

October 14, 2020

New Jersey Department of Environmental Protection
Protecting Against Climate Threats (PACT)

Via Email: NJairrulesmobile@dep.nj.gov

Re.: Comment to New Jersey PACT's Reducing CO₂ Emissions from the Transportation Sector Stakeholder Meetings, held on September 10th and 16th, 2020, on (1) California's Advanced Clean Truck Rule, (2) California's Zero Emission Vehicle Fleet Rules, (3) Cargo Handling Equipment, and (4) Oceangoing Vessels.

To Whom It May Concern,

The Port Authority of New York and New Jersey (Port Authority) has a longstanding commitment to environmental sustainability and reducing the emission of Greenhouse Gases (GHG) in the New York/New Jersey region. In 2018, we became the first public transportation agency to embrace the Paris Climate Accord, committing to aggressive GHG emission reduction targets of 35% by 2025 and 80% by 2050.

Without regulatory mandates, the Port Authority has taken action to dramatically reduce the port facilities' emissions of Criteria Air Pollutants and greenhouse gases. Through voluntary programs, efficiency improvements, fuel mandates, and collaboration with our tenants, terminal operators, truckers and other port stakeholders, we have taken steps to move toward a cleaner, greener Port and have realized measurable success.

We continually work to incentivize or partner with our tenants and port stakeholders, encouraging them to pilot zero-emission equipment when available. Our Cargo Handling Equipment Fleet Modernization Program provides incentives to terminal operators to replace old equipment with clean, electric or renewable fuel source equipment. While the technology available to the maritime industry is slowly changing, we are not waiting until tried-and-true zero-emission equipment is commercially ready. We are continuing to test and verify the operability of new technology that can provide clean and financially sustainable operations. In support of the move to zero emissions (ZE) equipment throughout the transportation industry, we encourage the State of New Jersey to create pilot programs and fund studies to identify and evaluate the required infrastructure needed to transition to ZE equipment.

The Port Authority commends the State of New Jersey for seeking to establish policies and programs that will reduce emissions in Port communities and throughout the State, and welcomes the opportunity to collaborate with NJDEP on efforts to address emissions from equipment, trucks, and vessels that visit our

Ports. Based on our experience with these efforts for our own facilities, as well as reports from our California counterparts, it is critical that any adoption of California regulations be preceded and/or accompanied by rigorous infrastructure assessments, piloting of new technologies, significant funding for equipment and infrastructure upgrades, and a realistic timeline for their implementation that will not create undue economic hardship and will minimize unintended consequences.

Leading by Example to Accelerate Industry Decarbonization and Improving Air Quality

The Port Authority feels strongly that it is critical to protect the health and safety of the residents in the communities we operate in, as well as the thousands of people who work at and visit our facilities every day. For this reason, the Port Authority has already taken steps to move toward a cleaner, greener fleet. We are leading by example in electrifying our entire airport shuttle bus fleet, and continuing to advance our goal of electrifying 50 percent of our light duty fleet. The Port Authority has installed electric vehicle charging infrastructure at our public parking facilities, and is in the process of constructing a fast-charging hub for public and for-hire vehicles at John F. Kennedy International Airport, which we intend to be a model for similar hubs at all of the airports we operate.

Through this leadership, we lay the groundwork for collaborating with our partners at our seaports and airports to transition to cleaner vehicles and equipment. Overall, criteria air pollutant emissions from port related activity have been reduced dramatically through our voluntary programs over the past decade; Nitrogen Oxide emissions are down by 38%, Particulate Matter emissions are down 74%, and Sulfur Dioxide emissions have been reduced by 98% from 2006 levels while cargo volume has increased by 41%. The total emissions generated by port related commercial activity represents a slim sliver of the overall emissions generated in the three surrounding counties of Essex, Hudson and Union; GHG emissions from port related activity represents less than 4% of all GHG emissions in the respective counties.¹ We incentivize cleaner ships and the slowing down of ocean-going vessels through our Clean Vessel Incentive Program, and we have been working diligently to support the replacement of privately owned old cargo handling equipment and aging drayage trucks through our Cargo Handling Equipment Fleet Modernization and Truck Replacement Programs.

