

March 4, 2020

## **Draft Economic CTFR Study Written Public Comments**

### **Trade, Health, and Environment (THE) Impact Project coalition**

- Create a plan to achieve 2035 ZE goal. Establish interim milestones
- Phase in short haul ZE drayage trucks beginning immediately
- Study a ZE only registration requirement
- Allocate all proceeds collected by the rate to fund purchase incentives for zero-emission trucks.
- Analyze and measure the health costs borne by freight impacted communities and the benefits of transitioning to a zero-emission fleet
- Revise the study's flawed assumptions regarding availability and cost of zero-emission trucks
- Ensure CTP costs are not shouldered by truck drivers.

### **California Hydrogen Business Council**

- Rate should be adequate to cover price difference between conventional diesel truck and a ZE truck to fund a purchasing incentive program
- Exemptions to rate should only apply to ZE trucks
- Rate should be paid by cargo owners

### **CARB**

- Study does not factor in cost savings from public health benefits that ZE trucks provide. CARB encourages ports to provide a comparable analysis of cost savings from the prospective of reductions in premature deaths, hospitalizations emergency room visits and other benefits of cleaner air.
- Ports must send strong message to marketplace that there is support for increased production and utilization of ZE trucks. This can be accomplished by setting a higher rate.

### **Maxlink Logistics, Inc.**

- Supports container rate in range of \$100 to support companies who have already begun the transition to clean energy

### **Green Fleet Systems**

- Supports container rate in range of \$100 to support companies who have already begun the transition to clean energy

### **Pacific 9 Transportation**

- Supports rate of \$60/TEU to support companies who have already begun the transition to clean energy

### **AJR Trucking / MDB Transportation**

- Urges adoption of \$100 container rate

### **American Trucking Associations, California Trucking Association, Harbor Trucking Association**

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- Truck rate likely preempted by the FAAAA
- Rate charged to shipper/owner of cargo does not help proposed rate escape preemption (*Rowe*); "...the effect of the regulation is that carriers will have to offer...delivery services that differ significantly from those that, in the absence of the regulation, the market might dictate. And that being so, 'treating sales restrictions and purchase restrictions differently for pre-emption purposes would make no sense.'"
- Urges ports to work closely with ATA, CTA and HTA to ensure implementation of updated CTP is consistent with the ports' jurisdiction and authority.

**Target:**

- Proposed fee is unfairly punitive because there are no ZE options in the industry at this time and very few NZE options
- Requests implementation of container fees be delayed until more equipment becomes available

**Inland Kenworth**

- Define NZE as trucks with engines certified to CARB's 0.02 optional standard and use renewable fuel that reduces greenhouse gases by at least 50% compared to baseline diesel.
- Exempt NZE trucks from the rate for the duration of truck useful life per standards contained in SB1 Section 18 (Health & Safety Code Section 43021(a))
- Continue funding NZE trucks until 2035
- Begin collecting rate no later than September 1, 2020
- Create CTRF of \$270 million by advancing the rate funds for the first three years of collection and begin awarding funding for advanced clean trucks July 2020

**Walmart:**

- Any fee and associated administrative fees would have a significant impact on business
- Seeks clarification on which trucks would qualify as NZE
- Concerned timeline presented does not align with anticipated deployment of necessary technology
- Draft plan lacks detailed explanation of what the revenues would be used for
- Asks that ports delay plan to allow for more time to address stakeholder concerns

**Alan Lowenthal, Member of Congress**

- "We need a container rate at the Los Angeles-Long Beach Port complex that reflects both ports commitment to significantly reducing NOx, particulate, and greenhouse gas emissions. I encourage a container rate that continues to lessen the burden on frontline communities."

**ILWU**

- CTRF should not exceed the proposed level for the foreseeable future. ILWU believes proposed rate strikes balance between reducing tuck emissions while limiting the diversion of cargo to other competing ports.
- Every container diverted from the ports will reach a destination port with less environmentally friendly cargo handling practices resulting in loss of business for the ports and increased environmental degradation

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- Advises against expending limited capital dollars on immature technologies

### **International Brotherhood of Electrical Workers and National Electrical Contractors Association, Los Angeles Chapter**

- Increase the CTF rate to \$50/TEU to ensure resulting pool of funding is sufficient to incentivize zero emissions
- Dedicate rate revenues to zero emissions exclusively to accelerate adoption of ZE trucks
- Recommends that detailed plan of how funds will be used be developed in concert with the final decision regarding the rate itself and that the funding be dedicated to ZE trucks.
- Ensure CTP costs are not born by individual truck drivers

### **Cory Shumaker, Independent Consultant**

- Rate should be \$45/TEU to provide high enough per truck incentives to truck owners to offset the high increased costs of transitioning to NZE and ZE trucks.
- NZE emission trucks should not be exempt from the CTRF beginning sooner rather than later, preferably before 2027 as proposed

### **AQMD**

- Draft study supports a truck rate significantly higher than the \$10 per TEU proposed by staff
- Recommends that the ports consider qualifying only trucks meeting 0.02 g/bhp-hr NOx or better for the CTF rebates as well as incentives in the CTP
- Recommends the ports allocate most, if not all, of the CTP revenues in the near term to subsidize NZE trucks.
- Recommend health impacts be considered

### **Breathe California**

- Draft study does not address public health
- Cargo diversion is not a justification for a low CTF Rate
- \$10/TEU is inadequate to raise necessary funding for subsidies and incentives to turn over fleet
- Propose rate in range of \$50-\$100/TEU
- Utilize Drayage Truck Registry to more quickly phase out diesel trucks
- Establish a clearer definition of near-zero – ports should use CARB's optional standard of 0.02
- Extend the fee refund benefit longer for NZE trucks
- Clarify tangible steps along the process i.e. interim goals

### **Clean Energy**

- Define NZE to mean a truck: (1) with an engine certified to CARB's 0.02 standard; and (2) uses renewable fuel that reduce greenhouse gases by at least 50% compared with baseline diesel as determined by CARB's Low Carbon Fuel Standard.
- Exempt NZE trucks from the rate for the duration of the trucks useful life per the standards contained in SB1 Section 18 (Health & Safety Code Section 43021(a))
- Continue funding NZE trucks until 2035
- Increase rate to \$40-\$50/TEU to collect more clean truck incentive funds and motivate voluntary turnover of the fleet (per Davies study)

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- Begin collecting rate ASAP but no later than September 1, 2020
- Create CTRF of \$270 million by advancing the rate funds for the first three years of collection and begin awarding funding for advanced clean trucks July 2020

#### **National Retail Federation (NRF)**

- Economic study significantly underestimates costs of the proposal and the impacts on transloaded cargo – the NRF does not accept idea transload cargo is inelastic
- Analysis does not factor in administrative costs (largely because administrative process remains undefined) or cumulative effect of other container fees (e.g. PierPass)
- Other factors not considered: ISO 2020 low sulfur standard; changes in business model for US retailing; wider analysis of tariff policy
- Requests ports undertake quantitative study of the stakeholder community (surveys) to gather actionable data especially on administrative costs of proposal
- NZE and ZE truck are not currently available
- Economic study concludes a fee is unnecessary – regulatory approach gets the ports to ZE and NZE by 2034
- Truck fee raises significant revenues without any detail of how money will be spent
- Urges ports slow down adoption of rate until CARB manufacturing standard finalized
- Voting on a truck fee at this point is premature; wait for regulations to be in place
- Implementation should be postponed until details of the funding program are made available

#### **PMSA**

- Diversion estimates grossly understated but even reported level of diversion will be enough to wipe out growth ports have experienced since 2016
- Revise study to include economic impact of diversion on local community
- Revise study to include analysis of export diversion
- Analysis ignores time component of elasticity
- Ports should insist on state/local funding commitments
- Rate will hurt truckers – BCOs can go elsewhere, truck drivers cannot.
- Ports should commission a competitive action plan
- Ports should make commitment to competitiveness and preserving jobs as public as commitment to clean air

#### **Agility Fuel Solutions**

- Urges consideration of a rate of \$35/TEU
- Study fails to look at what non-attainment of federal goals would look like for the region
- Concerned ports have not developed details of the incentive program; Ports should develop an incentive program term sheet, setting forth the basic structure of how the program will function, identifying critical milestones, and outlining (at least at a high level) the path toward achieving CAAP goals

#### **Coalition for Clean Air**

- Regression model is flawed and too simplistic; assumption of one-way causal effects of time and cost incorrect

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- Supports rate of \$35 -\$50/TEU *or* allow the market to solve the problem by setting no rate at all but immediately restricting all new additions to the PDTR to trucks that can meet or exceed the optional low-NOx Standard (0.02) while requiring all trucks in the registry to meet or exceed the optional low-NOx standard by July 1, 2023 and changing CAAP 100% ZE drayage trucks by 2035 goal to a requirement.

#### **LA Cleantech Incubator, LA National Electrical Contractors' Association, Greenlots**

- Recommend CTR rate be increased significantly to ensure that the resulting pool of funding is sufficient to incentivize the transition to zero emissions trucks
- Dedicate rate revenues to ZE to accelerate adoption of ZE trucks; recommend that the details of how these funds are used be developed in concert with the final decision on the rate itself, and that the funding be dedicated to ZE trucks
- Update the *Drayage Truck Feasibility Assessment* annually

#### **California Natural Gas Vehicle Coalition**

- Define NZE to mean a truck: (1) with an engine certified to CARB's 0.02 standard; and (2) uses renewable fuel that reduces greenhouse gases by at least 50% compared with baseline diesel as determined by CARB's Low Carbon Fuel Standard.
- Exempt NZE trucks from the rate for the duration of the trucks useful life per the standards contained in SB1 Section 18 (Health & Safety Code Section 43021(a))
- Continue funding NZE trucks until 2035
- Increase rate to \$40-\$50/TEU to collect more clean truck incentive funds and motivate voluntary turnover of the fleet (per Davies study)
- Begin collecting rate ASAP but no later than September 1, 2020
- Create CTRF of \$270 million by advancing the rate funds for the first three years of collection and begin awarding funding for advanced clean trucks July 2020

#### **Quantum Fuel Systems**

- Define NZE to mean a truck: (1) with an engine certified to CARB's 0.02 standard; and (2) uses renewable fuel that reduces greenhouse gases by at least 50% compared with baseline diesel as determined by CARB's Low Carbon Fuel Standard.
- Exempt NZE trucks from the rate for the duration of the trucks useful life per the standards contained in SB1 Section 18 (Health & Safety Code Section 43021(a))
- Continue funding NZE trucks until 2035
- Increase rate to \$40-\$50/TEU to collect more clean truck incentive funds and motivate voluntary turnover of the fleet (per Davies study)
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#### **TTSI (trucking company); member Clean Trucking Association**

- Truck rate should be around \$50/TEU
- Clarity needed on definition of NZE; should be trucks certified to meet CARB 0.02 standard
- Program should encourage NZE trucks by extending exemption from fee for useful life of truck, beyond 2035 if necessary

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### **Retail Industry Leaders Association**

- Economic study understates potential economic and diversionary impact of the currently-proposed fee
- Industry stakeholders not included in consideration of affects
- Questions remain as to how program will be implemented, definitions and availability of clean truck technology, how funds will be collected, and how funds will evolve as the program moves forward
- Additional time will allow the ports to expound on the details of the program

### **SoCalGas**

- Proposed rate is too low to generate sufficient funds to meet goal of ZE trucks by 2035
- Without stronger action by ports, region will have trouble meeting 2023 attainment deadline or face federally imposed sanctions and/or implementation plans

### **Overseas Freight, Inc.**

- Ports should define NZE
- Encourage NZE trucks by not levying a rate for the useful life of the truck.
- The exemption ends far too soon in 2027 and funding eligibility should continue until 2035
- The rate should be closer to \$50 per TEU. The proposed rate will not motivate a change or allow new, more expensive cleaner trucks to compete with the existing used diesel trucks.

### **American Apparel & Footwear Association (AAFA),**

- New container fees would do nothing to further or accelerate the adoption of ZNE or ZE trucks and there is no clarity on how the funds raised would be spent
- Cargo owners will have no choice but to pay the fee as there are no ZE trucks available to purchase.
- The proposal presumes regulation
- The addition of another fee compounds many new challenges, including the coronavirus

### **Footwear Distributors & Retailers of America (FDRA)**

- It is not apparent how the funds will be allocated is no clarity on how the funds raised would be spent
- ZE trucks are not yet available
- Companies may consider other ports when trying to mitigate any cost increases

### **Cummins Inc.**

- Cummins and their OEM partners are capable of replacing ~8,000 trucks with low NO<sub>x</sub> (0.02g NO<sub>x</sub>) trucks by January 1, 2023, provided orders are placed no later than the 1st quarter 2021.

### **Various members of the public**

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- End Use of Diesel Form Email: supports the Mayor's zero emissions goal of 100% zero emissions by 2035 with interim targets, opposes natural gas trucks, must begin the large scale truck deployment (21 letters received)
- CTP Form Email: the fee could divert cargo to other gateways or suppress drayage rates, encourage early adoption of NZE, funds should focus on aiding small fleets, work with HTA to limit burdens on trucking industry (45 letters received)

## **Organized by Comment Topic**

### *Comments related to critiques of economic study*

1. Any fee and associated administrative fees would have a significant impact on business (Walmart)
2. Economic study significantly underestimates costs of the proposal and the impacts on transloaded cargo – the NRF not accept idea transload cargo is inelastic (NRF)
3. Analysis does not factor in administrative costs (largely because administrative process remains undefined) or cumulative effect of other container fees (PierPass) (NRF)
4. Other factors not considered: ISO 2020 low sulfur standard; changes in business model for US retailing; wider analysis of tariff policy (NRF)
5. Economic study understates potential economic and diversionary impact of the currently-proposed fee (Retail Leaders Association)
6. Diversion estimates grossly understated but even reported level of diversion will be enough to wipe out growth ports have experienced since 2016 (PMSA)
7. Revise study to include economic impact of diversion on local community (PMSA)
8. Revise study to include analysis of export diversion (PMSA)
9. Analysis ignores time component of elasticity (PMSA)
10. Regression model is flawed and too simplistic; assumption of one-way causal effects of time and cost incorrect (Coalition for Clean Air)
11. Study fails to look at what non-attainment of federal goals would look like for the region (Agility Fuel Solutions)

### *Comments related to level of rate*

1. Draft study supports a truck rate significantly high than the \$10 per TEU proposed by staff (AQMD)
2. Ports must send strong message to marketplace that there is support for increased production and utilization of ZE trucks. This can be accomplished by setting a higher rate (CARB)
3. Increase the CTF rate to \$50/TEU to ensure resulting pool of funding is sufficient to incentivize zero emissions (International Brotherhood of Electrical Workers)
4. \$10/TEU is inadequate to raise necessary funding for subsidies and incentives to turn over fleet; Propose rate in range of \$50-\$100/TEU (Breathe California)
5. Supports rate of \$35 -\$50/TEU (Coalition for Clean Air)
6. Increase rate to \$40-\$50/TEU to collect more clean truck incentive funds and motivate voluntary turnover of the fleet (Clean Energy)
7. Increase rate to \$40-\$50/TEU to collect more clean truck incentive funds and motivate voluntary turnover of the fleet (California Natural Gas Vehicle Coalition)
8. Rate should be adequate to cover price difference between conventional diesel truck and a ZE truck to fund a purchasing incentive program for truck owners to offset costs of transitioning to ZE trucks (California Hydrogen Business Council)
9. Truck rate should be around \$50/TEU (TTSI)
10. Urges adoption of \$100 container rate (AJR Trucking/MDB Transportation)

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11. Rate should be \$45/TEU to provide high enough per truck incentives to truck owners to offset the high increased costs of transitioning to NZE and ZE trucks. (Cory Shumaker, Independent Consultant)
12. Supports container rate in range of \$100 to support companies who have already begun the transition to clean energy (Green fleet Systems)
13. Supports container rate in range of \$100 to support companies who have already begun the transition to clean energy (Maxlink Logistics)
14. Supports rate of \$60/TEU to support companies who have already begun the transition to clean energy (Pacific 9 Transportation)
15. Urges consideration of a rate of \$35/TEU (Agility Fuel Solutions)
16. Increase rate to \$40-\$50/TEU to collect more clean truck incentive funds and motivate voluntary turnover of the fleet (Quantum Fuel Systems)
17. "We need a container rate at the Los Angeles-Long Beach Port complex that reflects both ports commitment to significantly reducing NOx, particulate, and greenhouse gas emissions. I encourage a container rate that continues to lessen the burden on frontline communities." (Representative A. Lowenthal)
18. Recommend CTR rate be increased significantly to ensure that the resulting pool of funding is sufficient to incentivize the transition to zero emissions trucks. (LA Cleantech Incubator, LA National Electrical Contractors' Association, Greenlots)
19. Proposed rate is too low to generate sufficient funds to meet goal of ZE trucks by 2035 (SoCalGas)
20. CTR should not exceed the proposed level for the foreseeable future. The proposed rate strikes balance between reducing tuck emissions while limiting the diversion of cargo to other competing ports (ILWU)
21. The rate should be closer to \$50 per TEU. The proposed rate will not motivate a change or allow new, more expensive cleaner trucks to compete with the existing used diesel trucks (Overseas Freight, Inc.)

