PORT of SAN DIEGO

November 19, 2021

Chair Liane Randolph
California Air Resources Board
P.O. Box 2815
Sacramento, CA 95812

Subject: Comments on Proposed Fiscal Year 2021-22 Funding Plan for Clean Transportation Incentives

Dear Chair Randolph,

Thank you for the opportunity to provide input on the California Air Resources Board's (CARB) Proposed Fiscal Year 2021-22 Funding Plan for Clean Transportation Incentives. It is gratifying to see funding dedicated to deploying clean vehicles and equipment, because the true need is at the local level, where resources are needed the most to plan, design, and fund projects to implement our shared vision for a clean, sustainable goods movement system. Correcting historic funding inequities will be crucial to meet this challenge, and CARB's existing programs must be re-tooled for us to access funding and achieve the progress that we seek.

Background
For more than a decade, the Port of San Diego (District) and its partners have deployed clean air investments and new technologies to improve air quality. Plans like the Clean Air Plan (2007), Climate Action Plan (2013), and the Final Environmental Impact Report for Tenth Avenue Marine Terminal (TAMT) Redevelopment Plan, and corresponding TAMT Redevelopment Plan (2016), have all played a part. These plans provided ideas, guidance, and other measures to improve overall air quality and alleviate the environmental burden on surrounding communities. These efforts have steadily increased over the years, with continued investments in solar energy, shore power, and expanded installation of electric vehicle (EV) charging stations and other emerging technologies like a microgrid at TAMT. In 2010, the District received $2.4M of funding from the California Air Resources Board's Carl Moyer Memorial Air Quality Standards Attainment Program (Moyer) for California's first shore power system for passenger ships at the B Street Cruise Terminal in 2010, four years ahead of state requirements. District tenants have also been early adopters of new technologies to reduce emissions: in 2016, the San Diego Port Tenants Association received funding from the CEC to demonstrate and deploy a wide range of zero emission (ZE) trucks and cargo handling equipment. These efforts have positioned the Port to advance the next level of clean air investments to help chart the course for further improvements in and around the District's tidelands.

Notwithstanding these advancements, Portside Community residents continue to suffer a disproportionate burden of environmental afflictions, including air pollution, and more needs to be done to reduce these impacts. The Portside Community is predominately downwind from industrialized, waterfront uses and activities and includes Barrio Logan, Logan Heights and Sherman Heights in the City of San Diego, and West National City in the City of National City. The confluence of regional transportation networks, like Interstate 5, Coronado Bridge (State Route 75), rail corridors, and industrial uses occurring within and adjacent to the Portside Community, and activity from the U.S. Navy and the Port, all generate emissions that contribute to relatively higher levels of diesel particulate matter and other toxic air pollutants within these communities. In fact, the 12 census tracts that make up the Portside Community rank as having some of the highest diesel particulate matter pollution burden (95th percentile per CalEnviroScreen 3.0) in the State. These pollutants, in turn, contribute to higher rates asthma,

cardiovascular disease, and other health-related illness for those living in the Portside Community.

Frameworks to Inform Future Funding Strategies
Focused funding can deliver results when there's a plan in place. Recently, the District adopted a new Maritime Clean Air Strategy (MCAS), establishing goals ahead of the state's actions to expand health equity for all and reduce emissions from maritime activities. Highlights of the MCAS goals and objectives that go beyond State requirements include:

- A goal of 100 percent ZE cargo trucks calling on the District cargo maritime terminals by 2030, far exceeding State requirements by five years, and in some cases, 15 years.
- A goal of 100 percent ZE cargo handling equipment by 2030.
- Facilitate implementation of the first all-electric tugboat in the United States by June 30, 2026.
- Convert the Port's own extensive fleet of vehicles to ZE starting in 2022 and completing by 2030.

Other notable clean air projects in the works that will aid in the achievement of the MCAS goals include:

- Addition of a second shore power circuit for cruise ships by 2023.
- Addition of three shore power systems or alternative technologies to reduce emissions from ocean-going vessels when at berth at the National City Marine Terminal by 2025, in alignment with State requirements.
- Procurement of electric cranes to replace the older diesel mobile harbor crane at the Tenth Avenue Marine Terminal.
- Procurement of electric cargo handling equipment like yard tractors, heavy duty lifts and drayage short-haul trucks.
- Facilitate conversion of various harbor craft to ZE and NZE ahead of CARB requirements.
- Facilitate development of large solar project that will be used to create green hydrogen.

By identifying ambitious, comprehensive strategies, it is the intent of the MCAS to put the Port and its tenants in a more competitive position to acquire the necessary funding and resources to accelerate emission reductions. **This policy-making framework calls for $60M-$80M of new projects by the District**, and that does not include the tenant infrastructure and equipment that will be required. **For comparison, the District's annual maritime business revenue is approximately $40M.** Clearly, the upfront costs of this transformation are tremendous, and only robust, focused funding from our state partners will allow work of this magnitude to move forward.

Widen Fund Distribution to Address Inequities
While the District has encouraged and supported its tenants' efforts to electrify their marine terminal operations, including assisting in securing and managing outside funding sources and advocating for their projects, top-down, one-size-fits-all grant solicitations are simply falling short of reaching all the way to San Diego.