1. California's Advanced Clean Truck Rule & Drayage Truck Rules

In July 2020, the California Air Resource Board (CARB) adopted the Advanced Clean Trucks (ACT) regulation, which has two main components, a manufacturers Zero Emissions Vehicle (ZEV) sales requirement and a one-time reporting requirement for large entities and fleets.

We are supportive of California's move towards zero emissions from trucks, because California is in a favorable position to take this step. CARB has taken early action in regulating the transportation sector, including the 2007 Drayage Truck Regulation, and supporting the transition to cleaner

¹ 2018 PANYNJ Multi-Facility Emissions Inventory Report <https://www.panynj.gov/content/dam/port/our-port/clean-vessel-incentive-program/PANYNJ-2018-Multi-Facility-EI-Report.pdf>

vehicles and technology through innovative grant programs, like the Carl Moyer Memorial Air Quality Standards Attainment Program that was inceptioned more than two decades ago, and has offered to date, over 1 Billion dollars of incentive funds. The phased-in regulatory approach coupled with financial incentives have proven to be essential ingredients in the creation of a platform ready for further action in the State of California. We urge the State of New Jersey to keep this lengthy timeframe in mind and consider new policies that are iterative, pragmatic, realistic and achievable. Jumping directly to the California standards, which have been in place after 20 years of concerted effort, is unlikely to produce a similar result.

According to 2018 data released by the Federal Highway Administration, there are approximately 37,000 heavy duty diesel trucks registered in the State of New Jersey. Of those, only 16% or 6,000 have any affiliation with the Port of New York and New Jersey. This leaves 31,000 trucks that are transporting goods between warehouses and distribution centers, traversing the NJ Turnpike, or driving in and around our residential communities every day that are not being phased-out or incentivized to upgrade to cleaner diesel through the Port Authority's Truck Replacement Program, let alone considering a near zero or zero emissions replacement. These trucks will all continue to operate in New Jersey because they are perfectly legal, to do so, passing the annual emissions tests associated with the age of the vehicle. Long after the Port Authority helps to upgrade all the trucks serving the Port through its Truck Replacement Program, 31,000 other heavy-duty diesel trucks operating in New Jersey will transport goods in and around the State to their final destination. These same older and dirtier trucks, which are part of the transportation sector's 42% statewide emissions contribution, will continue to operate in and around our communities as they do today. For this reason, it is our recommendation that any rule adopted for trucks be applied to all heavy-duty trucks operating in NJ, as opposed to a focus solely on those visiting the seaports.

We believe it is critical that any rule adoption also include funding for pilot projects to study the logistical and operational constraints of ZE vehicles, and cost-effective incentive programs, including special rate categories for vehicle charging, to effectuate the transition to ZE trucks.

Moreover, as New Jersey moves to consider various regulatory concepts such as green contracting or ZE zones that may have the force and effect of law related to motor carriers' price, route, or service, it is recommended that Federal statutes such as those found in the Federal Aviation Administrative Authorization Act with regards to intrastate transportation be reviewed to avoid potential conflict.

2. Zero Emission Vehicle Fleet Rule

Under the currently proposed Zero Emission Vehicle Fleet Rule, California is planning to implement rules aimed at electrifying buses and trucks by 2045 wherever feasible. Current regulatory concepts proposed include the requirement for phased-in ZE vehicle purchases (compliance year depending on type and class of vehicle), ZE fleet standards for owners of large fleets of vehicles, green contracting, ZE zones targeting geographic zones like stores, ports, railyards and warehouses near Environmental Justice communities, ZE facility requirements, mandating that facilities that receive trucks install ZE charging infrastructure, and ZE Miles Standard.