### *Comments related to structure of CTP*

1. Draft plan lacks detailed explanation of what the revenues would be used for (Walmart)
2. Truck fee raises significant revenues without any detail of how money will be spent (NRF)
3. Questions remain as to how program will be implemented, definitions and availability of clean truck technology, how funds will be collected, and how funds will evolve as the program moves forward (Retail Leaders Association)
4. Recommends that detailed plan of how funds will be used be developed in concert with the final decision the rate itself and that the funding be dedicated to ZE trucks. (International Brotherhood of Electrical workers)
5. Concerned timeline presented does not align with anticipated deployment of necessary technology (Walmart)
6. Clarify tangible steps along the process i.e. interim goals (Breathe California)
7. Begin collecting rate ASAP but no later than September 1, 2020 (Clean Energy, California Natural Gas Coalition, Inland Kenworth, Quantum Fuel Systems)
8. Create CTRF of \$270 million by advancing the rate funds for the first three years of collection and begin awarding funding for advanced clean trucks July 2020 (Clean Energy, California Natural Gas Coalition, Inland Kenworth, Quantum fuel Systems)

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9. Ensure CTP Costs are not born by truck drivers (International Brotherhood of Electrical workers, PMSA, THE Impact Project Coalition, California Hydrogen Business Council)
10. Concerned ports have not developed details of the incentive program; Ports should develop an incentive program term sheet, setting forth the basic structure of how the program will function, identifying critical miles stones, and outlining (at least at a high level) the path toward achieving the CAAP Goals (Agility Fuel Solutions)
11. New container fees would do nothing to further or accelerate the adoption of ZNE or ZE trucks and there is no clarity on how the funds raised would be spent (AAFA)
12. It is not apparent how the funds will be allocated is no clarity on how the funds raised would be spent (FDRA)
13. Funds to operators should focus on aiding small fleets (members of public)
14. Voting on a truck fee at this point is premature; wait for regulations to be in place (NRF)
15. Implementation should be postponed until details of the funding program are made available (NRF)

### *Comments related to equipment availability*

1. Proposed fee is unfairly punitive because there are no ZE options in the industry at this time and very few NZE options (Target)
2. NZE and ZE truck are not currently available (NRF)
3. Requests implementation of container fees be delayed until more equipment becomes available (Target)
4. Advises against expending limited capital dollars on immature technologies (ILWU)
5. Cargo owners would have no choice but to pay the rate as there are no ZE trucks available (AAFA)
6. ZE trucks are not yet available (FDRA)

### *Comments related to a Low NO<sub>x</sub> standard*

1. Recommends that the ports consider qualifying only trucks meeting 0.02 g/bhp-hr NO<sub>x</sub> or better for the CTF rebates as well as incentives in the CTP (AQMD)
2. Establish a clearer definition of near-zero – ports should use CARB's optional standard of 0.02 (Breathe California)
3. Define NZE to mean a truck: (1) with an engine certified to CARB's 0.02 standard; and (2) uses renewable fuel that reduces greenhouse gases by at least 50% compared with baseline diesel as determined by CARB's Low Carbon Fuel Standard. (Clean Energy, California Natural Gas Vehicle Coalition, Inland Kenworth, Quantum Fuel Systems)
4. Clarity needed on definition of NZE; should be trucks certified to meet CARB 0.02 standard (TTSI)
5. The Ports should define NZE (Overseas Freight, Inc.)

### *Comments related to treatment of NZE trucks*

1. Seek clarification on which trucks would qualify as NZE (Walmart)
2. Recommends the ports allocate most, if not all, of the CTP revenues in the near term to subsidize NZE trucks. (AQMD)
3. Extend the fee refund benefit longer for NZE trucks (Breathe California)

4. Exempt NZE trucks from the rate for the duration of the trucks useful life per the standards contained in SB1 Section 18 (Health & Safety Code Section 43021(a)) (Clean Energy, California Natural Gas Coalition, Inland Kenworth, Quantum Fuels)
5. Continue funding NZE trucks until 2035 (Clean Energy, California Natural Gas Coalition, Inland Kenworth, Quantum Fuels)
6. Program should encourage NZE trucks by extending exemption from fee for useful life of truck, beyond 2035 if necessary (TTSI)
7. NZE emission trucks should not be exempt from the CTRF beginning sooner rather than later, preferably before 2027 as proposed (Cory Shumaker, Independent Consultant)
8. Encourage NZE trucks by not levying a rate for the useful life of the truck. The exemption ends far too soon in 2027 and funding eligibility should continue until 2035 (Overseas Freight, Inc.)
9. Fully Opposes natural gas trucks (members of public letters)

### *Comments related to the treatment of ZE Trucks*

1. Dedicate rate revenues to zero emissions exclusively to accelerate adoption of ZE trucks (International Brotherhood of Electrical Workers)
2. Phase in short haul ZE drayage trucks beginning immediately; Study a ZE only registration requirement; Allocate all proceeds collected by the rate to fund purchase incentives for zero-emission trucks; Analyze and measure the health costs borne by freight impacted communities and the benefits of transitioning to a zero-emission fleet; Revise the study's flawed assumptions regarding availability and cost of zero-emission trucks (Trade, Health and Environment (THE) Impact Projection Coalition)
3. Exemptions to rate should only apply to ZE trucks (California Hydrogen Business Council)
4. Dedicate rate revenues to ZE to accelerate adoption of ZE trucks; recommend that the details of how these funds are used be developed in concert with the final decision on the rate itself, and that the funding be dedicated to ZE trucks. (LA Cleantech Incubator, et al)

### *Comments related to Health Impacts*

1. Recommend health impacts be considered (AQMD)
2. Study does not factor in cost savings from public health benefits that ZE trucks provide. CARB encourages ports to provide a comparable analysis of cost savings from the prospective of reductions in premature deaths, hospitalizations emergency room visits and other benefits of cleaner air. (CARB)
3. Draft study does not address public health (Breathe California)

### *Comments related to legal perspectives*

1. Truck rate likely preempted by the FAAAA (ATA, CTA, HTA)
  - Rate charged to shipper/owner of cargo does not help proposed rate escape preemption (Rowe); "...the effect of the regulation is that carriers will have to offer...delivery services that differ significantly from those that, in the absence of the regulation, the market might dictate. And that being so, 'treating sales restrictions and purchase restrictions differently for pre-emption purposes would make no sense.'"

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- Urge ports to work closely with ATA, CTA and HTA to ensure implementation of updated CTP is consistent with the ports' jurisdiction and authority.
- 2. Without stronger action by ports, region will have trouble meeting 2023 attainment deadline or face federally imposed sanctions and/or implementation plans (SoCalGas)
- 3. Study fails to look at what non-attainment of federal goals would look like for the region (Agility Fuel Solutions)

### *Miscellaneous Comments*

1. Asks that ports delay plan to allow for more time to address stakeholder concerns (Walmart)
2. Requests ports undertake quantitative study of the stakeholder community (surveys) to gather actionable data especially on administrative costs of proposal (NRF)
3. Industry stakeholders not include in consideration of affects (Retail Leaders Association)
4. Urges ports slow down adoption of rate until CARB manufacturing standard finalized (NRF)
5. Additional time will allow the ports to expound on the details of the program (Retail Leaders Association)
6. Economic study concludes a fee is unnecessary – regulatory approach gets the ports to ZE and NZE by 2034 (NRF)
7. Utilize Drayage Truck Registry to more quickly phase out diesel trucks (Breathe California)
8. Allow the market to solve the problem by setting no rate at all but immediately restricting all new additions to the PDTR to trucks that can meet or exceed the optional low-NOx Standard (0.02) while requiring all trucks in the registry to meet or exceed the optional low-NOx standard by July 1, 2023 and changing CAAP 100% ZE drayage tucks by 235 goal to a requirement. (Coalition for Clean Air)
9. Ports should insist on state/local funding commitments (PMSA)
10. Ports should make commitment to competitiveness and preserving jobs as public as commitment to clean air (PMSA)
11. Cargo diversion is not a justification for a low CTF Rate (Breathe California)
12. Update the *Drayage Truck Feasibility Assessment* annually (LA Cleantech Incubator, et al)
13. The addition of another fee compounds many new challenges, including the coronavirus (FDRA)
14. Companies may consider other ports when trying to mitigate any cost increases (AAFA)
15. Cummins is capable of replacing ~8,000 trucks with low NO<sub>x</sub> (0.02g NO<sub>x</sub>) trucks by January 1, 2023, provided orders are placed no later than the 1st quarter 2021. (Cummins)
16. The fee could divert cargo to other gateways or suppress drayage rates, encourage early adoption of NZE, funds should focus on aiding small fleets (members of public)
17. Work with HTA to limit burdens on trucking industry (members of public)
18. The fee could divert cargo to other gateways or suppress drayage rates (members of public)



May 7, 2019

Mr. Mario Cordero  
Executive Director  
Port of Long Beach  
4801 Airport Plaza Dr.  
Long Beach, CA 90815

Mr. Gene Seroka  
Executive Director  
Port of Los Angeles  
425 South Palos Verdes St.  
San Pedro, CA 90731

**RE: Zero-Emission Drayage Trucks**

Dear Mr. Cordero and Mr. Seroka:

On behalf of the undersigned organizations, we write regarding efforts to advance zero-emission trucks at the San Pedro Bay Ports. Both Ports must do more to achieve Mayor Garcia's and Mayor Garcetti's 2017 joint Executive Directive as it relates to port drayage trucks. We're rapidly approaching the two-year anniversary of this Executive Directive, and we are concerned the Ports are not making the necessary progress to ensure a smooth transition to 100% zero-

emission drayage trucks by 2035. We suggest the Ports take several steps to ensure the successful transition to zero-emission trucks.

## **I. The Port Industry Continues to Exact a Large Toll on Community Health.**

We continue to find out air pollution is more dangerous than we previously knew. Our families living, working and attending school in environmental justice communities have waited too long for air clear from deadly diesel pollution. Our daily lives disrupted by health, quality of life and economic burdens are unseen illustrations of the outdated modes of operation in and around the San Pedro Bay Ports. Without any substantive progress towards 100% zero-emission drayage trucks, we'll continue to hear parents say the following:<sup>1</sup>

*My 7 year old son was hospitalized twice last year due to asthma. At the time, he seemed like a normal kid until he got a cold, which triggered his asthma and spiraled out of control from one day to the next.*

*My 6 year old daughter has asthma. Her first experience with difficulty breathing was when she was 2 years old. I was terrified. I called 911 and we went by ambulance to the hospital. After that first instance, others followed. Her doctor finally diagnosed her with asthma and prescribed an albuterol inhaler – but it seemed to make her sicker. She would get terrible headaches, have nightmares, would feel jittery and was generally frightened. My lack of understanding of what was happening to her combined with her fear made me feel helpless and scared myself.*

*My 10 year old daughter has asthma. She is the only family member with asthma. As a family, we've experienced our daughter having 4 asthma attacks and rushing her to the emergency room to receive treatments all within 6 months. My daughter suffers daily with asthma symptoms and our family is unsure why.*

We cannot continue along a path where the externalities of port operations are our health and welfare.

## **II. Our Organizations Support Zero-Emission Drayage Trucks.**

Our organizations have come together to clearly state that we want a shift to zero-emission port drayage trucks. Many of our organizations have been the most active participants in advocating for port clean up over the years. Our organizations have challenged Port developments when we believed they failed to adequately protect health and the environment, have advocated strenuously when we believed clean air plans for the Ports lacked sufficient force, and even negotiated ways to allow freight to continue even as port clean up took place. While others outside our collaborative have suggested we should support a wholesale transition

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<sup>1</sup> These are real statements from people living in the harbor area.

to natural gas trucks (i.e., “near-zero” trucks), we want to clarify this does not reflect our position.

While some fuel providers and their paid spokespeople have made the push to deploy “near-zero” trucks or even “clean diesel” trucks instead of zero-emissions, we want to be clear that we believe these approaches detract from advancing zero-emission trucks. As recent analyses from the Ports have shown, a wholesale shift to natural gas trucks, for example, will require significant additional fueling infrastructure. This infrastructure will inevitably be placed in communities that already suffer disproportionately from the freight movement industry. The communities listed on this letter do not want this fossil fuel infrastructure, and as such demand reasonable measures to achieve zero-emission trucks in the near-term.

Despite having no plans to prioritize zero-emission trucks over near-zero vehicles prior to 2035, the Ports project that zero-emission trucks will account for about 10% of the port fleet in 2031, and then quickly jump to 65 - 85% in 2035. They also project that near-zero will account for 90% of the fleet in 2031 and then quickly reduce to 15 - 35% in 2036. To facilitate the retirement of expensive natural gas vehicles and infrastructure before the end of their economic life, the Ports will have to implement a steep dirty truck rate. Unnecessary investments and disruptions will occur unless the Ports incentivize zero-emission trucks above near-zero prior to 2035, to ease the transition from diesel to zero-emissions and avoid a short, sharp shift to and from natural gas vehicles. In fact, there is no reason the Ports could not start providing incentives for the use of zero-emission trucks now. Some incentive examples include:

- Priority: Port Terminal Entry Line, Container Inspection, Truck Inspection**
- Free: Fuel Subsidies Covered and Extended/Lifetime Warranties**
- Discount**
- Vouchers: New Tires, Brake Job, New Truck Purchase**
- Funds: Feebates, incentive dollars for use of zero-emission vehicles**

Our analysis shows zero-emission trucks are the best strategy to address localized air pollution hazards, decrease regional air pollution threats, and when combined with a rapidly cleaner electric grid, reduce greenhouse gases. We do not ask that the Ports shift the drayage fleet to zero-emission overnight, but we recognize the need to take steps now and establish a ZE Phase-in Plan to ensure a complete fleet conversion in a relatively short timeframe.

### **III. The Ports Must Make Progress Toward Zero-Emission Drayage Trucks Now.**

For more than a decade, organizations have been asking the Ports to make substantial progress towards zero-emission drayage trucks. The general public has also weighed in by approving Proposition B and Measure M to help finance freight transportation transition. We fear these efforts to advance zero-emission trucks have taken a back seat as the Ports appear to desire the creation of the largest fleet of natural gas burning trucks in the nation. The Governor

of California and the Mayors of Los Angeles and Long Beach have been clear that they desire a zero-emission future, and actions must be taken now to ensure we hit the 2035 mark for 100% zero-emission trucks.

As the Ports explore the next iteration of their clean trucks programs, there are three core principles that we suggest the Ports follow:

- First, the criteria pollutant benefits and greenhouse gas benefits of electric trucks are greater than any combustion alternative.<sup>2</sup>
- Second, to meet the directive to have 100% zero-emission trucks serving the Ports of Los Angeles and Long Beach by 2035, the Ports must start now toward a broader deployment standard, including identifying and addressing near-term barriers to adoption of zero-emission trucks (e.g. rates and charging infrastructure).
- Third, any program related to trucks must be designed to give the greatest push to deploying zero-emission trucks now to facilities in EJ Communities that can utilize short-haul drayage trucks. This includes incentive dollars, trucks rates, and other strategies to push for the clean-up of the drayage truck fleet.

These principles are critical to ensuring the Ports are advancing zero-emission trucks now.

#### **IV. The Ports Should Formally Adopt Zero-Emission Vehicle Targets.**

In comments on the Clean Air Action Plan, several organizations proposed gradual, yet ambitious transition targets for Port drayage trucks to shift to zero-emissions. In those comments, we proposed the following targets:

2020	1.5% Zero-Emission Trucks
2024	25% Zero-Emission Trucks
2028	60% Zero-Emission Trucks
2030	90% Zero-Emission Trucks
2035	100% Zero-Emission Trucks

Whether this set of targets or something different, the Ports need to develop benchmarks of success in advancing zero-emission trucks, instead of simply the current vague and ad hoc “commitment” to advancing zero-emission trucks.

Moreover, the Ports should recognize that many state programs make zero-emission trucks more desirable now. For example, if the Hybrid Vehicle Incentive Program is used to offset any incremental additional cost in purchasing a zero-emission truck, the truck is actually cheaper for the Ports to incentivize than a new near-zero natural gas truck. In addition, several

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<sup>2</sup> Our analysis shows this even if one assumes the natural gas burning trucks buy fuel from a fuel provider that obtains Low Carbon Fuel Standard credits from capturing biomethane from out-of-state or in-state – even assuming the large supply of biomethane claimed by natural gas fuel providers could actually come to fruition.

programs have been developed on a first-come, first-serve basis to advance zero-emission trucks. Millions of dollars will be hitting the streets under the VW Appendix D scandal settlement this year. We fear the Ports are too distracted advancing the interests of natural gas burning trucks and not pushing to implement zero-emission trucks.

The Mayors also directed the Ports to advance a 50-100 truck deployment pilot for zero-emission trucks. This will help truck operators understand the operational and other challenges to operating more than a handful of zero-emission trucks. To date, we have not seen the Ports (or others) identify a plan to implement this directive. This lack of progress after two years indicates the Ports are dismissing this critical element of the Mayors' Executive Directives.

We would also like to bring to your attention the passage of AB 617 and its mandate to reduce emissions from all major stationary and mobile pollution sources. The ports, freight transportation corridors, railyards and warehouse-distribution centers have all been identified as priorities for the Community Plans currently in development.

Finally, we fear that there are unequal efforts to figure out infrastructure challenges to advancing zero-emission drayage trucks. We believe the Port of Long Beach and the utility that serves it, Southern California Edison (SCE), are taking these challenges more seriously than the Port of Los Angeles and its utility, Los Angeles Department of Water and Power (LADWP). For example, our analysis shows the cost of electricity in LADWP's territory for zero-emission drayage trucks will be much higher than in SCE's territory. In addition, we do not think any progress is happening to pave the way from an infrastructure-planning side to make sure electric trucks succeed within the City of Los Angeles. In contrast, SCE is launching a major heavy-duty infrastructure investment this year. This disparity in advancing charging infrastructure for drayage trucks and much better EV charging rates for drayage trucks on one side of the harbor will have a discriminating impact on whether trucks in Los Angeles decide to move to electric, as opposed to continuing on a diesel path.