- 7% of HVIP vouchers statewide were awarded to applicants within the boundaries of the San Diego Air Pollution Control District. In comparison, 62% of vouchers were awarded to those within the South Coast Air Quality Management District, which oversees Los Angeles, Orange County, Riverside, and San Bernardino counties. More than half of the state's HVIP funds - or $215.6M - went to the South Coast Air Quality Management District, while just $18.1M was received by San Diego Air Pollution Control District.

- While HVIP is aimed at point-of-purchase for zero-emission and near-zero-emission vehicles, the CORE program is focused on zero-emission off-road equipment, such as cargo-handling equipment. Though CORE was not launched until last year, 47% of statewide funding in CORE has gone to the greater Southern California region and 0% to the San Diego region. The San Diego Air Pollution Control District currently has ten vouchers worth a total of $1.9M on the waitlist for CORE funding, and the program has a total of 399 waitlisted vouchers and is $41.7M oversubscribed. On October 28, the most recent round of HVIP funding, $63M, was fully requested in the first fifteen minutes of availability. This would arguably justify a lottery system or other mechanism to handle the overwhelming demand and more than that, meet the need where it's at. The proposed Innovative Small e-Fleets set-aside is one way that, with effective public outreach to small trucking fleets and independent owner operators, can enhance HVIP and make it more inclusive.

Accessibility, not appropriation, of funds remains the issue. Unfortunately, competitive grants without regional benchmarks or set asides will only perpetuate the existing inequities that concentrate funds rather than distribute them broadly.

Update Incentive Programs to Meet Today's Needs

In recent years as technology has advanced and costs increased, legacy grant programs that could support clean technology at the District, such as Moyer, have not fit the scope or size of current potential projects. Common limitations and exclusions of existing grant programs include:

- Low maximum award size;
- Expectations of high usage rates;
- Oversubscription of available funds;
- Lack of funds or time allowed for first step planning & design;
- A requirement that the use exceeds regulatory compliance;
- Inability to distribute funds based on small/medium size ports' needs; and
- Requirements to scrap useful equipment regardless of age or emissions.

Although there are multiple programs and grant opportunities for ZE/NZE cargo handling equipment (CHE), there are often restrictions that limit this funding source from reaching the Port of San Diego and/or its tenants. For example, some programs require an existing piece of diesel equipment to be destroyed in exchange for grant funding, which deters equipment owners from pursuing lower-emitting alternatives, particularly if the diesel piece is only a few years old and/or still within its useful life. For a case in point, staff worked with a tenant looking into replacing yard tractors that were a few years old with Tier 4 diesel engines. However, the grant program did not allow them to move the equipment out of state, but rather, required that the existing equipment be destroyed. Additionally, the award was minimal because the equipment was not considered as dirty as other older pieces of equipment that applied for the grant. This reduced the cost effectiveness of the replacement and proved to be suboptimal for the environment.

Recent grant programs have not provided adequate funding for ZE and NZE CHE. Based on four pieces of high-emitting cargo-handling equipment at TAMT, which was estimated to cost a total of $6.1 million to replace, a recent analysis demonstrated that the maximum award potential would only be $736,000, or about 12%. Conversations with SDAPCD staff have indicated that the reason that these maximum award amounts are so low is because the diesel emissions, which are based

on MY Engine, Engine Tier, and annual hours of operation, are not that high at TAMT when compared to other pieces of equipment in San Diego County and the State of California.

Many of the SDAPCD programs, such as Carl Moyer, FARMER, and the Community Air Protection Program, that are used to fund equipment and prioritize equipment consider applications on basis of cost effectiveness calculations and/or utilization rates. These programs have yielded few awards to District tenants because several pieces of CHE have either newer (Tier 4) engines, which rank lower relative to other equipment in the County, or the older pieces of CHE are not used enough to make upgrades or replacement "cost effective", as established by the programs.

Recent examples within the District itself underscore the impact of overly restrictive grant limitations and depressed award amounts when it comes to replacing existing equipment with clean alternatives:

- The District's single harbor crane, the diesel Gottwald Mobile Harbor Crane, was infeasible for replacement with grant funding because the maximum incentive funding to offset the purchase was limited to 1% of the $9,350,000 cost. The replacement was not allowed to exceed 125% of the existing crane's horsepower, even though a greater lift capacity is needed to meet the District's maritime business objectives as a wind energy component importer.
- The District's single diesel garbage truck that services its many public parks and facilities was also infeasible to be replaced with an all-electric version with grant funding because the maximum incentive funding to offset the purchase was limited to 2.7% of the $400,000 cost. Moyer program cost effectiveness calculations determined that the District's existing 2005 garbage truck was fairly new and had a relatively low utilization rate.
- The District, acting well in advance of the pending Commercial Harbor Craft regulation, applied to CARB in 2017 for assistance with the purchase of a 74-ft lithium-ion battery electric ferry to provide hourly passenger service between the Broadway Pier, San Diego Convention Center, and the City of Coronado. The proposal, which also included funds for seven high-capacity forklifts and a boat hoist, was rejected.