When considering California’s success in implementing its approach to ZE vehicles it is critical to note the State’s ports are unique in that there are few competitors in close geographic proximity. In comparison, the Port of New York and New Jersey has competing ports all along the East Coast. A focus on New Jersey’s ports without a coordinated effort with neighboring states could have serious unintended consequences. It may result in a loss of business and could cause an overall increase in truck emissions throughout New Jersey as the cargo destined for the State is driven in from neighboring states. Currently, 70% of all trucks serving the marine terminals are owned and operated by Independent Owner Operators (IOO), who often operate as a small business and own 1 to 2 trucks, while 30% of the trucks are operated by Licensed Motor Carriers (LMCs), who own fleets of trucks. Some larger LMCs may have the financial resources to operate newer equipment and to potentially pilot electric trucks. However, due to the financial investment associated with aZE trucks and the associated infrastructure requirements—at the present upwards of \$300,000—IOOs are effectively priced out. On average, IOOs operate some of the oldest trucks serving the ports and will require significant financial support to upgrade their trucks. NJDEP should also consider that any mandated ZE zones, without regional coordination with other States, may push the IOOs away from the port into other areas within the state, where it remains legal to operate the truck or to other states.

While it is critical to have fast charging at strategic locations near the port and at final delivery sites to mitigate range limitations of current ZE trucks, trucks will generally require a home base for an extended period of charging and rest. The operating model for drayage trucks doesn’t afford them the opportunity to stop and do this at the Port. Furthermore, as indicated in the Port Master Plan 2050, when you consider the expected growth cargo volume in order to keep up with population growth in the region over the next 30 years, land within the port complex is at a premium and must be reserved to support vessel related activity as that cannot be moved to nearby locations. To effectuate the placement of fast charging locations, we recommend the State develop a competitive rate category for vehicle charging. Currently, both the cost of infrastructure upgrades and electricity rates prohibit rapid ZE adoption.

In order to address the problem of GHG emissions from port-related activities, we encourage New Jersey to create rules coupled with financial incentive programs, adequate enforcement mechanisms and pilot programs to study the logistical constraints of our region.

3. Cargo Handling Equipment

As noted during the stakeholder meeting, the private marine terminal operators use specialized Cargo Handling Equipment (CHE) of various types, size, function, energy source and cost. There are over a dozen different types of CHE employed in the Port, each with just a handful of manufacturers around the world. The current state of the global CHE industry is such that most types of CHE are unavailable in Near Zero or Zero Emission models. Based on our first-hand exchange with our own terminal operators and West Coast counterparts, we urge the State to consider a similar phased-in approach and to carefully tailor them to different equipment types to

allow for a seamless transition. Furthermore, many CHE are also being utilized throughout the New Jersey in warehouses, distribution centers, chassis and empty container depots, and intermodal yards. To ensure that retired equipment is not inadvertently transferred to other properties in New Jersey, we urge the State to implement a comprehensive approach that addresses all CHE and off-road equipment statewide and not exclusively at ports.

The Port Authority has carefully considered the type, quantity and age of CHE operated in the Port as well as the market availability of NZE or ZE options. As such, we are incorporating the following requirements into the Rules and Regulations for Port Authority Marine Terminals (Federal Maritime Commission Tariff No. 10) in January 2021. We urge the State to take this iterative and achievable approach into consideration when establishing new Statewide policies for off road vehicles and Cargo Handling Equipment.

- All Material Handling Equipment added to the Port after January 2021 must meet or exceed Tier 4 Final emission standards.
- New Ship-To-Shore and Rail-Mounted Gantry cranes must be Zero-Emission after January 2021.
- Primary Terminal or Yard Tractors must meet or exceed Tier 3 emission standards by January 1, 2022.
- Primary Material Handling Equipment must meet or exceed Tier 2 emission standards by January 1, 2022.