#### **V. Planning for the Future Requires Leadership from the Ports.**

While we do not expect the Ports to address all of the charging issues surrounding a zero-emission truck future, it must play an active role in planning for the future. As such, we would like to see the Ports identify what entity should be planning for an electric truck future and our organizations would actively participate in the process. We understand that concepts like trucking electrification involves many jurisdictions from the Ports to the Railyards to the Warehouses. While it can be easy to argue this planning is not the duty of the Ports, the Ports would be abdicating its duties if it did not help the region facilitate this transition away from combustions technologies in the trucking sector. As such, the Ports should ask the Mayors of Los Angeles and Long Beach to consider what entity should undertake this planning effort, in conjunction with the utilities, cities and counties in the Inland Valley region, and other important stakeholders like the California Air Resources Board and the South Coast Air Quality Management District. A major push should be presented to the new Southern California Association of Governments (SCAG) Regional Transportation Plan currently in development

and at the Caltrans California Freight Advisory Committee. These large-scale transformational challenges require planning now.

This request for regional planning should not displace current efforts to plan for zero-emissions on the terminals of the Ports. We have been appreciative of efforts like the Port of Long Beach EV Blueprint process, which is tackling the near-term challenges to advancing zero-emissions cargo handling equipment by 2030. These efforts need to continue, but in addition, the Ports need to exhibit leadership in the regional planning for advancing zero-emissions in drayage trucks.

We appreciate your consideration of these comments. We reiterate that our critique is not that the Ports are doing nothing to advance zero-emission trucks. In fact, they are engaging in several important activities. Rather, our critique is that transitioning to 100% zero-emission trucks by 2035 requires robust and sustained action from now until Mayor Garcia and Garcetti's promises are met. We fear the near-term strategies to get to zero-emissions, including electrification of trucks, are being placed on the back burner. Please do not hesitate to contact us if you have questions about these comments.

Sincerely,

Andrea Vidaurre  
Center for Community Action & Environmental Justice

Jesse Marquez  
Coalition for a Safe Environment

Taylor Thomas  
East Yard Communities for Environmental Justice

Adrian Martinez  
Earthjustice

Sylvia Betancourt  
Long Beach Alliance for Children with Asthma

Heather Kryczka  
Natural Resources Defense Council

Peter Warren  
San Pedro Peninsula Homeowners Coalition

Carlo De La Cruz  
Sierra Club

Angelo Logan  
Urban & Environmental Policy Institute, Occidental College

ZE Truck Letter  
05/07/19  
Page 7 of 7

Theral Golden  
West Long Beach Neighborhood Association

CC: Mayor Garcia, Long Beach  
Mayor Garcetti, Los Angeles  
Board of Harbor Commissioners, Port of Long Beach  
Board of Harbor Commissioners, Port of Los Angeles

*Hydrogen Means Business in California!*

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**STAFF**

**Jeffrey Serfass** | Executive Director  
**Emanuel Wagner** | Deputy Director

August 20, 2019

Port of Long Beach  
Environmental Planning  
4801 Airport Plaza Drive  
Long Beach, CA 90815

Port of Los Angeles  
Environmental Management  
425 S. Palos Verdes St.  
San Pedro, CA 90731

**RE: CHBC Comments on Clean Truck Fund Rate Workshop**

Dear CAAP Team,

The California Hydrogen Business Council (CHBC)<sup>1</sup> appreciates the opportunity to offer comments on the Clean Truck Fund Rate Workshop held August 1, 2019.

The CHBC would like to provide overall support of the Clean Air Action Plan (CAAP) and the goal of transitioning all trucks and equipment to zero emission. We support the effort to create a mechanism to collect a specified rate from trucks entering the ports that do not meet the California Air Resources Boards' certification for near-zero engines.

This Clean Truck Fund rate should be high enough to make a difference in the subsequent use of the funds to incentivize zero emission trucks, such as hydrogen fuel cell electric trucks. The CAAP Team should consider applying a higher rate to truck engines that are the least compliant to accelerate the adoption of zero emission trucks.

We understand the perspective of the truck drivers in not wanting to pay out of their pocket for this new rate, as the financial burden should be put on the beneficial cargo owners. Large companies that use the facilities of the port for their economic benefit need to support the goal of a transition to zero emission trucks by 2035; this Clean Truck Fund rate is a necessary step in that direction.

We would be happy to answer any questions you may have about our comments. Please feel free to contact us.

Best regards,



Emanuel Wagner  
Deputy Director  
California Hydrogen Business Council

<sup>1</sup> The views expressed in these comments are those of the CHBC, and do not necessarily reflect the views of all of the individual CHBC member companies. CHBC Members are listed here: <https://www.californiahydrogen.org/aboutus/chbc-members/>

September 30, 2019

Mr. Mario Cordero, P.E.  
Executive Director  
Port of Long Beach  
4801 Airport Plaza Drive  
Long Beach, California 90815  
[Mario.Cordero@polb.com](mailto:Mario.Cordero@polb.com)

Mr. Gene Seroka  
Executive Director  
Port of Los Angeles  
425 South Palos Verde Street  
San Pedro, California 90731  
[Gene\\_Seroka@portla.org](mailto:Gene_Seroka@portla.org)

Dear Mr. Cordero and Mr. Seroka:

I am writing to offer the California Air Resources Board (CARB)'s partnership and encouragement on reducing emissions from trucks as the Ports continue to move forward to pursue air quality improvements. The Ports have played a critical role in substantially reducing emissions and associated health impacts to neighboring communities, but there is still much that can and should be done. Air pollution from the Ports continues to affect State and local air quality and public health. I understand the Ports are considering next steps on encouraging the use of cleaner vehicles at their facilities.

The California Air Resources Board (CARB) is confident that the Ports can take more action to accelerate the adoption of zero emission and low nitrogen oxide (NOx) emitting vehicles and equipment, especially for sources that travel through neighboring communities. This near-term action is critical to address localized health risk by further cutting diesel particulate matter emissions beyond the 85 percent reduction target in the 2017 Clean Air Action Plan. This is consistent with the need to help achieve ambient air quality standards by reducing NOx and to lower community air pollution burdens, and to meet the Ports' goal of 100 percent zero emission trucks by 2035.

One important step that the Ports can take is to implement gate rates or incentives based on the emissions levels of trucks entering the Ports – prioritizing zero-emission trucks, and also differentiating low-NOx trucks from conventional combustion vehicles. Providing these incentives would directly address localized health risks by helping to further reduce emissions of NOx, particulate matter, and other pollutants in local communities affected by truck traffic.

In CARB's view, the Ports have the legal authority to set in-use requirements for accessing their private facilities in this manner. The Ports may use tools available to any private company, and, like any participant in the freight market, may develop environmental incentives that make the ports better industrial citizens and hence more attractive to businesses. As the Supreme Court held considering past Port efforts, the Ports may act as market participants through contractual and incentive means to reward the use of clean vehicles (provided, of course, that they do not attach criminal sanctions to violations of their incentive structures). See *American Trucking Associations, Inc. v. City of Los Angeles* (2013) 569 U.S. 641, 651–54. These tools can and should include incentives for cleaner vehicles, especially zero-emission vehicles, or the exclusion of certain vehicles from the Ports for failing to abide by voluntary agreements between the Ports and the vehicles operating at its facilities. (*Id.* at p. 654.) Use of tools available to a private company would not be preempted by any federal law concerning interstate commerce, such as the Federal Aviation Administration Authorization Act of 1994. (*Id.* at p. 654.)

CARB recognizes that the Ports may be viewed as government bodies, but the federal Clean Air Act is clear that governments, too, may set appropriate in-use regulations and requirements. (42 U.S.C. § 7543(d) Such in-use and locality-based rules are rooted in the general authorities inherent to local government. Moreover, localities are free to set in-use rules for their own fleets or fleets they control. See *Engine Manufacturers Association v. South Coast Air Quality Management District* (9th Cir. 2007), 498 F.3d 1031.

Given these authorities, CARB believes the Ports would prevail in any challenges to properly designed in-use incentive structures. We are happy to work with you to further explore workable designs for such programs.

The Ports should incentivize zero-emission vehicles in particular. Zero-emission vehicles offer the greatest public health and climate change benefits. One potential option to encourage zero emission vehicle use at the ports is to provide rebates to zero emission vehicles that enter the ports.

The Ports could fashion gate rates by referencing NOx standards that some trucks already meet. For instance, in determining at what NOx levels to set different gate rates, the Ports could consider using the NOx levels in CARB's Optional Low NOx Emissions Standards regulation (Optional Low NOx regulation) (Cal. Code Regs., tit. 13, § 1956.8). The Optional Low NOx regulation establishes the next generation of optional low NOx standards for 2015 and later Model Year (MY) heavy-duty engines. The regulation consists of three optional NOx emission standards: 0.1 g/bhp-hr, 0.05 g/bhp-hr, and 0.02 g/bhp-hr. These three standards are 50 percent, 75 percent, and 90 percent lower, respectively, than the current mandatory NOx emission standard of 0.2 g/bhp-hr. Manufacturers can elect to certify to any of the optional NOx standards, or instead to certify to the existing mandatory 0.2 g/bhp-hr NOx standard. In the past two years, CARB has already certified trucks that meet the optional NOx standards in the Optional Low NOx regulation.

Mr. Cordero and Mr. Seroka  
September 30, 2019  
Page 3

Any incentive structure should also further drive greenhouse gas reductions by requiring the use of renewable fuels.

The Ports have been worldwide leaders in reducing emissions, and developing truck gate rates that prioritize zero emission, while also providing appropriate benefits for low NOx trucks. They have an opportunity to continue that role. We will be prepared to discuss this opportunity further with you and your teams.

If you have any questions, please call me at (916) 445-4383, or have your staff contact Bonnie Soriano, Chief, Freight Activity Branch, Transportation and Toxics Division, at (916) 322-8277, or by email at [Bonnie.Soriano@arb.ca.gov](mailto:Bonnie.Soriano@arb.ca.gov).

Sincerely,



Richard W. Corey  
Executive Officer

cc: (via email)

Kathleen Kenealy  
Senior Assistant City Attorney  
Los Angeles City Attorney's Office  
[Kathleen.Kenealy@lacity.org](mailto:Kathleen.Kenealy@lacity.org)

Christopher Cannon  
Director of Environmental Management  
Port of Los Angeles  
[CCannon@portla.org](mailto:CCannon@portla.org)

Dawn McIntosh  
Deputy City Attorney  
City of Long Beach  
[Dawn.McIntosh@longbeach.gov](mailto:Dawn.McIntosh@longbeach.gov)

Heather Tomley  
Acting Managing Director of Planning and Environmental Affairs  
Port of Long Beach  
[Heather.Tomley@portlb.com](mailto:Heather.Tomley@portlb.com)

**Maxlink logistics Inc**  
**15330 Fairfield Ranch Rd., Unit G,**  
**Chino Hills, CA 91709**

October 11, 2019

Gene Seroka  
Executive Director  
Port of Los Angeles  
425 S Palos Verdes St  
San Pedro CA 90731

Mario Cordero  
Executive Director  
Port of Long Beach  
415 W. Ocean Blvd.  
Long Beach, CA 90802

Subject: CAAP Container Rate

Dear Mr. Seroka and Mr. Cordero,

My port trucking company is a small operation with 6 trucks in the fleet. We applied for and received a truck replacement grant for two trucks from AQMD. The grant requires us to scrap our old trucks and replace them with new clean trucks. We are scheduled to receive the new trucks later this month.

I am writing to express support for a Container Rate that helps companies like mine. We are doing the right thing by scrapping the old trucks. However, the new trucks have a large truck payment and higher costs for insurance and DMV registration. The new trucks with these higher costs must compete with the many other old trucks that are operating in the port. I am at a competitive disadvantage because my truck costs are much higher compared to those old trucks that will just keep running in the ports.

I am counting on the Container Rate to level the playing field so that I can compete with my more expensive trucks. The Container Rate should be on the order of \$100 per container. This will protect my business that is already investing in clean trucks and will encourage other companies to also invest in clean trucks. Without the support of a good container rate, there is no reason to invest in more expensive clean trucks. I urge you to adopt a strong container rate.

In addition to incentive the carriers like us to change to a clean truck, may I suggest to open the Express Lane for the CNG trucks who can come in and out the terminal faster.

Sincerely,



Mary Liu  
Maxlink Logistics Inc.  
(909) 586-3000

cc: Chris Cannon, Port of Los Angeles      Heather Tomley, Port of Long Beach



# Green Fleet Systems

2501 Cherry Ave., Suite 160, Signal Hill, CA 90755 • Phone: (310) 816-0610 • Fax: (310) 830-4217

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October 16, 2019


Mr. Mario Cordero  
Executive Director  
Port of Long Beach  
415 W. Ocean Blvd.  
Long Beach, CA 90802

Dear Mr. Cordero,

Green Fleet Systems, LLC has been a leader in clean trucking at the Ports for over ten (10) years. We started with the "Legacy" LNG trucks under the initial Clean Truck Program. Currently, we are upgrading our fleet to trucks equipped with the Cummins Westport ultralow-NOx engines. We have already taken delivery of twenty (20) of these trucks with the intent of acquiring additional units in an effort to reach our goal of operating the entire fleet with renewable natural gas trucks.

I urge the Port of Long Beach to adopt a container rate that supports companies that have invested in clean technology. I believe that adopting a strong rate will drive more companies to invest in new clean equipment and help reach the goal of significantly reducing emissions caused by older, "dirty" trucks.

A container rate in the \$100 range will surely drive new investment as well as level the playing field for those of us who have already begun the transition to the new clean technology.

Sincerely,  
  
Gary C. Mooney  
CEO

Cc Heather Tomley ✓



## Pacific 9 Transportation, Inc.

---

October 17, 2019

Gene Seroka  
Executive Director  
Port of Los Angeles  
425 S Palos Verdes St  
San Pedro CA 90731

Mario Cordero  
Executive Director  
Port of Long Beach  
415 W. Ocean Blvd.  
Long Beach, CA 90802

Subject: CAAP Container Rate

Dear Mr. Seroka and Mr. Cordero,

Pacific 9 Transportation has been providing port drayage services for over 15 years. We were early adopters of LNG trucks under the first Clean Trucks Program. We have since added to our fleet with other clean natural gas trucks. We operate 4 CNG trucks with the Cummins Westport ISX12N ultralow-NOx engine. We also operate 23 CNG Freightliner Cascadia trucks with the previous version of this engine, the ISX12-G. As the ports consider the decision on the container rate, we have two requests for you to consider.

First, the CNG trucks mentioned above fuel with renewable natural gas (RNG). RNG has the benefit of dramatically reducing greenhouse gas (GHG) emissions. According to the California Air Resources Board, RNG can reduce GHG emissions by up to over 300%. As I understand, reducing GHG is one of the key goals of the Clean Air Action Plan and is one emissions category that can use a lot of further reductions. Our ISX12-G trucks offer the benefit of GHG reductions. However, because these engines are certified to the 2010 EPA standard for NOx, we are concerned that the container rate will be applied to these trucks even though they offer great GHG benefits. A strong container rate will render these trucks uneconomic and we will lose our investment. We urge the ports to classify these trucks as exempt from the container rate in recognition of the GHG reduction benefits.



## Pacific 9 Transportation, Inc.

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Second, we support a strong container rate to provide an incentive for new clean trucks. We already operate 4 ultralow-NOx trucks and plan to acquire more. A container rate of \$60/TEU per container will provide the level playing field for these more expensive trucks to compete in the port market.

Sincerely,

A handwritten signature in black ink, appearing to read 'Alan Ta', is written over a horizontal line.

Alan Ta  
COO  
(310) 603-6011

cc: Chris Cannon, Port of Los Angeles  
Heather Tomley, Port of Long Beach



www.ajrtrucking.com

435 E Weber Ave Compton, CA 90222



www.mdbtransportation.com

October 23, 2019

Gene Seroka  
Executive Director  
Port of Los Angeles  
425 S Palos Verdes St  
San Pedro CA 90731

Mario Cordero  
Executive Director  
Port of Long Beach  
415 W. Ocean Blvd.  
Long Beach, CA 90802

Subject: CAAP Container Rate

Dear Mr. Seroka and Mr. Cordero,

My companies AJR Trucking and MDB Transportation are national leaders in clean trucking. MDB provides port drayage in the Ports of Los Angeles and Long Beach. AJR provides trucking for the US Postal Service. We have been transitioning our trucking operations to CNG trucks equipped with the Cummins Westport ISX12N (Near Zero) engine and powered by renewable natural gas. AJR Trucking operates more than 30 CNG tractors for the United States Postal Service. MDB Transportation is currently operating 15 CNG tractors servicing the Port of Los Angeles and Port of Long Beach, with another 15 tractors being added to the fleet before the end of 2019.

The ports will soon decide on the new container rates under the CAAP. This will not be popular, but I urge you to adopt a container rate of \$100. Companies like mine are willing to deploy clean trucks and eager to do so to meet the market needs. We want our truck emissions to be as low as possible. We do not like our industry to be tainted by the image and reality of old dirty trucks. A strong container rate means companies can run 100% on non-diesel technologies. This benefits the ports, the communities, and of course everyone concerned about climate change.

I urge you to support our efforts for clean trucking in the ports.

