have been raised regarding driver equity and the impact that not adequately addressing these concerns will have on the workforce, the long-term sustainability of the Clean Trucks Program and port operations. Under the “Driver Conditions and Sustainability of the Clean Trucks Program” section of the CAAP, language has been added addressing workplace inequities for truck drivers and the sustainability of the Clean Trucks Program. The Ports along with the Air Agencies have committed to working together on securing grant and incentive funding, and to ensure that such funding is effectively used to benefit motor carriers and drivers alike to sustainably turn over truck fleets to achieve CAAP goals. Furthermore, The Ports remain committed to a sustainable Clean Trucks Program that achieves our ambitious clean-air goals while supporting the workforce. To that end, in implementing the Clean Trucks Program, the Ports will be guided by the principles listed in the

CAAP, including the need to support a vibrant workforce, with equity for the men and women who haul cargo to and from the Ports each day.

## **TRANSPARENCY AND REPORTING**

Commenters requested to see more details on implementation, reporting, and transparent for all stakeholders.

Specific “Transparency and Reporting” comments with responses are listed below:

15. Interim goals and milestones should be identified and tracked to provide certainty that the Ports will take the necessary actions to ensure the cleaner equipment is introduced into port-related operations on the expected timeline.

Response: The CAAP now includes estimated implementation timelines in an appendix. The CAAP also commits to posting regular progress reports on the CAAP website.

16. Development and implementation of the CAAP must be transparent and inclusive of various stakeholders.

Response: Details of development and implementation are included in the “Implementation” section of the CAAP. The Ports plan to establish a CAAP Implementation Advisory Group to advise the executive directors and staff regarding the specific details of CAAP implementation. This group will consist of a core group of invitees with specific expertise and meetings will be open to all who want to attend and provide input. The workgroup will be formed in January of 2018 and the Ports plan to hold the first meeting soon after in February. It is anticipated that this group will meet initially on a quarterly basis to provide input and hear updates on CAAP progress.

## **LIQUEFIED NATURAL GAS (LNG)**

Specific “LNG” comments with responses are listed below:

17. The CAAP does not mention liquefied natural gas (LNG) as an alternative fuel to reduce emissions, particularly for ships and harbor craft.

Response: The CAAP does not mandate or assume the use of one particular technology or fuel. Operators have choices about the use of the clean technology that meets their operational needs, while also meeting the Ports goals for lower emissions. In order to be inclusive of the available options, LNG as a marine fuel for ships and harbor craft has been added to the discussion in the document.

## **HEALTH RISK**

Specific “Health Risk” comments with responses are listed below:

18. The cost of doing nothing will result in continued health impacts that will have greater regional economic impacts that must be paid by the local communities, including from health care costs, hospitalizations, missed days of work and missed school days, and that those expenses will be greater than the cost to purchase cleaner equipment.

Response: The Ports recognize that while significant progress has been made over the past decade to reduce emissions and reduce health risks for the local communities, more work must be done. With our community's health and quality of life at the forefront, this final CAAP Update offers the Ports' most aggressive set of strategies yet.

19. The Ports need to highlight their community impacts and prioritize public health.

Response: The "Public Health – A Call to Action" section of the CAAP contains information about public health impacts associated with pollution from goods movement sources. Additionally, the document "Economic and Workforce Considerations for the Clean Air Action Plan Update" contains a discussion of public health benefits associated with reducing emissions.