*Primary is defined as greater than 100 horsepower with 500 or more operation hours per year.

To aid the acceleration and comprehensiveness of a transition to zero or near-zero emission CHE, significant funding is needed for pilot demonstrations of equipment, electrical infrastructure assessments and upgrades, and installation of charging stations.

4. Oceangoing Vessels (OGV)

Under existing international protocols, vessels are already mandated to use low sulfur fuel (0.1%) when navigating within 200 nautical miles of the US coastline. While it is possible that the State could mandate fuel use beyond international protocols within State boundaries to further reduce vessel emissions, we urge the State to take into consideration the extensive research and development that many international ocean carriers are conducting on carbon neutral fuel to avoid conflict with lengthy and costly infrastructure development that may become obsolete in the near horizon.

Additionally, the Port also finds that there is a great benefit to encouraging behavioral changes

through voluntary programs such as the Port's Clean Vessel Incentive Program. Oceangoing vessels that excel in environmental performance and voluntarily comply with a speed reduction of 10 knots or less within 20 nautical miles of the territorial sea line are rewarded with a financial incentive. Slowing down contributes significantly to the overall reduction in particulate matter emissions during transit to and from our port terminals. Given that these ships are part of a massive international fleet that crisscross the globe several times a year, it is critical that any regulatory scheme for OGVs closely consider international programs and goals for all vessels operating under the International Maritime Organization's (IMO) framework. At this point, ports in California and Germany are the only ones in the world that require any type of cold ironing or stack emissions capture while OGVs are in port so it is essential to consider both the costs and the benefits of additional mitigation measures, as well as operational feasibility in the New Jersey region. In 2019, there were over 4,300 international OGV arrivals in the Port, half of which were container ships calling Port Authority facilities. Close to 1,000 of those voyages were oil, fuel and chemical tankers that predominately call at the dozens of privately-owned port facilities lining the New Jersey side of the Kill van Kull and Arthur Kill waterways. The other 1,000 voyages were a mix of automobile carriers, cruise vessels and general freighters. We encourage New Jersey to consider a harbor-wide incentive program, that would include all ships entering the harbor, and lead to an immediate reduction of emissions. Absent a wholesale approach, the State is unlikely to achieve its admirable goals.

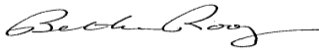
We also suggest that the State consider how it can support the advancement of alternative, carbon neutral fuels for marine vessels and supporting infrastructure. As the maritime industry works toward achieving the greenhouse gas reduction goals established by the IMO, there is increasing progress in the advancement of alternative fuel technology which may render cold ironing and stack emissions capture obsolete.

Conclusion

The Port Authority commends the State of New Jersey's focus on developing effective policies, projects, and programs that can balance the need for expanded movement of goods and people with the need to further reduce local air pollution and related health impacts around the State's transportation facilities. Our seaports play a critical role in moving supplies, food, and equipment throughout the region and are an essential part of New Jersey's economic and social recovery. Any cargo that comes in through our seaports can reach 134 million people within 36 hours. That means Port Authority facilities provide critical goods and services well beyond the Northeast, into Canada and the Midwest. We remained the region's lifeline during the COVID pandemic when the New York-New Jersey area was the global epicenter. The Port Authority remains steadfast in our focus moving forward to further

reduce our emissions contribution and its impact on the local communities, and our sustainability commitments reflect that. In considering the adoption of California's regulations, we encourage New Jersey to be mindful of the lengthy timeframe and significant resources that state has relied upon to reach its current framework for the reduction of Greenhouse Gases. We are eager to collaborate on shaping effective policies and funding programs to decarbonize hard to abate transportation segments such as aviation, maritime and heavy-duty vehicles within a broad-based transportation focused framework. It is with this broad focus that New Jersey, the Port Authority, and our partners in private industry can effectively achieve our collective climate action and air quality improvement goals.

Sincerely,



Bethann Rooney
Deputy Port Director