Sincerely,

A handwritten signature in black ink, appearing to read "Jack Khudikyan", written in a cursive style.

Jack Khudikyan

cc: Chris Cannon, Port of Los Angeles  
Heather Tomley, Port of Long Beach



January 3, 2020

**RE: Clean Air Action Plan 2017, Draft Final**

**Submitted via: [caap@cleanairactionplan.org](mailto:caap@cleanairactionplan.org)**

The American Trucking Associations' (ATA), California Trucking Association (CTA) and Harbor Trucking Association (HTA) represent the preponderance of licensed motor carrier (LMC) interest in the San Pedro Bay port complex.

We would like to first compliment the Ports and your respective staff for the exceptional amount of outreach conducted to date to all impacted community, public agency and industry stakeholders and thank you for the opportunity to comment on the Draft Final San Pedro Bay Ports 2017 Clean Air Action Plan (CAAP).

#### **Procedural Issues Related to CAAP Litigation History**

From a national perspective, the American Trucking Associations' Intermodal Motor Carriers Conference (IMCC) has been working with CTA and port officials to ensure that intermodal commerce related aspects of truck – port drayage are not impaired by any changes or modifications being considered or proposed to the clean truck program. As you know, during the development and deployment of the initial program in 2008, ATA sued both the Ports of Los Angeles and Long Beach arguing that the Federal Aviation Administration Authorization Act of 1994 [FAAAA, §14501(c)(1)] expressly preempted certain identified elements in the combined ports' program.

As a result of extensive negotiations between ATA and Long Beach port and city officials, a settlement was signed in October 2009 and approved by the U.S. District Court Central District of California which removed Long Beach from the lawsuit. The court order, which remains in effect, included the following restrictive language relevant to future changes or modifications to the program: "The parties agree that any material change by the Long Beach Defendants to the Registration and Agreement without the prior agreement of ATA set forth in a writing signed by representatives of each party having the express authority to so bind...would constitute a breach of this Settlement."

In addition, the settlement further stated that..."ATA shall not be precluded by this Settlement from filing a new complaint reinstating any claims previously brought against the Long Beach Defendants and/or asserting additional claims against the Long Beach Defendants arising from the Concession Agreement or the Registration and Agreement if the Long Beach Defendants—at any future time amend in any material way the terms of, or the procedures applicable to, the Registration and Agreement without the prior agreement of ATA..."

Regarding the Port of Los Angeles, on June 13, 2013, by a 9-0 unanimous vote, the U.S. Supreme Court ruled in favor of ATA's assertion that the FAAAA expressly preempts the port's specific concession agreement requirements identified by ATA and that Section 14501(c)(1) indeed preempts a state "law, regulation, or other provision having the force and effect of law related to a

price, route, or service of any motor carrier . . . with respect to the transportation of property.” 49 U. S. C. §14501(c) (1).

Concerning any future changes by the port regarding program enforcement activities, because the port argued that it in fact had never used its enforcement, suspension or revocation power to penalize a motor carrier’s past violations of program requirements, the court deferred on making a specific preemption ruling on enforcement actions. However, in its written opinion, the court clearly inferred that a decision would be appropriate when, if ever, the Port enforces its agreement in a way arguably violating the legal precedent ATA had presented.

In summary, the ATA will continue to work with CTA, HTA and their motor carrier members to ensure that the Long Beach-ATA settlement considerations and *Los Angeles v. ATA* Supreme Court decision guidance on concession enforcement is not infringed or impaired.

### **Truck Rate Likely Preempted**

The ports’ proposed “rate” on any truck not meeting certain emission standards is likely preempted by the FAAAA.

As explained by the Supreme Court in striking down Maine’s law prohibiting unlicensed tobacco shipment, holding that such requirements had a direct “connection with” motor carrier services:

In *Morales*, the Court determined: (1) that “[s]tate enforcement actions having a connection with, or reference to, ‘carrier’ ‘rates, routes, or services’ are pre-empted,”...(2) that such pre-emption may occur even if a state law’s effect on rates, routes or services “is only indirect,”...(3) that, in respect to pre-emption, it makes no difference whether a state law is “consistent” or “inconsistent” with federal regulation...and (4) that pre-emption occurs at least where state laws have a “significant impact” related to Congress’ deregulatory and pre-emption-related objectives” - *Rowe v. New Hampshire Motor Transp.* (2008) 552 U.S. 364, 372.

That the port proposes to assess the “rate” against the shipper/owner of the cargo that is being transported by the truck does not help the proposed “rate” escape preemption. The *Rowe* court emphasized that:

We concede that the regulation here is less “direct” than it might be, for it tells *shippers* what to choose rather than *carriers* what to do. Nonetheless, the effect of the regulation is that carriers will have to offer . . . delivery services that differ significantly from those that, in the absence of the regulation, the market might dictate. And that being so, “treating sales restrictions and purchase restrictions differently for pre-emption purposes would make no sense.” *Engine Mfrs. Assn. v. South Coast Air Quality Management Dist.*, 541 U. S. 246, 255 (2004). If federal law pre-empts state efforts to regulate, and consequently to affect, the advertising about carrier rates and services at issue in *Morales*, it must pre-empt Maine’s efforts to regulate carrier delivery services themselves...To allow Maine to insist that the carriers provide a special checking system would allow other States to do the same. And to interpret the federal law to permit these, and similar, state requirements could easily lead to a patchwork of state service-determining laws, rules, and regulations.

The Draft Final CAAP makes it clear that the intent of the “rate” is to compel shipper/cargo owner purchase behavior by creating an economic disincentive for use of certain trucks otherwise compliant with State and Federal emission standards. To allow such a “rate” could lead to an endless patchwork of economic regulation imposed by states and their subdivisions, directly or indirectly aimed at regulating motor carrier rates, routes and services, circumventing Congress’ deregulatory and pre-emption related objectives.

### **Status of State and Federal Emission Standards**

The Clean Air Act allows California to seek a waiver of the preemption which prohibits states from enacting emission standards for new motor vehicles. EPA must grant a waiver, however, before California’s rules may be enforced.

According to the Clean Air Act Section 209 – State Standards, EPA shall grant a waiver unless the Administrator finds that California:

- was arbitrary and capricious in its finding that its standards are, in the aggregate, at least as protective of public health and welfare as applicable federal standards;
- does not need such standards to meet compelling and extraordinary conditions; or
- such standards and accompanying enforcement procedures are not consistent with Section 202(a) of the Clean Air Act.

The 2017 CAAP update contemplated that the Air Resources Board would “promulgate a new engine standard in 2019 that will require all new heavy-duty engines manufactured in 2023 to meet the near-zero-emissions level.”

To date, no such standard has been established. ARB is currently in rulemaking and EPA indicates it will soon be in rulemaking to set new heavy duty on-road engine emission standards, to take effect potentially as far out as the 2027 model year.

The optional low NOx standards adopted by ARB in 2013 have not been published in the Federal Register as being submitted for authorization of waiver of Clean Air Act preemption.

Unlike the State of California, the ports do not have authority under the Clean Air Act to promulgate otherwise preempted new heavy duty on-road engine emission standards.

We urge the ports to work closely with ATA, CTA and HTA to ensure that implementation of the updated Clean Trucks Program is consistent with the ports’ jurisdiction and authority.

### **Conclusion**

The ATA, CTA and HTA look forward to working with the port on implementing the CAAP. We believe there are significant voluntary actions to take, within the ports’ jurisdiction and authority, which will result in the San Pedro Bay port complex continuing the lead the nation in sustainability.

Please feel free to contact us with any questions.

Tyler Rushforth, Executive Director  
American Trucking Associations' Intermodal Motor Carriers Conference  
[trushforth@trucking.org](mailto:trushforth@trucking.org)

Alex Cherin, Executive Director  
California Trucking Association, Intermodal Conference  
[acherin@ekapr.com](mailto:acherin@ekapr.com)

Weston Labar, CEO  
Harbor Trucking Association  
[weston@harbortrucker.com](mailto:weston@harbortrucker.com)



January 7, 2020

Mario Cordero  
Executive Director  
Port of Long Beach  
415 West Ocean Boulevard  
Long Beach, California 90802

**Re: Proposed Container Fees**

Dear Mr. Cordero,

I am writing to express Target's concerns with the proposed assessment of container fees to be charged to the beneficial cargo owners (BCO's) for loaded heavy duty trucks that do not meet the CARB-certified near zero emission engine standard or better. Given the volume of freight Target brings through the port any fee is substantial. But in this case, the proposed fee is unfairly punitive because there are no zero emission (ZE) options in the industry at this time and very few near-zero emission (NZE) options exist for commercial ordering.

There are a number of reasons why there currently is a very limited availability of NZE and ZE trucks - from manufacturing delays to delays in the timeline for final NZE standards to the technology just not being feasible or available at the moment. According to the Feasibility Assessment for Drayage Trucks released by the Ports in March 2019, a very low percentage of the current drayage fleet of roughly 18,000 trucks in the San Pedro Bay Harbor would meet the NZE standard. The study notes that even mass heavy duty truck and engine manufacturers are still in testing phases, with many new tests scheduled to come online in 2021 and beyond. Also, the lack of infrastructure in the harbor complex was noted as a significant barrier to having ZE trucks in the market.

Target is proud of our presence in California and our support for the local economy and communities in Long Beach. Target is also committed to finding ways to limit emissions throughout our supply chain and we have an ongoing commitment to invest in innovations supporting the transition to a lower-carbon transportation system. But we also understand that meeting these goals will not only take ingenuity, but time to create market ready equipment.

Given the unavailability of NZE and ZE trucks for purchase there seems to be little need of such an urgent roll out of this fee. It would essentially be a penalty for not having equipment that will not be readily available for some time. We respectfully request that any implementation of container fees at the Port of Long Beach charged to BCOs for trucks that do not meet the CARB ZE or NZE standard be delayed until more equipment becomes available. Thank you for your consideration and we welcome further conversation on this issue.

Sincerely,

A handwritten signature in black ink, appearing to read "Natalia Chan", written over a light grey circular stamp.

Natalia Chan  
Senior Director, International Logistics

January 29, 2020

Chris Cannon  
Port of Los Angeles  
425 South Palos Verdes Street  
San Pedro CA 90731

Heather Tomley  
Port of Long Beach  
415 W. Ocean Blvd  
Long Beach CA 90802

Submitted electronically to: [caap@cleanairactionplan.org](mailto:caap@cleanairactionplan.org)

Subject: Proposed Truck Rate Program

Dear Ms. Tomley and Mr. Cannon:

My name is Chuck Peterman and I am the Director of Fleet Sales for Inland Kenworth, the authorized full-service Kenworth truck dealer in Southern California, Arizona, New Mexico, British Columbia, Manitoba and Saskatchewan Canada. With thirty-six (36) total locations, Inland Kenworth is the second largest Kenworth dealer in North America. Important to my note today is our presence in Southern California. We maintain locations in El Cajon, Fontana, Montebello and Carson, CA.

While Inland Kenworth obviously sells a large number of new and used diesel powered trucks, we have a long and successful history of selling and servicing Natural Gas powered vehicles and this success has accelerated exponentially with the introduction of the spark ignited Cummins ISX-12 Near Zero Natural Gas power engine from Cummins. Since the introduction of this engine, Inland and Kenworth Truck Company have placed more units into service than any other truck dealer and manufacturer. Kenworth Truck Co. produces these units on a daily basis, with no disruption to the normal plant production process and with no long lead time constraints. Most exciting is the fact that these trucks work day in and day out. Our customers are very happy with the performance and reliability and as a result, they continue to place orders.

The Ports have an important decision to make regarding clean trucks. There are almost 8,000 of the oldest diesel trucks that will be banned from port operation by CARB on January 1, 2023. In just three short years, these 8,000 trucks that haul almost 50% of containers will be gone. The question facing the Ports is will these trucks be replaced by used 2014 diesel trucks that are deployed prior to the 1/1/23 deadline or will the Ports seize this once-in-a-lifetime opportunity to transform the port trucking fleet to clean trucks? We urge the Ports to not miss this opportunity. Making the tough decision to place a high priority on community health, local air quality, and climate, knowing that affordable, cost-effective, and proven near-zero trucks powered by renewable natural gas will keep the Ports competitive.

I fully support the comments submitted by the California Natural Gas Vehicle Coalition (CNGVC) and endorse the recommendations:

1. Define "Near-Zero" as trucks with engines certified to CARB's 0.02 g/bhp-hr Optional Low NOx Standard and use renewable fuel that reduces greenhouse gases by at least 50% compared to baseline diesel.
2. Exempt Near-Zero trucks from the truck rate for the duration of the truck useful life per the standards contained in SB1 Section 18 (Health & Safety Code Section 43021(a)).
3. Continue funding Near-Zero trucks until 2035.
4. Begin collecting truck rates no later than September 1, 2020.
5. Create a clean truck fund of \$270M by advancing the truck rate funds for the first three years of collections and begin awarding incentive funding by July 1, 2020.
6. Set the container rate at \$50/TEU.

These recommendations will achieve the goals and commitments of the Clean Air Action Plan.

Sincerely,

Charles Peterman  
Director of Fleet Sales  
Inland Kenworth



850 Cherry Avenue  
San Bruno, CA 94066  
Phone 650.837.5000  
Fax 650.837.5382  
www.walmart.com

January 30, 2020

Eugene D. Seroka  
Executive Director  
425 South Palos Verdes Street  
San Pedro, CA 90731

Mario Cordero  
Executive Director  
415 West Ocean Boulevard  
Long Beach, California 90802

Dear Mr. Seroka and Mr. Cordero,

Walmart appreciates the opportunity to provide feedback to the ports as you weigh the implications of implementing a new fee ranging between \$5 to \$70 per TEU on loaded containers. As both a beneficial cargo-owner and an industry leader in sustainability, Walmart is proud to have a presence in the Long Beach and Los Angeles communities. As a company with a longstanding commitment to reducing greenhouse gas emissions across all our operations, we appreciate the intention of the Ports of LA/LB proposed Clean Truck Fund Rate. However, we are concerned with the implementation plan as drafted.

We are a large customer of the ports and the assessment of any new container fees and associated administrative costs for loaded heavy duty trucks will have a significant impact on our business. Regarding the proposed Clean Truck Fund Rate, we are concerned that the economic study recently commissioned by the port to analyze the proposed fee concluded that implementation of a new container fee would have little to no impact on early adoption of clean trucks. Additionally, we seek clarification on which trucks would qualify as near-zero emission trucks and are additionally concerned that the timeline presented in the proposal does not align with anticipated deployment of necessary technology. It would be more effective for the ports to delay any such plan until the California Air Resources Board finalizes its manufacturing standards.

Finally, the draft plan also lacks a concise and detailed explanation of what the new revenues would be used for. That lack of detail combined with other remaining questions has us concerned that this fund rate will become a permanent program that serves as a basis for future fee increases in the coming years without evidence that it will achieve the intended environmental benefit. We respectfully ask that the ports delay this plan to allow for more thoughtful and comprehensive planning to address stakeholder concerns.

Ken Braunbach  
Vice President, Inbound Transportation, Logistics

**ALAN LOWENTHAL**

47TH DISTRICT, CALIFORNIA

**COMMITTEE ON NATURAL RESOURCES**

CHAIR, SUBCOMMITTEE ON ENERGY  
& MINERAL RESOURCES

SUBCOMMITTEE ON NATIONAL PARKS, FORESTS,  
& PUBLIC LANDS

SUBCOMMITTEE ON WATER, OCEANS, & WILDLIFE

**COMMITTEE ON**

**TRANSPORTATION & INFRASTRUCTURE**

SUBCOMMITTEE ON HIGHWAYS & TRANSIT

SUBCOMMITTEE ON WATER RESOURCES

SUBCOMMITTEE ON COAST GUARD & MARITIME

SUBCOMMITTEE ON RAILROADS, PIPELINES, &  
HAZARDOUS MATERIALS



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[www.lowenthal.house.gov](http://www.lowenthal.house.gov)  
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January 30, 2020

Hon. Bonnie Lowenthal, President  
Long Beach Board of Harbor Commissioners  
Port of Long Beach  
415 W. Ocean Blvd.  
Long Beach, CA 90802

Ms. Jaime L. Lee, President  
Los Angeles Board of Harbor Commissioners  
Port of Los Angeles  
425 S. Palos Verdes St.  
San Pedro, CA 90731

Dear President Lowenthal and President Lee,

The Los Angeles-Long Beach Port Complex is a vital economic engine that keep our country's goods flowing by ship, rail, and truck while providing good-paying jobs. Unfortunately, diesel exhaust from the big rig trucks bringing our goods to market continue to pollute our air and contribute to major health problems including asthma, heart disease, and lung cancer. Despite the significant work the ports have accomplished over the past several decades to reduce air pollution, Southern California remains by far the most polluted area in the nation, with heavy-duty diesel trucks being the largest source of emissions.

In 2023, nearly 8,000 of the oldest diesel trucks currently serving the ports will be banned by state law. As you consider adopting a new container rate designed to raise funds to help offset the cost of replacement trucks, we urge you to establish a rate that will be adequate to help incentivize the replacement of old diesel trucks with the cleanest available technology. You must do all you can to ensure that these banned diesel trucks are not replaced with newer, but still heavily polluting, diesel trucks. This is an opportunity to signal to truck manufacturers and operators that the Port is committed to meeting their 100 percent zero-emissions truck goal by 2035.