Naturally, no current incentive program purports to cover 100% of the cost of clean, new equipment or infrastructure. However, awards that are often limited to 1-7% of the cost are impractical and fall short of their intended purpose. Restrictive cost-effectiveness calculations and rigid fund limitations are impractical and hamper the effectiveness of CARB's incentive programs. The net effect is to impede local efforts to obtain green infrastructure and equipment by placing these purchases woefully far out of reach and stifling progress to meet clean air goals.

Fast-track State Goals with Port-specific Funding Program

CARB must embrace the reality that port business operations call for different sizes, types, and quantities of equipment and capital assets. California is a big state, and the uneven impacts of supply chain congestion among California's seaports shows their great variety. Despite their commonalities, no two ports function the same. The jobs they do, the cargo they move, and the infrastructure required to the work vary in the extreme.

Currently, ports of all sizes and models of operation are forced into the same category to compete against each other for narrow project funding – such as the case of the Zero-Emission Drayage Truck and Infrastructure Pilot Project, a solicitation aimed at larger ports with fleets of 50 trucks or more -- regardless of the shape or profile of the needs in their own community.

State investments should equal in variety the needs they seek to meet. Ports are not one type or scale and should not be placed at a competitive disadvantage for grants simply because they have different operational needs and abilities. Different is not bad; diversity is good. While programs like California's Low Carbon Fuel Standard (LCFS) represents an additional source of potential funding support, none are enough to mitigate the disadvantage of rigid funding programs that continue to exclude us.

California needs a coordinated investment in a multi-pronged, resilient port system that is capable of transforming business operations in a new, clean, green way. Let ports like San Diego shed a burdensome piecemeal approach limited to small demonstration projects or emerging technology and provide real access to major funding for commercial-grade solutions needed to usher in the sweeping change we need. Again, this opportunity to establish electrification priorities at ports must be viewed through a lens of equity for all project types, sizes, and locations, and feature stackable, ongoing stream of funds with support for planning, design, environmental review and permitting.

Add Flexibility to Maximize Traditional Incentive Programs

Our community joins us in calling for flexibility for funding programs to fit the need. On October 14, 2021, CARB approved The Portside Community's AB 617 Community Emission Reduction Program (CERP), which included *Action B1: Create Additional Flexibility for Mobile Source Incentives*:

> "Work with CARB to implement flexibilities that can provide funding for other projects in the Portside community through the Community Air Protection Incentives Guideline process."

The CERP highlights specific needs, which include "modified cost-effectiveness limits for zero-emission Moyer-type projects, eligibility for new purchase without scrappage requirements, eligibility for supporting infrastructure," and more. The District urges CARB's incentive programs to be improved by including the following features:

- Match levels and solicitations scaled to electrification projects of different sizes.
- Equity carve-outs, perhaps by air district or through regional or size-based allocations, to expand reach and widen geographic distribution.
- Locally informed solicitations crafted to support specific goals on the ground, such as electrification plans in the District's MCAS, rather than top-down approaches.
- New efficiencies in grant processes to reduce the administrative burden that jeopardizes project implementation and timelines.
- Ensure CARB and other state agencies commit to tethering new funding with the operative regulations and making grant funds available for planning and design of projects so that applications for necessary larger infrastructure or equipment may be timely submitted.

Expanding the reach of CARB's funding plan is possible with flexible incentives that recognize the variety of needs that exist among the ports, and programmatic fixes that prevent a repeat of the inequities of the past.

Conclusion

California's air quality and greenhouse gas emissions goals are being pursued in multiple ways at the county, city, and community levels. However, the costs of this technology turnover are concentrated in heavy industry, particularly seaports, where the industrial infrastructure and

equipment are the most expensive. Maritime applications of such technology almost always require customization, more frequent replacement, and are often in short supply. Faced with such high up-front costs, massive funding is typically required from multiple sources.

When approving this funding plan, please emphasize a more equitable distribution of new funding, focused on underserved ports and portside communities. We ask CARB to collaborate with us to ensure that grant funding addresses inequities posed by economic, technical, and logistical barriers that limit deployment of clean technology at the District. The District and its tenants are well-positioned to help promote and advance these new technologies, but it is time for CARB's incentive programs to reflect these unique challenges. Revising CARB's approach will bolster its capacity to be a catalyst in California's clean transportation revolution and provide infrastructure-heavy entities like the District with crucial leverage in accessing the funds CARB brings to the table at a time they are needed the most. We steadfastly believe the goals of economic sustainability and environmental justice can be achieved, but only equitable distribution of resources will make a difference.

Here is an opportunity to leverage CARB's capacity to lift all who strive to achieve the state's emissions goals in disadvantaged communities. These grant programs must not only be sized to fit the need, but focused on equitably reaching the need, or else our state will fall short in meeting its emissions targets and our communities will miss this opportunity in California's story.

Please work with us to make these improvements and partner together in meeting the green infrastructure challenge ahead of us. Thank you for the opportunity to provide feedback, and please contact my office with any additional questions or for further information.

Sincerely,

Job Nelson
Vice President of Strategy & Policy