We need a container rate at the Los Angeles- Long Beach Port complex that reflects both ports commitment to significantly reducing NOx, particulate, and greenhouse gas emissions. I encourage a container rate that continues to lessen the burden on frontline communities. For any questions or concerns, please contact Clayton Heard in my Long Beach office at (562) 436-3828 or [Clayton.Heard@mail.house.gov](mailto:Clayton.Heard@mail.house.gov).

Sincerely,

Alan Lowenthal  
Member of Congress

# International Longshore and Warehouse Union



ILWU Local 13 • 630 Centre Street • San Pedro, CA 90731 • (310) 830-1130

January 30, 2020

Ms. Heather Tomley  
Managing Director of Environmental Planning  
Port of Long Beach  
415 W. Ocean Blvd.  
Long Beach, CA 90802

Mr. Christopher Cannon  
Director of Environmental Management  
Port of Los Angeles  
425 S. Palos Verdes Street  
San Pedro, CA 90731

***RE: Public Comment on Draft Economic Study for the Clean Truck Fund Rate***

Dear Ms. Tomley and Mr. Cannon,

Thank you for the opportunity to comment on the Draft Economic Study for the Clean Truck Fund Rate (DES). The International Longshore and Warehouse Union (ILWU) has provided labor within the Ports of Long Beach and Los Angeles for over eighty years and has helped the combined San Pedro Bay Ports (the Ports) become the leading gateway for ocean-bound international trade within the United States. Our organization's long-standing, integral role in the maritime industry, with nearly fifteen thousand (15,000) local workers, establishes our identity as key stakeholders in the Ports' business.

After having reviewed the DES, we concur with the assessment that caution must be exercised in setting a new Clean Truck Fund Rate (CTFR). At present, the Ports are recommending that upon implementation of the new Clean Truck Program (CTP), Beneficial Cargo Owners will be charged a fee of ten dollars (\$10) per loaded Twenty Equivalent Unit unless their cargo is drayed in or out of the Ports by Near Zero-Emission (NZE) or Zero Emission (ZE) trucks. The collected fees will create a fund used to incentivize turning over the drayage fleet to newer, cleaner vehicles. It is our position that the CTFR should not exceed the proposed level for the foreseeable future. We furthermore believe that this suggested rate strikes a balance between reducing drayage truck emissions while limiting the diversion of cargo to other competing ports.

Without question, the Ports must remain competitive if they are to deliver on their obligations to stakeholders. Consequently, operational excellence, environmental sustainability, and economic vitality remain central to the Ports' mission. While there are several considerations that could be explored in support of this position, we would like to briefly address three.

The first is to echo the findings of the Davies Study Diversion Analysis, as reported within the DES, that cargo demand at the Ports is not entirely inelastic. Today's shippers have more choices than ever in deciding which North American port to ship their cargo through to market. With the widening of the Panama Canal in 2016, ports on the East and Gulf Coasts began to benefit from improved access to Asian markets. In response, the Ports have made substantial investments in various efficiency building capital projects. Additionally, Terminal Operators and the ILWU labor force have succeeded in moving ever-larger volumes of cargo by adapting to the introduction of the Ultra Large Container Vessels that now call regularly at the Ports. While the aforementioned improvements have made positive impacts on the Ports' competitiveness, outside forces remain unpredictable and constitute obstacles to the Ports' success. Examples of some of these outside forces include the following. The current US-China trade dispute, shifting manufacturing to Southeast Asia, and the application of the Harbor Maintenance Tax have all, in their own ways, contributed to the erosion of the Ports' market share. Therefore, it is undeniable that an aggressive CTFR will only create additional headwinds for the Ports' competitiveness.

Secondly, California has proudly led the nation in environmental stewardship for decades. While California has accepted this responsibility for numerous reasons, the lack of a national strategy on this issue perhaps looms largest among them. The result of this lack of Federal leadership has led to a patchwork of competing environmental regulations among the various States. We know of no other State or Port Authority in the country that places a greater emphasis on improving the environment than the Ports. The existence of the Clean Air Action Plan (CAAP) itself is evidence of this fact. However, we must bear in mind that in the pursuit of combating global warming, we must consider the global ecosystem as a whole. Every container that is diverted from the Ports due to unsustainable costs, will invariably reach its destination by traversing a port with less environmentally friendly cargo handling practices. The end result is a loss of business for the Ports and increased environmental degradation for the planet.

Lastly, the current iteration of the CTP is occurring at a much more challenging time from a legislative and technological standpoint than its last implementation in 2007.

During the rollout of the previous CTP, the drayage industry was compelled to participate, in part, due to the need for compliance with the California Air Resources Board (CARB) Drayage Truck Regulation. That impetus is missing from the immediate regulatory environment and therefore the Ports will not benefit from that extra motivating force in reaching their goals.

Additionally, and more importantly, NZE and ZE technologies are continuing to evolve in their progression toward operational and economic feasibility. Incidentally, this is not only true for the long haul and drayage truck industries, but it is also true for cargo handling equipment as highlighted in the CAAP 2018 Feasibility Assessment for Cargo Handling Equipment. Liquefied Natural Gas, Hydrogen Fuel Cells, Hybrid Technologies, and Battery Power will all undoubtedly play some combination of roles in the pursuit of achieving lower emissions in years to come.

Ultimately, we all recognize that reaching the year 2035 ZE goal is an important endeavor. However, we must stress that employing prudent strategies, that do not invite expending limited capital dollars on immature technologies, is especially relevant in achieving said goal.

In conclusion, the ILWU supports the Ports' current stance on the CTFR. It is our contention that the ten-dollar per TEU rate is an appropriate compromise among various interests. This prudent and well-studied conclusion ensures that progress will continue to be made in the pursuit of local environmental sustainability without threatening to divert significant cargo to competing ports.

Sincerely,



Ray Familathe  
*President*  
ILWU Local 13



Gary Herrera  
*Vice President*  
ILWU Local 13



Mark Williams  
*Secretary/Treasurer*  
ILWU Local 13

cc: Anthony Loy, *Port Representative, Port of Los Angeles*  
Sal DiCostanzo, *Port Representative, Port of Long Beach*



January 30, 2020

Submitted via: [caap@cleanairactionplan.org](mailto:caap@cleanairactionplan.org)

Chris Cannon  
Director of Environmental Management  
Port of Los Angeles  
425 S Palos Verdes St  
San Pedro, California 90732

Heather Tomley  
Acting Managing Director of Planning and Environmental Affairs  
Port of Long Beach  
4801 Airport Plaza Drive  
Long Beach, California 90815

Re: Comments on the Clean Air Action Plan Clean Truck Fund Rate

Dear Ms. Tomley and Mr. Cannon:

The International Brotherhood of Electrical Workers, Local Union Eleven (IBEW Local 11) and the National Electrical Contractors Association, Los Angeles Chapter (LA NECA), Labor Management Cooperation Committee appreciate the opportunity to comment on the proposed Clean Truck Fund (“CTF”).

The CTF Rate is a critical mechanism to achieving the CAAP 2035 goal and the analysis of potential rates must take this into consideration. We appreciate the effort undertaken to prepare the draft

Economic Study for the Clean Truck Fund Rate and request both ports consider the comments and recommendations below and take a stronger proposal to both Boards of Harbor Commissioners as follows:

**1. Increase the CTF Rate to \$50.**

The proposed CTF Rate of \$10 per TEU (Twenty Foot Equivalent Unit) will not effectuate the CAAP 2035 goal. According to the draft Economic Study, “None of the scenarios modelled by the consultant results in a 100 percent ZE fleet by 2035.” The study further notes that a CTF Rate in the range of \$35 to \$50 per TEU would be necessary to cover the subsidies needed to result in a fully zero emission fleet by 2035. **As such, we request the final CTF rate be increased to \$50 per TEU to ensure that the resulting pool of funding is sufficient to incentivize the zero-emission.**

**2. Dedicate rate revenues to zero emissions exclusively to accelerate adoption of zero emissions trucks.**

As demonstrated by the draft Economic Study, implementing the CTF Rate itself will not result in the needed fleet transition. It is the combination of the Rate and the strategic use of the Rate Revenues that has the potential to transform the trucks in the Port Drayage Truck Registry to zero emissions by 2035. If not defined clearly from the outset, these revenues will result in unnecessarily heavy investment in near-zero emissions vehicles in the short-term. Such investment will ultimately lead to stranded assets and require more work to be done in later years in order to meet the 2035 goal. **We recommend that the details of how these funds are used be developed in concert with the final decision on the rate itself, and that the funding be dedicated to zero emissions trucks.**

**3. Ensure that Clean Truck Program costs are not born by individual truck drivers.**

As we understand the intent is that the fee be paid by beneficial cargo owners (“BCOs”), the ports should consider using an existing vendor, who already had a contractual relationship with the BCOs, to ensure the intent is effectuated. Against this backdrop, we are cognizant of the on-going misclassification of truck drivers and the economic pressures that impact them. For this reason as well, we support the CTF being borne directly by the BCOs and not indirectly paid by the drayage community, and ensuring a mechanism accomplishes this goal.

We look forward to supporting our ports’ ongoing efforts to both advance their environmental agenda, create clean energy apprenticeship-based pathways and improve air quality benefits for all.

Yours most sincerely,

Jennifer J. Kropke, Esq.

Director of Workforce and Environmental Engagement,

IBEW Local Union 11, LA NECA Labor Management Cooperation Committee

cc: Jim Willson, Chapter Manager, LA NECA  
Joel Barton, Business Manager & Financial Secretary, IBEW 11 (Los Angeles County)

January 30, 2020

Dear CAAP Team,

I appreciate the opportunity to comment on the Clean Truck Fund Rate Workshop held January 15<sup>th</sup>, 2020. I would like to provide overall support of the CAAP and its goal of transitioning all trucks and equipment to zero emission.

While I acknowledge the concerns raised by cargo owners for increased costs, which will result in a small diversion from the San Pedro Bay Ports, as you stated in your presentation there is a more urgent need to reduce emissions for the benefit of community health, regional air quality, and global climate change. I support the effort to create a mechanism to collect a Clean Truck Fund Rate from trucks entering the port grounds that do not meet the Low-NOx CARB certification for near-zero engines.

Based on the Davies Economic Study, a Clean Truck Fund Rate of up to \$70/TEU is not sufficient on its own to change the makeup of the nearly 18,000 port drayage truck fleet.<sup>1</sup> This does not mean that the rate can be low, it simply means that additional State incentives are required to help offset the cost of near-zero and zero emission trucks. With Governor Newsom's proposed cut of \$135 million from clean transportation in his 2020-2021 budget<sup>2</sup>, there is no guarantee from the State that sufficient subsidies for near-zero and zero emission trucks will be available.

A rate of \$10/TEU results in an estimated \$90 million available annually for a Clean Truck Fund. With 15 years remaining until the CAAP's goal of a 100% zero emission port truck fleet, 1,200 trucks per year are required to transition to zero emission to meet this goal. \$90 million divided between 1,200 trucks breaks down to a \$75,000 per truck incentive. The price difference between a conventional diesel truck and a zero emission truck is significantly higher than \$75,000. Therefore, the Clean Truck Fund Rate should be \$45/TEU & \$90/FEU to provide high enough per truck incentives (in addition to what may or may not be available from the State) to truck owners to offset the high increased costs of transitioning to near-zero and zero emission trucks.

In regards to an exemption to the Clean Truck Fund Rate, I believe that near-zero and zero emission trucks should not be treated equal and therefore near-zero emission trucks should not be exempt from the Clean Truck Fund Rate beginning sooner rather than later, preferably before the proposed 2027 timeline. I want to make it clear that "near-zero" and zero are two entirely different solutions with "near-zero" Cummins Westport low NOx L9N natural gas engines still emitting detectable levels of NOx, PM2.5, PN, ultrafine and greenhouse gas emissions.<sup>3</sup>

I understand the perspective of the truck drivers in not wanting to pay out of their pocket for this new rate, as the financial burden should be put on the beneficial cargo owners. Large companies that use the facilities of the port for their economic benefit need to support the goal of a transition to zero emission trucks by 2035; this Clean Truck Fund Rate is a necessary step in that direction.

Thank you for the opportunity to comment on this very important issue and I want to see the San Pedro Bay ports continue to place community health above economic gain.

Best Regards,

Cory Shumaker, MBA  
Independent Consultant

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<sup>1</sup> San Pedro Bay Ports Clean Air Action Plan Clean Truck Program Rate Proposal, January 15<sup>th</sup> 2020

<sup>2</sup> <https://www.ccair.org/newsoms-budget-disappointing-clean-transportation/>

<sup>3</sup> [https://ucrtoday.ucr.edu/wp-content/uploads/2018/08/CWI-LowNOx-12L-NG\\_v03.pdf](https://ucrtoday.ucr.edu/wp-content/uploads/2018/08/CWI-LowNOx-12L-NG_v03.pdf)



January 31, 2020

Port of Long Beach  
Environmental Planning  
4801 Airport Plaza Drive  
Long Beach, CA 90815

Port of Los Angeles  
Environmental Management  
425 S. Palos Verdes St.  
San Pedro, CA 90731

**RE: CHBC Comments on Clean Truck Fund Rate Workshop**

Dear CAAP Team,

The California Hydrogen Business Council (CHBC)<sup>1</sup> appreciates the opportunity to comment on the Clean Truck Fund Rate Workshop held on January 15, 2020. The CHBC is supportive of the CAAP and its goal of transitioning all trucks and equipment to zero emission.

CHBC agrees with CAAP's statement that there is a more urgent need to reduce emissions for the benefit of community health, regional air quality, and global climate change. Hydrogen fuel cell electric trucks can be part of the solution to address this need. We therefore support the effort to create a mechanism to collect a Clean Truck Fund Rate from trucks entering the port.

The rate should be adequate to cover the price difference between a conventional diesel truck and a zero emission truck to fund a dedicated purchasing incentive program for truck owners to offset the high increased costs of transitioning to zero emission trucks. We encourage reviewing and adjusting your proposed rate in light of the comments provided by the Coalition for Clean Air, to determine an effective rate structure that allows a conversion to zero emission trucks in the proposed timeframe.

Exemptions to the Clean Truck Fund Rate should only apply to zero emission trucks, including hydrogen fuel cell trucks, as they remove tailpipe emissions and can, if sourced renewably, remove emissions from fuel production.

The rate should be passed onto the cargo owners rather than the truck drivers. Companies that use the port facilities should support the goal of a transition to zero emission trucks by 2035, and this Clean Truck Fund Rate is a necessary step in that direction.

Thank you for the opportunity to comment on this very important issue.

Best Regards,

Emanuel Wagner  
Deputy Director

California Hydrogen Business Council

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<sup>1</sup> The CHBC is comprised of over 100 companies and agencies involved in the business of hydrogen. Our mission is to advance the commercialization of hydrogen in the energy sector, including transportation, goods movement, and stationary power systems to reduce emissions and dependence on oil. **The views expressed in these comments are those of the CHBC, and do not necessarily reflect the views of all of the individual CHBC member companies.** CHBC Members are listed here: <https://www.californiahydrogen.org/aboutus/chbc-members/>



SAN PEDRO PENINSULA  
HOMEOWNERS' COALITION



January 31, 2020

Chris Cannon  
Director of Environmental Management  
Port of Los Angeles  
425 S Palos Verdes St  
San Pedro, California 90732

Heather Tomley  
Acting Managing Director of Planning and Environmental Affairs  
Port of Long Beach  
4801 Airport Plaza Drive  
Long Beach, California 90815

**Re: Comments on Draft Economic Study for the Clean Truck Fund Rate**

Dear Mr. Cannon and Ms. Tomley:

Thank you for the opportunity to comment on the Draft Economic Study for the Clean Truck Fund Rate (“Draft Rate Study”), and the Ports’ proposed rate. We submit these comments on behalf of the undersigned members of the Trade, Health, and Environment (THE) Impact Project coalition. Many of our organizations have been working with the San Pedro Bay Ports for decades to advance clean air for communities impacted by pollution from the freight industry in Southern California. Continued operation of the Ports and any future growth must be contingent on addressing and reducing these longstanding emissions exposure inequities, and reaching a zero emissions future.

The Ports' update to the Clean Trucks Program ("CTP") is the major mechanism for the Ports to carry out their commitment to achieving 100 percent zero-emission trucks serving the Ports by 2035. This zero emissions vision is embraced by the 2017 Clean Air Action Plan Update,<sup>1</sup> Mayors Garcia and Garcetti's joint 2017 Executive Directive,<sup>2</sup> the City of LA's Green New Deal,<sup>3</sup> LA's 2028 Zero Emissions Roadmap,<sup>4</sup> and Port of Long Beach's Strategic Plan.<sup>5</sup> Transitioning the Ports' truck fleet to zero emissions is also key to achieving California's ambitious greenhouse gas reduction goals and statewide goals for deploying electric trucks.<sup>6</sup> Port-related drayage trucks are the source of a significant amount of NOx emissions in an air basin that is unlikely to meet its 2023 ozone attainment goal if immediate and substantial reductions in fossil-fueled truck travel do not occur. Failure to reach attainment may have catastrophic economic effects on the Ports and on the region in general. Short-haul zero-emission drayage trucks are available now and must be deployed in the near-term to achieve federal Clean Air Act attainment deadlines.

As proposed, the CTP will set the Ports up for failure to do their part to meet the previously referenced goals. The Ports' own analysis shows that the proposed rate and structure would position the Ports to fall far short of turning over the fleet to zero emissions by 2035. A rate of \$10 per twenty-foot equivalent unit (TEU) is equivalent to charging one-fifth of a penny per pair of tennis shoes that enters the Ports. \$10/TEU will not collect adequate funding to transition the truck fleet to zero emissions. It signals that the Ports are willing to trade community health for a tiny fraction of their total cargo volume. And the Ports' proposed detour to near-term deployment of near-zero trucks will delay the Ports from providing needed investments in zero-emission technologies, and sink the region into further dependence on fossil fuels in the future. We are concerned that the Ports are being sidetracked to the detriment of their long-term goals, and will fail to follow through with the zero emissions future that communities have long demanded and been promised.

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<sup>1</sup> San Pedro Bay Ports, Clean Air Action Plan 2017, *available at* <https://cleanairactionplan.org/2017-clean-air-action-plan-update/>.

<sup>2</sup> Creating a Zero Emissions Goods Movement Future, <https://www.lbreport.com/port/mayrstm.pdf>.

<sup>3</sup> LA's Green New Deal, Sustainable City pLAN 2019, at 83, *available at* [https://plan.lamayor.org/sites/default/files/pLAN\\_2019\\_final.pdf](https://plan.lamayor.org/sites/default/files/pLAN_2019_final.pdf) (committing to implementing an updated clean truck program that prioritizes zero emission trucks, and setting goal of reaching 100 percent zero emission on-road drayage trucks by 2035 as part of strategy to reduce port-related greenhouse gas emissions 80 percent by 2050).

<sup>4</sup> 2028 Zero Emissions Roadmap 2.0, at 12, *available at* [https://laincubator.org/wp-content/uploads/LA\\_Roadmap2.0\\_Final2.2.pdf](https://laincubator.org/wp-content/uploads/LA_Roadmap2.0_Final2.2.pdf) (setting goal that 40 percent of heavy duty short haul and drayage trucks on the road are zero emissions by 2028, to support goal of reducing air pollution and greenhouse gas emissions 25 percent before 2028 Olympics).

<sup>5</sup> Port of Long Beach, 2019 Strategic Plan, at 20, <http://www.polb.com/civica/filebank/blobdload.asp?BlobID=13726>.

<sup>6</sup> 2025: Executive Order B-48-18 calls for 200 hydrogen fueling station, 250,000 electric vehicle chargers, and 10,000 direct current fast chargers by 2025.

2030: SB 32 codified GHG target in Executive Order S-3-05 of statewide emissions at least 40 percent below 1990 levels by 2030.

2030: based on Executive Order B-32-15, the California Sustainable Freight Action Plan established a goal to "deploy over 100,000 freight vehicles and equipment capable of zero-emission operation...by 2030."

2030: Executive Order B-48-18 sets a goal of putting 5 million zero-emission vehicles on the road by 2030.

2045: Executive Order B-55-18 sets a goal of statewide carbon neutrality by 2045.

2050: Executive Order S-3-05 established a target of GHG emission reductions 80 percent below 1990 levels by 2050.

We recommend that the Ports take the following steps to improve the proposed CTP and to take a stronger proposal to both Boards of Harbor Commissioners:

- 1. Study the pathway to zero emissions and create a plan to achieve the 2035 goal.**  
Work backwards from the goal to develop a CTP structure and rate that are sufficient to transition the fleet to zero emissions by 2035. Establish interim milestones to track progress leading up to 2035.
- 2. Phase-in short-haul zero-emission drayage trucks beginning immediately.**
- 3. Study a zero-emission only registration requirement.** This would send a clear signal to truck companies and manufacturers that all trucks must transition to zero emissions.
- 4. Allocate all proceeds collected by the rate to fund purchase incentives for zero-emission trucks.**
- 5. Analyze and measure the health costs borne by freight impacted communities and the benefits of transitioning to a zero-emission fleet.**
- 6. Revise the study's flawed assumptions regarding availability and cost of zero-emission trucks.**
- 7. Ensure that CTP costs are not shouldered by truck drivers.**

A strong CTP is essential to fulfilling our local, regional, and statewide air quality and public health commitments. Achieving all of these goals requires immediate steps to advance deployment of zero-emission trucks and associated infrastructure, as well as sustained efforts throughout the next decade and half. We submit these comments urging the Ports to take their commitments seriously and to revise the proposed program in a way that sets them up for success.

## **I. Community Health Must Be Front and Center to the Truck Rate.**

Diesel truck emissions are a devastating local air pollutant containing high levels of ultrafine particles and over forty known carcinogens.<sup>7</sup> Internal combustion engine vehicles create highly localized health hazards near busy roadways, including high levels of particulate matter and toxic air contaminant exposures. A large body of research has documented associations between exposure to pollution from traffic-related sources and illness.<sup>8</sup> Diesel exhaust contains diesel particulate matter, which is responsible for about 70 percent of cancer risk related to air

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<sup>7</sup> Univ. S. Cal., "Infographic: Living Near Diesel Exhaust," <https://envhealthcenters.usc.edu/infographics/infographic-living-near-diesel-exhaust> (last accessed: Jan. 30, 2020).

<sup>8</sup> See, e.g., Univ. S. Cal., "USC Children's Health Study: Study Findings," <https://healthstudy.usc.edu/study-findings/> (last accessed Oct. 1, 2019); "The Children's Health Study," <https://ww3.arb.ca.gov/research/chs/chs.htm> (last accessed Oct. 1, 2019); John M. Peters, Univ. S. Cal., *Epidemiologic investigation to identify chronic effects of ambient air pollutants in Southern California* (2004), available at [https://ww3.arb.ca.gov/research/single-project.php?row\\_id=60245](https://ww3.arb.ca.gov/research/single-project.php?row_id=60245); Andrea Hricko, Glovioell Rowland, Sandra Eckel, Angelo Logan, Maryam Taher, and John Wilson, *Global Trade, Local Impacts: Lessons from California on Health Impacts and Environmental Justice Concerns for Residents Living near Freight Rail Yards*, Int. J. Environ. Res. Public Health (2014), available at <https://doi.org/10.3390/ijerph110201914>; Wu, et al., *Association between Local Traffic-Generated Air Pollution and Preeclampsia and Preterm Delivery in the South Coast Air Basin of California*, *Envtl. Health Perspectives* 117(11) (Nov. 2009), available at <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2801174/pdf/ehp-117-1773.pdf>.

toxins in California.<sup>9</sup> Short term health impacts of diesel exhaust can include irritation to the eyes, nose, throat and lungs, while long term effects can include lung cancer, bladder cancer, worse allergies, asthma attacks, lung illnesses, and heart disease.<sup>10</sup> Exposure to particulate matter, even for a short period, can elevate the risk of death.<sup>11</sup>

In California, communities of color and low-income communities bear a disproportionate burden of diesel truck emissions.<sup>12</sup> Frontline communities include those living near ports, warehouses, railyards, and busy roads, such as the I-710 corridor and in the Inland Valley where trucks from the Ports move goods to warehouses and railyards. Residents and workers in these communities experience disproportionately high cancer risks.<sup>13</sup> Studies show that residents living near the Ports are exposed to greater cancer risk compared to the regional average.<sup>14</sup>

Transitioning to zero-emission technologies can reduce these health burdens. The Standardized Regulatory Impact Assessment (SRIA) for CARB's recently proposed Advanced Clean Truck Rule found almost \$10 billion in health benefits and nearly 1,000 instances of avoided premature mortality when more zero-emission trucks are placed on the road.<sup>15</sup>

**The Ports should revise the study to provide a robust analysis of health impacts that will result from different truck rate program scenarios.** Any true economic analysis must consider the health costs and other externalities of the program. Board members who will be deciding on the rate must be presented with the full trade-offs between cargo diversion and community health in order to make an informed decision. The Ports should also consider the social cost of emissions reductions and other economic benefits of zero emissions, as described in CARB's SRIA, when considering the costs of electrification.

The Ports' low proposed truck rate of \$10/TEU indicates a willingness to continue endangering residents' lives and to abandon zero emissions commitments to preserve a paltry percentage of their cargo volume. The Draft Rate Study shows that a truck rate of \$5/TEU will result in 0.1 percent of imported cargo being diverted annually, and a rate of \$70/TEU will result

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<sup>9</sup> CARB, "Overview: Diesel Exhaust & Health," <https://ww2.arb.ca.gov/resources/overview-diesel-exhaust-and-health> (last accessed Jan. 30, 2020).

<sup>10</sup> Univ. S. Cal. Env'tl. Health Ctr., "References: Living Near Diesel Exhaust," <https://envhealthcenters.usc.edu/infographics/infographic-living-near-diesel-exhaust/references-living-near-diesel-exhaust> (last accessed: Jan. 30, 2020).

<sup>11</sup> U.S. Env. Prot. Agency, "How Does PM Affect Human Health?" <https://www3.epa.gov/region1/airquality/pm-human-health.html> (last accessed: Jan. 30, 2020).

<sup>12</sup> Union of Concerned Scientists, "Inequitable Exposure to Air Pollution from Vehicles in California," Fact Sheet (Feb. 2019), at 1-2, available at <https://www.ucsusa.org/sites/default/files/attach/2019/02/cv-air-pollution-CA-web.pdf>.

<sup>13</sup> Univ. S. Cal. Env'tl. Health Ctr., "References: Living Near Diesel Exhaust," <https://envhealthcenters.usc.edu/infographics/infographic-living-near-diesel-exhaust/references-living-near-diesel-exhaust> (last accessed: Jan. 30, 2020).

<sup>14</sup> S. Coast Air Quality Mgmt. Dist., Multiple Air Toxics Exposure Study in the South Coast Air Basin, MATES IV (2012), at 4-16, available at <https://www.aqmd.gov/docs/default-source/air-quality/air-toxic-studies/mates-iv/mates-iv-final-draft-report-4-1-15.pdf?sfvrsn=7>.

<sup>15</sup> Cal. Air Res. Bd., Advanced Clean Trucks Regulation Standardized Regulatory Impact Assessment (Aug. 8, 2019), at 78, available at <https://ww3.arb.ca.gov/regact/2019/act2019/appc.pdf>.

in up to 1.4 percent of cargo diverted.<sup>16</sup> These small slivers of total cargo volumes are particularly insignificant given projections that cargo volumes will more than double over the next twenty years, leading to significant increases in pollution and impacts on freight communities.<sup>17</sup> Moreover, the Ports have already implemented a \$10 per TEU incentive for some cargo to incentivize shippers to use the San Pedro Bay Ports gateway, which essentially creates no incentive for cleaner trucks for some segments of cargo.<sup>18</sup> The Ports have not fully explained how a fee that potentially cancels itself out provides additional incentives to advance zero-emission truck moves.

## **II. Costs of the Program Must Not Be Shouldered by Truck Drivers.**

The costs of the updated Clean Truck Program should not be passed on to truck drivers. We support the Ports' proposed concept of charging Beneficial Cargo Owners (BCOs) for the costs of the program. However, the Ports have not yet articulated a plan for how they will structure the program to ensure that costs are not passed on to drivers. This is especially critical as in the previous Clean Truck Program trucking companies unlawfully forced the costs of the technology transition onto misclassified truck drivers, resulting in widely documented wage theft and financial ruin. The Ports must ensure that the program is structured so that drivers will not bear the costs of emission reducing technologies.

## **III. The Ports Must Create a Plan to Meet Zero Emissions Targets.**

The Ports' failure to analyze a program that would achieve the 2035 goal suggests that the Ports are not taking the 2035 goal seriously. Of the six scenarios modeled in the Draft Rate Study, none are sufficient to reach 100 percent zero-emission trucks by 2035.<sup>19</sup> Many of the undersigned groups have been asking for years for the Ports to articulate their plan to reach the 2035 emissions goal. Without a comprehensive plan, or interim milestones to track progress, it creates a public appearance that the Ports are not serious about attaining their 2035 commitments. Active planning and transparency on progress are necessary to maintain public trust that future growth will be contingent on a zero emissions future.

**The rate should be set at the amount that is needed to turnover 100 percent of the truck fleet to zero-emission trucks by 2035.** The Ports need to study a program structure and rate amount that would achieve the 2035 goal, and implement that rate. The Draft Rate Study

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<sup>16</sup> Port of Los Angeles, Port of Long Beach, Draft Economic Study for the Clean Truck Fund Rate (Dec. 2019), at 2, available at <https://cleanairactionplan.org/documents/draft-economic-study-for-the-clean-truck-fund-rate.pdf/> [hereinafter "Draft Rate Study"].

<sup>17</sup> Under Port of Long Beach's Draft Port Master Plan Update, the Port estimated that cargo throughput will more than double by 2040, and greenhouse gas emissions will rise 75 percent between 2017 and 2040; emissions of diesel particulate matter will increase by nearly 50 percent; truck traffic will more than double; emissions of volatile organic compounds, carbon monoxide, and particulate matter will significantly increase; and there will be significant increases in individual cancer risk, cancer burden, and chronic and acute noncancer health effects, among other significant impacts. Port of Long Beach, Port Master Plan Update, Draft Program Environmental Impact Report (Aug. 2019), at 1-9, 3.16-18, 3.2-61, 3.13-23, 3.2-39, ES-35, available at <http://www.polb.com/civica/filebank/blobdload.asp?BlobID=15228>.

<sup>18</sup> Los Angeles Business Journal, "Long Beach Port Turns to Incentives" (Sept. 27, 2019), available at <https://labusinessjournal.com/news/2019/sep/27/long-beach-port-turns-incentives/>.

<sup>19</sup> Draft Rate Study at 27.

shows that to collect sufficient incentive funding to achieve a 75 percent zero-emission truck fleet by 2035, a \$35-50/TEU rate is needed. \$10/TEU clearly falls short. By comparison, the previous clean truck program set the rate at \$35/TEU. The Ports should be developing a more ambitious program today given their zero emissions commitments to the community and elected officials.

**The Ports should also study the effect of a zero-emission only registration requirement on fleet turnover.** The current proposal would require all new trucks that register at the Ports to meet near-zero or zero-emission engine standards beginning in 2023. Scenario 1 explores the effect of this registration requirement compared to the baseline projection, and shows that from a registration requirement alone, diesel trucks will age out of the fleet by 2035.<sup>20</sup> The Ports should consider adopting a zero-emission only registration requirement, and study what the effect of such a requirement would be on achieving the 2035 goal. A zero-emission only requirement would signal to industry that there is a clear market and demand for zero-emission trucks, and signal to trucking companies, infrastructure investors, and decision-makers, that any buildout to support natural gas trucks will be short-lived.

**All funds raised by the truck rate should be allocated for advancing zero-emission trucks and zero-emission infrastructure.** The Ports' current proposal would provide partial funding for near-zero trucks in the first several years of the program, which would detract from the Ports' ability to deploy zero-emission technologies in the near-term. Investments in zero-emission technologies are more beneficial from a community health, air quality, total cost of ownership, and efficiency perspective, compared to near-zero technologies. We are concerned that the Ports' proposed detour to near-zero trucks will have serious long-term negative consequences for communities. These concerns are discussed in the following section.

**The rate should be used to phase-in zero-emission trucks beginning today.** According to the U.S. Department of Energy, there are several zero-emission drayage trucks currently available for sale.<sup>21</sup> In addition to those already available, new entrants, such as Tesla and major manufacturers including Volvo and Daimler are piloting tractors with an electric range beyond 100 miles, and plan to bring them to market in late 2020 or early 2021.<sup>22</sup> For example, Tesla Semi trucks, with over 2,000 trucks in preorder, are scheduled for delivery later this year, can travel between 300 and 600 miles per charge, and cost between \$150,000 and \$180,000.<sup>23</sup> The following chart highlights key Class 8 trucks coming to market in the near-term:

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<sup>20</sup> *Id.*

<sup>21</sup> U.S. Dep't of Energy, Alternative Fuels Data Center, "Alternative Fuel and Advanced Vehicle Search," <https://afdc.energy.gov/vehicles/search/> (last accessed: Jan. 30, 2020).

<sup>22</sup> Am. Council for an Energy-Efficient Economy, *Electrifying Trucks: From Delivery Vans to Buses to 18-Wheelers*, at 13-14, available at <https://aceee.org/white-paper/electrifying-trucks-delivery-vans-buses-18>.

<sup>23</sup> *Id.*

Manufacturer	Model	Fuel Type	Cost	Range (mi.)	Availability
Daimler	<a href="#">eCascadia</a>	Electric	NA	250	2021
Daimler	<a href="#">E-Fuso Vision One</a>	Electric	NA	200	2021
Tesla	<a href="#">Semi</a>	Electric	\$150,000- \$180,000	300-500	2020
Nikola	<a href="#">TWO</a>	Electric	NA	300-400	2022
Volvo	<a href="#">VNR Electric</a>	Electric	NA	NA	2020
Xos (Thor)	<a href="#">ET-One</a>	Electric	\$150,000- \$250,000	100-300	2020
BYD	<a href="#">T9</a>	Electric	\$300,000	124-167	2020
Peterbilt (TransPower)	<a href="#">ElecTruck</a>	Electric, Hybrid	\$250,000	50-100	2020
Cummins	<a href="#">Aeos</a>	Electric, Hybrid	NA	100-300	2020
Nikola	<a href="#">ONE</a>	Fuel Cell	NA	1,200	2022
Toyota (Kenworth)	<a href="#">FCET</a>	Fuel Cell	NA	300	Pilot

*This table provides estimates for the upfront cost of different freight truck models including several fuel types.*

*Electric models have a higher purchase price than other fuel types.*

Source: Electric Bus and Truck Overview, Atlas Public Policy (July 2019), at 10, <https://atlaspolicy.com/wp-content/uploads/2019/07/Electric-Buses-and-Trucks-Overview.pdf>

#### **IV. Investing in Near-Zero Trucks Is a Harmful Detour from Zero Emissions and Air Quality Goals.**

The Ports must reexamine their assumption that a near-term turnover to near-zero emission trucks should be an objective of the CTP.<sup>24</sup> A detour to near-zero trucks—many of which will be powered by natural gas—will sink our region in investments in natural gas trucks and infrastructure, increased fossil fuel extraction, leaking natural gas pipelines and compressor stations, and will delay the zero emissions transition that is necessary for our communities. In addition, SB100 mandates that California has a carbon-free grid by 2045.<sup>25</sup> And Executive Order B-55-18 mandate that the state achieve carbon neutrality “as soon as possible, and no later than 2045.”<sup>26</sup> A near-term near-zero truck turnover is incompatible with reaching local and statewide zero-emission and emission reduction goals.

While the natural gas industry has been promoting the idea of renewable natural gas to fuel drayage trucks, the reality is that supplies of “renewable” natural gas are extremely limited, and biomethane from waste in California could meet just 3 percent of the state’s demand for natural gas.<sup>27</sup> In addition, natural gas extraction, production, and transport produces toxic waste

<sup>24</sup> Draft Rate Study at 1.

<sup>25</sup> SB 100, California Renewables Portfolio Standard Program: emissions of greenhouse gases, *available at* [https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill\\_id=201720180SB100](https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201720180SB100).

<sup>26</sup> EO B-55-18 to Achieve Carbon Neutrality, Section 1, *available at* <https://www.ca.gov/archive/gov39/wp-content/uploads/2018/09/9.10.18-Executive-Order.pdf>.

<sup>27</sup> Union of Concerned Scientists, “The Promises and Limits of Biomethane as a Transportation Fuel,” Fact Sheet (May 2017) at 2, *available at* <https://www.ucsusa.org/sites/default/files/attach/2017/05/Promises-and-limits-of-Biomethane-factsheet.pdf>.

products, and has negative impacts on nearby communities workers, and has been linked to neurological impacts,<sup>28</sup> cancer,<sup>29</sup> reproductive harm,<sup>30</sup> respiratory impacts,<sup>31</sup> and other illnesses. If natural gas infrastructure is developed in Southern California communities, communities will face additional health impacts from harmful pollutants emitted from compressor stations<sup>32</sup> and tailpipes, as well as leaking storage<sup>33</sup> facilities.

A recent report by ICF International demonstrates the benefits of zero-emission technologies compared to near-zero and natural gas fueled trucks.<sup>34</sup> ICF found that battery electric trucks are the cleanest technology, and will result in the greatest reductions in greenhouse gas emissions, NO<sub>x</sub>, and particulate matter, compared to near-zero and diesel technologies.<sup>35</sup> According to ICF's analysis, widespread electrification beyond existing and proposed policies is required to meet both 2030 and 2050 greenhouse gas reduction goals and to significantly help in achieving the NO<sub>x</sub> reductions required to meet federal ambient air quality standards.<sup>36</sup> In addition, electric technologies would provide more job opportunities than near-zero technologies.<sup>37</sup>

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<sup>28</sup> Webb, E., Moon, J., Dyrszka, L., Rodriguez, B., Cox, C., Patisaul, H., Bushkin, S., London, E., *Neurodevelopmental and neurological effects of chemicals associated with unconventional oil and natural gas operations and their potential effects on infants and children*, *Reviews on Env'tl. Health* (2018), 33(1), 3-29, available at <https://doi.org/10.1515/reveh-2017-0008>.

<sup>29</sup> McKenzie, L. M., Allshouse, W. B., Byers, T. E., Bedrick, E. J., Serdar, B., & Adgate, J. L., *Childhood hematologic cancer and residential proximity to oil and gas development*, *PLoS ONE* (2017), 12(2), 1–17, available at <https://doi.org/10.1371/journal.pone.0170423>; Russo, P. N., & Carpenter, D. O., *Air emissions from natural gas facilities in New York state*, *Int'l Journal of Env'tl. Research and Public Health* (2019), 16(9), available at <https://doi.org/10.3390/ijerph16091591>.

<sup>30</sup> McKenzie, L. M., Guo, R., Witter, R. Z., Savitz, D. A., Newman, L. S., & Adgate, J. L., *Birth outcomes and maternal residential proximity to natural gas development in rural Colorado*, *Everyday Env'tl. Toxins: Childrens Exposure Risks* (2015), (4), 111–130, available at <https://doi.org/10.1201/b18221>.

<sup>31</sup> Webb, E., Hays, J., Dyrszka, L., Rodriguez, B., Cox, C., Huffling, K., & Bushkin-Bedient, S., *Potential hazards of air pollutant emissions from unconventional oil and natural gas operations on the respiratory health of children and infants*, *Reviews on Env'tl. Health* (June 2016), Walter de Gruyter GmbH, available at <https://doi.org/10.1515/reveh-2014-0070>; Rasmussen, S. G., Ogburn, E. L., McCormack, M., Casey, J. A., Bandeen-Roche, K., Mercer, D. G., & Schwartz, B. S., *Association between unconventional natural gas development in the marcellus shale and asthma exacerbations*, *JAMA Internal Medicine* (2016), 176(9), 1334–1343, available at <https://doi.org/10.1001/jamainternmed.2016.2436>.

<sup>32</sup> Russo, P. N., & Carpenter, D. O., *Air emissions from natural gas facilities in New York state*, *Int'l Journal of Env'tl. Research and Public Health* (2019), 16(9), available at <https://doi.org/10.3390/ijerph16091591>; Payne, B. F., Ackley, R., Paige Wicker, A., Hildenbrand, Z. L., Carlton, D. D., & Schug, K. A., *Characterization of methane plumes downwind of natural gas compressor stations in Pennsylvania and New York*, *Science of the Total Env't.* (2017), 580, 1214–1221, available at <https://doi.org/10.1016/j.scitotenv.2016.12.082>.

<sup>33</sup> Hendrick, M. F., Ackley, R., Sanaie-Movahed, B., Tang, X., & Phillips, N. G., *Fugitive methane emissions from leak-prone natural gas distribution infrastructure in urban environments*, *Env'tl. Pollution* (2016), 213, 710–716, available at <https://doi.org/10.1016/j.envpol.2016.01.094>; see also Field, R. A., Soltis, J., & Murphy, S., *Air quality concerns of unconventional oil and natural gas production*, *Env'tl. Sciences: Processes and Impacts* (2014), 16(5), 954–969, available at <https://doi.org/10.1039/c4em00081a> (“Up to 75% of VOC emissions are estimated to be from well pad storage tanks and pneumatic devices at production units”).

<sup>34</sup> ICF International, *Comparison of Medium and Heavy Duty Technologies in California* (Dec. 2019), available at [https://caletc.com/wp-content/uploads/2019/12/ICF-Truck-Report\\_Final\\_December-2019.pdf](https://caletc.com/wp-content/uploads/2019/12/ICF-Truck-Report_Final_December-2019.pdf) [hereinafter “2019 ICF Truck Report”].

<sup>35</sup> 2019 ICF Truck Report, Part 1: Emission Impacts Scenario Analysis, at 25-28.

<sup>36</sup> 2019 ICF Truck Report, Executive Summary, at 2.

<sup>37</sup> *Id.* at 6.

**The Draft Rate Study should consider the additional costs that transitioning to near-zero technologies will have on the region.** The added costs of a natural gas truck fleet turnover, stranded assets, and additional negative impacts of natural gas extraction, production, transport, and combustion are economic realities of the Ports’ current proposed program. The Ports must stay focused on the long-term goals and reject efforts by the natural gas industry to sink investments in false near-term solutions.

## V. The Draft Rate Study Includes Flawed Assumptions.

**The Draft Rate Study wrongly assumes that the first zero-emission trucks will not be introduced until 2025.**<sup>38</sup> Zero-emission technologies are available today for short-haul applications, which make up a significant number of truck trips at the Ports.<sup>39</sup> Zero-emission battery-electric trucks are nearing widespread commercial viability, can outperform diesel trucks, and are competitive on a total cost of ownership basis.<sup>40</sup> The Ports’ own feasibility study shows that 5 OEMs expect to sell 9 models of zero-emission battery electric trucks by 2021.<sup>41</sup> It’s also worth noting that the zero-emission vehicle technology currently used in heavy-duty electric yard and refuse trucks may also be applicable in the near-term for drayage. The Draft Rate Study should be revised to reflect that investments in zero-emission drayage trucks can begin today.

**The Draft Rate Study fails to consider zero-emission technology’s rapid development and total cost of ownership.** Battery prices are rapidly dropping,<sup>42</sup> and are likely

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<sup>38</sup> Draft Rate Study, Technical Appendix at 71.

<sup>39</sup> UCLA Luskin Center, *Zero-Emission Drayage Trucks: Challenges and Opportunities for the San Pedro Bay Ports* (2019), at 15, 18-19, available at <https://innovation.luskin.ucla.edu/wp-content/uploads/2019/10/Zero-Emission-Drayage-Trucks.pdf>.

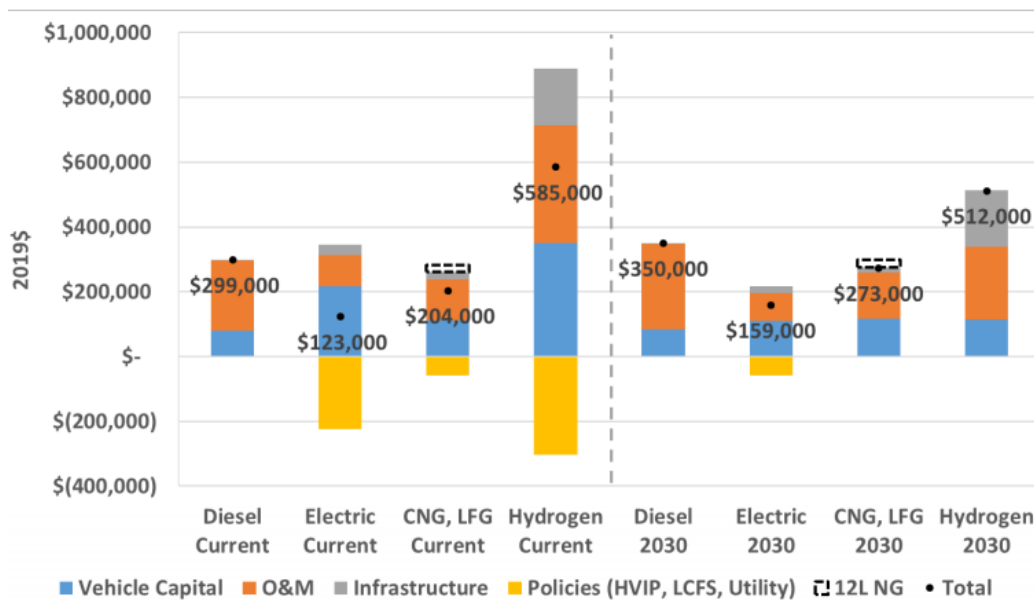
<sup>40</sup> ICF, *Medium- and Heavy-Duty Electrification in California, Literature Review* (Dec. 2018), available at [http://www.caletc.com/wp-content/uploads/2019/01/Literature-Review\\_Final\\_December\\_2018.pdf](http://www.caletc.com/wp-content/uploads/2019/01/Literature-Review_Final_December_2018.pdf) [hereinafter “2018 ICF Literature Review”]; The International Council on Clean Transportation (ICCT), *Transitioning to Zero-Emission Heavy-Duty Freight Vehicles*, at 23-24, available at <https://www.theicct.org/publications/transitioning-zero-emission-heavy-duty-freight-vehicles> (“...electrification is the most cost-effective technology for freight transport in the longterm”); Southern California Edison, *The Clean Power and Electrification Pathway* (Nov. 2017), available at <https://www.edison.com/home/our-perspective/clean-power-and-electrification-pathway.html> (this study shows that in the long term the cost effective path is the electrification option); CARB, *Advanced Clean Local Trucks Second Workgroup Meeting* (2017), available at <https://ww2.arb.ca.gov/sites/default/files/2018-10/170830arbpresentation.pdf>; O’Dea, J., “Electric vs. Diesel vs. Natural Gas: Which Bus is Best for the Climate? The Equation” (Cambridge, MA: Union of Concerned Scientists, Blog, July 19, 2018) available at <https://blog.ucsusa.org/jimmy-odea/electric-vs-diesel-vs-natural-gas-which-bus-is-best-for-the-climate>; Chandler, S., J. Espino, and J. O’Dea, *Delivering opportunity: How electric buses and trucks can create jobs and improve public health in California* (Cambridge, MA, and Berkeley, CA: Union of Concerned Scientists and The Greenlining Institute, 2017) available at <https://www.ucsusa.org/sites/default/files/attach/2016/10/UCS-Electric-Buses-Report.pdf>.

<sup>41</sup> San Pedro Bay Ports, *2018 Feasibility Assessment for Drayage Trucks* (Apr. 2019) at 32, available at <https://cleanairactionplan.org/documents/final-drayage-truck-feasibility-assessment.pdf/>.

<sup>42</sup> Cal. Air Res. Bd., *Proposed Advanced Clean Trucks Regulation Staff Report Initial Statement of Reasons* (Oct. 22, 2019), at IX-10, available at <https://ww3.arb.ca.gov/regact/2019/act2019/isor.pdf> [hereinafter “CARB ACT Rule ISOR”]; 2018 ICF Literature Review at ES-1.

to continue falling through 2030.<sup>43</sup> Moreover, the Draft Rate Study fails to consider the total costs of ownership of electric trucks, which are projected to have the lowest total cost of ownership compared to other technologies without incentives by 2030.<sup>44</sup> Zero-emission trucks offer cost savings on maintenance<sup>45</sup> and fuel efficiency, as zero-emission trucks are two to five times more fuel efficient than internal combustion engine technologies.<sup>46</sup> As the analysis from ICF International shows, with the right purchase incentives, Class 8 drayage trucks are competitive today from a total cost of ownership perspective:

**Figure III-3. Class 8 Drayage TCO Analysis Results**



Source: ICF International, Comparison of Medium and Heavy Duty Technologies in California, Part 2: Total Cost of Ownership Technology Analysis (Dec. 2019) at 21, available at <https://caletc.com/comparison-of-medium-and-heavy-duty-technologies-in-california/>

The Ports should also recognize that there are additional incentive programs that help to subsidize the costs of transitioning to zero-emission technologies in the near-term. For example, the Hybrid and Zero-Emission Truck and Bus Voucher Program (HVIP), VW settlement funds, utility programs, and the Low Carbon Fuel Standard, offer incentives to reduce the costs of zero-emission trucks. While the Ports should recognize and seize on the opportunity to take advantage of these opportunities today, these programs alone will not provide enough funding for the Ports to reach their 2035 goal, and the programs are not guaranteed to continue in the future.

<sup>43</sup> Bloomberg NEF, “Electric Vehicle Outlook 2019,” <https://about.bnef.com/electric-vehicle-outlook/> (last accessed: Jan. 30, 2020).

<sup>44</sup> 2019 ICF Truck Report, Executive Summary, at 4; CARB ACT Rule ISOR, Appendix H, at 25-27 (estimating that the total cost of ownership of a ZE truck will be lower than a diesel truck in 2024 and 2030).

<sup>45</sup> ZET maintenance costs are less expensive relative to their diesel counterparts due to cost savings from fewer fluids and moving parts, infrequent service needs for batteries and motors, and regenerative braking that reduces the wear and tear on brakes. 2018 ICF Literature Review at 32.

<sup>46</sup> CARB ACT Rule ISOR at VIII-2. For example, an electric bus running on electricity produced by natural gas can go twice as far as a natural gas bus with the same amount of gas in its tank. Chandler, S., J. Espino, and J. O’Dea, Delivering opportunity: How electric buses and trucks can create jobs and improve public health in California (Cambridge, MA, and Berkeley, CA: Union of Concerned Scientists and The Greenlining Institute, 2017) available at <https://www.ucsusa.org/sites/default/files/attach/2016/10/UCS-Electric-Buses-Report.pdf>.

Total cost of ownership considerations should be incorporated in the revised Draft Rate Study to show that the transition to a zero-emission truck fleet makes economic sense and will result in cost savings for the region. Although total cost of ownership of zero-emission trucks will result in long-term savings, incentive funding is critical in the near-term to help with the higher upfront costs of trucks.

## **VI. Conclusion**

The opportunity to set a rate that effects the necessary change cannot be missed. We urge the Ports to revise the draft rate study and proposed rate structure and rate amount in a way that aligns the program with the Ports' 2035 zero emissions commitment.

Sincerely,

Heather Kryczka, Natural Resources Defense Council

Sylvia Betancourt, Long Beach Alliance for Children with Asthma

Taylor Thomas, East Yard Communities for Environmental Justice

Adrian Martinez, Earthjustice

Theral Golden, West Long Beach Association

Andrea Vidaurre, Center for Community Action and Environmental Justice

Angelo Logan, Urban & Environmental Policy Institute, Occidental College

Peter Warren, San Pedro Peninsula Homeowners' Coalition

Carlo de la Cruz, Jessica Yarnall Loarie, Sierra Club

Jesse Marquez, Coalition for a Safe Environment



# South Coast Air Quality Management District

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*Office of the Executive Officer*  
*Wayne Nastri*  
909.396.2100, fax 909.396.3340

January 31, 2020

Mr. Mario Cordero  
Executive Director  
Port of Long Beach  
415 West Ocean Blvd.  
Long Beach, CA 90802

Mr. Eugene Seroka  
Executive Director  
Port of Los Angeles  
425 South Palos Verdes St.  
San Pedro, CA 90731

Re: Draft Economic Study for the Clean Truck Fund (CTF) Rate and Potential CTF Rate

Dear Mr. Cordero and Mr. Seroka:

Thank you for the opportunity to comment on the Ports' Draft Economic Study for the Clean Truck Fund Rate as well as the potential truck rate which was discussed at the recent workshop. We continue to support all efforts by the Ports that will reduce emissions from port-related operations to improve air quality and public health in neighboring communities and in the South Coast Air Basin (Basin). The Draft Economic Study was conducted to support the development of the Ports Clean Trucks Program (CTP), a central component of the Ports 2017 Clean Air Action Plan Update (CAAP) and one with the potential to achieve the most and quickest emission reductions. As such, the appropriate design and implementation of the CTP, including the truck rate and incentives, is critical for achieving both near-term and long-term air quality objectives outlined in the CAAP for meeting upcoming federal ambient air quality standards, and for protecting public health.

Our comments regarding the Draft Economic Study consist of the following key points: 1) that the Draft Study supports a truck rate significantly higher than the \$10 per TEU rate currently proposed by Ports' staff, 2) concerns regarding the Ports transition from using the term near zero emissions (NZE) trucks to low-NOx trucks, and 3) the need for the Ports to accelerate

deployment of both NZE and ZE trucks as well as consider other strategies to ensure short term NOx reductions.

The Draft Economic Study Supports a Truck Rate in excess of the \$10/TEU rate currently recommended

The Draft Economic Study concludes that “the implementation of CTF rates at the levels modeled, without the provision of a subsidy, will not modify the fleet composition” because the rate levels, even at \$70 per TEU, are not large enough to compensate for the incremental cost of purchasing and operating NZE and ZE trucks. The Study also concludes that a CTF rate between \$35 and \$50 would be needed to provide full subsidies. Given the Study’s own conclusions, it appears that the proposed \$10 per TEU falls significantly short of meeting CAAP’s objectives of transitioning the drayage truck fleet to cleaner technologies.

Further, the projected diversion rates associated with the truck rates modeled are far lower than anticipated, with a maximum projected diversion rate of 1.4% at a \$70/TEU truck rate. While diversion is an important consideration, the Ports’ own analysis does not support that it is an overriding factor, and that there are a multitude of other reasons why cargo will continue to be routed through the San Pedro ports. Given the urgent need to reduce NOx emissions and provide much-needed relief from the associated health impacts, the Ports should take the necessary actions to reduce emissions from trucks visiting their facilities and meet CAAP objectives.

Also, based on our review of the input cost factors in the analysis, the Study may have overestimated the capital cost of clean truck technologies. For example, the Study assumed \$250,000 for the purchase price of a NZE truck which is 20% higher than the average unit price of \$200,000 based on information from truck vendors and manufacturers. Since the capital and operating costs of these clean trucks are key input factors in the Modeled Scenarios, we recommend that most up to date and accurate cost data be used in the final analysis.

Finally, there is a unique window of opportunity to turn over pre-2010 drayage trucks over the next few years and the CTR will play a critical role in that effort. There are approximately 8,000 pre-2010 drayage trucks that are currently registered in the Port Drayage Truck Registry. Under CARB’s Truck and Bus Regulation, these trucks will have to turn over to MY 2010 or newer trucks by January 1, 2023. Without additional incentives, these trucks will turn over to MY 2010+ *diesel* engines. There is therefore a great opportunity to instead turn over these trucks to the cleanest available technologies currently available- natural gas NZE trucks - which are at least 90% cleaner than the rule-compliant diesel trucks, and hopefully ZE trucks in the near future. We believe that an appropriate level of truck rate coupled with a sufficient amount of subsidies and incentives to cover the incremental costs will be essential to encourage Licensed Motor Carriers (LMCs) and individual truck owners to purchase these cleanest available trucks. Based on the proposed \$10 per Twenty-Foot Equivalent Unit (TEU) presented at the workshop, the Ports staff have projected that approximately \$90 million in revenues will be generated annually from the collection of the truck rate. Applying \$100,000 per truck as a potential subsidy, approximately 900 pre-2010 diesel trucks can be replaced with NZE trucks annually,

which is clearly not enough to convert enough trucks to meet even the worst case projections<sup>1</sup> from the CAAP that was approved by both Ports in 2017. Therefore, we recommend that the Ports consider a higher truck rate to take full advantage of this window of opportunity to maximize near-term emission reductions.

#### The Distinction between NZE Trucks and Low-NOx Trucks and Impact on Emission Reductions

In the Draft Economic Study, NZE trucks are also referred to as low-NOx trucks. We note that the Ports staff now uses the term “low-NOx trucks” in recent presentations and discussions in lieu of NZE trucks, which was originally referenced in the CAAP. However, the final San Pedro Bay Ports Clean Truck Fund Rate Study, which is attached to the draft Economic Study, uses the term NZE which is defined to be a truck with an engine that meets the 0.02 g/bhp-hr optional low NOx engine emission standard<sup>2</sup>. CARB staff is currently considering an additional regulation with a range of low NOx heavy-duty engine emission standards that would vary depending on the model year and phase-in schedule. Specifically, the NOx standard being considered for Model Year 2024 through 2026 engines is in the range of 0.05 to 0.08 g/bhp-hr while the NOx standard for MY 2027 and newer engines is expected to be in the range of 0.015 to 0.03 g/bhp-hr. CARB is expected to finalize these standards within the next few months.

We are concerned with the Ports’ apparent transition from NZE to low-NOx trucks for the CTP and its potential impact on near-term emission reductions. If the Ports were to qualify low-NOx trucks for the CTF rebates and incentive funding instead of, or as well as, NZE trucks, emission reductions from the CTP implementation could be significantly lower than what was initially anticipated in the CAAP. Given that there are NZE trucks commercially available today and CARB’s proposed MY 2027 low-NOx standard could also be at or close to 0.02 g/bhp-hr NOx, we recommend that the Ports consider qualifying only trucks meeting 0.02 g/bhp-hr NOx or better for the CTF rebates as well as incentives in the Clean Trucks Program.

#### The Need for Short Term NOx Emission Reductions through Accelerating NZE and ZE Truck Deployment

As you know, South Coast Air Basin is facing a daunting challenge to meet the 2023 and 2031 attainment dates for the federal 8-hour ozone standards, which require significant NOx reductions in the next several years. It is therefore critical to focus all efforts to achieve both near- and long-term emission reductions through accelerated deployment of commercially available clean technologies to attain these standards. This is also consistent with the objective of the Ports CTP, as stated in the 2017 CAAP, to “transition the current drayage truck fleet to near-zero technologies in the near-term and ultimately to zero-emission technologies by 2035.”

Based on the Ports Truck Technology Feasibility Assessment, there are commercially available NZE drayage trucks with CARB-certified natural gas engines at 0.02 g/bhp-hr of NOx, whereas fully commercialized ZE trucks are still a few years away. Therefore, we recommend the Ports

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<sup>1</sup> The worst-case scenario presented in Scenario 1 from the Emission Reductions chapter of the 2017 CAAP shows 69% of the drayage truck fleet being NZE, with associated NOx emission reductions of 80% by 2024.

<sup>2</sup> CARB’s existing Optional Low NOx Standard Regulation can be found in the California Code of Regulations, Title 13 Section 1956.8.

allocate most, if not all, of the CTP revenues in the near term to subsidize these NZE trucks to provide much needed relief and health benefits to communities around the Ports that are disproportionately impacted by the port-related goods movement activities as well as to maximize emission reductions for the 2023 attainment date.

In addition to utilizing the truck rate and incentives to accelerate the deployment of NZE and ZE trucks, we recommend that the Ports consider additional strategies to maximize both the near-term and long-term emission reductions. Under Scenario 1 of the Draft Economic Study (Figure 7.1), the Ports 2023 restriction on new truck registration alone (i.e., new registered trucks have to be NZE or ZE trucks) would result in over 10% deployment of NZE or ZE trucks in 2023 and about 80% in 2031. If this projection reflects the anticipated deployment of cleaner trucks without any subsidies based on natural turn-over, we would recommend that the Ports consider implementing this new truck registration requirement earlier in 2022 instead of 2023. Finally, to avoid any delays in near-term deployment of cleaner NZE and ZE trucks, we recommend that advanced funding to subsidize NZE and ZE trucks become available as soon as the truck rate implementation begins in Fall 2020, based on the anticipated revenues from the CTP. Without such accommodation, it may take an additional six months or even longer before cleaner trucks are actually on the road.

Finally, we also recommend that the health impacts of the Port trucks be considered in determining the final truck rate.

Thank you again for the opportunity to comment. We are fully committed to continuing to work collaboratively with the Ports and other stakeholders to successfully implement the CAAP strategies and measures as they are critical in meeting clean air standards.

Sincerely,

A handwritten signature in black ink, appearing to read "Wayne Natri", with a stylized flourish at the end.

Wayne Natri  
Executive Officer

January 31, 2020

Mr. Mario Cordero  
Executive Director  
Port of Long Beach  
415 Ocean Blvd.  
Long Beach, CA 90802

Mr. Gene Seroka  
Executive Director  
Port of Los Angeles  
425 S. Palos Verdes St.  
San Pedro, CA 90731

Re: Comments re the Draft Economic Study for the Clean Truck Fund Rate

Dear Mr. Cordero & Mr. Seroka:

The Port of Los Angeles' and Port of Long Beach's (Ports or POLA/POLB) 2017 Clean Air Action Plan (CAAP) Update committed to a strategy to update the Clean Truck Programs at both ports. As stated in the 2017 CAAP Update, the objective of the Ports' updated Clean Trucks Programs is to shift the present drayage truck fleet to Near-Zero technologies in the short-term and, ultimately, to Zero-Emissions technologies by 2035. While we support this noble and important goal, achieving it will be a serious challenge. The Draft Economic Study for the Clean Truck Fund (CTF) Rate was insufficient in guiding how the Ports should move forward to achieve this goal for several reasons.

### **Health Impacts**

The Draft Economic Study neglected to touch on a very important issue: public health. Only once is the word "health" stated in the entire study, and it is used only in reference to the 2006 CAAP. Yet the entire foundation underlying the CAAP is the need to clean the air, which will thereby improve public health impacts due to poor air quality. As the 2017 CAAP Update states:

*"The Ports must work with our tenants and customers to expeditiously reduce our fair share of air emissions and associated health risk from port-related operations to support a healthy, thriving community and clean environment." <sup>1</sup>*

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<sup>1</sup> San Pedro Bay Ports 2017 Clean Air Action Plan Update, Page 9, at <https://cleanairactionplan.org/documents/final-2017-clean-air-action-plan-update.pdf/>

The heavy-duty truck fleet at the Ports is among the largest in Southern California. Heavy-duty diesel trucks in the South Coast region are the largest source of NO<sub>x</sub> and one of the largest sources of diesel particulate matter (DPM). The fact that the economic study failed to address the health externalities of diesel trucks at the Ports is very disappointing.

Diesel exhaust is toxic in countless ways and is a leading barrier to cleaner air. Diesel exhaust is a major source of air pollution, black carbon, and DPM. Diesel exhaust includes more than 40 substances listed as hazardous air pollutants by the Environmental Protection Agency (EPA) and California Air Resources Board (CARB). This can trigger many health problems, including heart disease, lung disease, and asthma. The highest level of exposure to diesel is experienced by people living near ports, rail yards, and freeways where diesel fuel is used to operate heavy-duty trucks, vehicles, and machinery.

However, the *Annals of the American Thoracic Society* recently published a survey of research which concluded that cutting air pollution yields “fast and dramatic impacts” on health-outcomes, and decreases deaths from all causes.<sup>2</sup> The study found air pollution reductions in a community can reduce cases of lung disease and heart disease by up to 40 percent and deaths from all sources by up to 16 percent in just four weeks. Imagine the improvements in health outcomes for residents of communities near the Ports by phasing out thousands of diesel-fueled vehicles at the ports in the coming years.

We are hopeful such improvements will occur by 2023, but are concerned that the Ports have not clearly identified the steps necessary to achieve their 2030 and 2035 Zero-Emission goals, let alone the steps they must take to eliminate the use of diesel engines to handle and transport cargo. We believe the first step is to update the Clean Trucks Program with a substantial CTF Rate that will enable a quick turnover of nearly half of the heavy-duty truck fleet to Near-Zero and Zero-Emission engines by 2023, to be followed by the remaining diesel trucks switching to Zero-Emission engines by 2035.

### **Cargo Diversion Not a Justification for a Low CTF Rate**

The Draft Economic Study tries to suggest that cargo diversion is a critical challenge for any CTF Rate. According to the study, cargo diversion and losses of market share are cited as reasons to be cautious about implementing a CTF Rate. Diversion makes it sound and appear the Ports will be losing business it has today, which is simply inaccurate. Cargo diversion is not a true impediment to implementing a CTF Rate that will raise sufficient funds to convert dirty diesel trucks to clean trucks. The study finds that a CTF Rate of \$70/TEU would produce a diversion rate of a mere 1.4 percent from **expected growth**, not from existing levels. So even establishing a CTF Rate of between \$5 and \$70/TEU will only divert a mere 1.4 percent of containers from that growth, meaning, the Ports’ container volume would still be expected to increase by 56 percent from 2021 through 2035.

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<sup>2</sup> Dean E. Schraufnagel, John R. Balmes, Sara De Matteis, Barbara Hoffman, Woo Jin Kim, Rogelio Perez-Padilla, Mary Rice, Akshay Sood, Aneesa Vanker, Donald J. Wuebbles. Health Benefits of Air Pollution Reduction. *Annals of the American Thoracic Society*, 2019; 16 (12): 1478 DOI: [10.1513/AnnalsATS.201907-538CME](https://doi.org/10.1513/AnnalsATS.201907-538CME)

### **Clean Truck Fund Rate**

Despite the shortcomings of the economic study, staff has floated a CTF Rate of \$10 per loaded TEU. Such a rate will not be adequate to raise the necessary funding for subsidies and incentives to enable the owners of the approximately 8,000 pre-MY2010 heavy-duty diesel trucks serving the ports to transition to Near-Zero and Zero-Emissions technologies by 2023, when those trucks will be banned under the California Bus and Truck Rule.

Per the study, a \$10/TEU CTF Rate will raise up to \$90 million, but this amount is not enough to get rid of the pre-MY2010 Diesel trucks in time. There is little value in establishing a low CTF Rate that will not raise adequate funds to provide sufficient subsidies and/or incentives for truck owners to purchase trucks with Near-Zero or Zero-Emission engines. And this is especially true if there is not enough money raised to help owners of pre-MY2010 Diesel trucks replace their vehicles with Near-Zero or Zero-Emission trucks. We are willing to work with the Ports' staff to develop a fee that accomplishes this, but we are confident that this will be in the range of \$50-\$100 per TEU and not anywhere near the \$10 fee proposed by staff. For a CTF Rate of \$70/TEU, for instance, using the study's assumed figures, approximately \$5 billion will be raised, which would be enough funding to subsidize the difference in cost of Near-Zero and Zero-Emissions trucks over the cost of Diesel. A higher fee will raise these funds even sooner.

### **Near-Zero Engines**

A common criticism of Near-Zero and Zero-Emissions technologies is the lack of availability of these engines. While Zero-Emission technologies are not yet scalable, the Ports have a goal of transition to Near-Zero trucks in the interim, and those engines are commercially available today. Other market forces, including CARB's impending mandate regarding pre-2010 engines, will also hasten the availability of Near-Zero and Zero-Emission technologies. The Ports can help create a market for those engines by being serious in their commitment to convert their large current drayage fleet, which is roughly 99 percent diesel, to cleaner trucks. A high CTF Rate is a strong incentive to move in that direction.

### **Utilize the Drayage Truck Registry to More Quickly Phase-out Diesel Trucks**

A CTF Rate is one component to replacing dirty diesel trucks with clean trucks. There are other steps the Ports can take to help guide this desired transition. For instance, the Ports can leverage the Drayage Truck Registry to assist in phasing-out diesel trucks. Currently, the CAAP includes the following transition dates:

**October 1, 2018** – Only MY 2014 trucks can be newly registered in the Drayage Truck Registry. Trucks already in the Registry can continue operating, including the 8,000 pre-2010 trucks.

**January 1, 2023** – Pre-2010 trucks are banned by CARB on this date, and only “Near-Zero” trucks can be newly registered in the Registry. All other trucks in the Registry can continue operating at the Ports.

**January 1, 2035** – Only Zero-Emission trucks may be in the Registry and operate in the Ports.

However, we have several concerns: the definition of Near-Zero, the date of the transition, and the CTF Rate reimbursement for Near-Zero trucks.

### **Establishing a Clearer Definition of Near-Zero Will Get Rid of Diesel Sooner**

Currently, “Near-Zero” is not yet defined. While we understand the Ports plan to utilize the California Air Resources Board upcoming new Near-Zero engine standard to define Near-Zero, CARB’s standard could actually allow diesel vehicles under that standard. That is unacceptable, and the Ports must take the lead on this. It is imperative that the Ports refer to the Option Low-NOx regulation and define Near-Zero engines as those certified to CARB’s 0.02 g/bhp-hr optional Low-NOx standard. In addition, the fuel used must not be fossil-fuel derived gas, but renewable fuel (such as renewable natural gas) that reduces greenhouse gases by at least 50 percent compared to baseline diesel, per CARB’s Low Carbon Fuel Standard.

### **Establishing an Earlier Near-Zero Registration Date Will Get Rid of Diesel Sooner**

In addition, the January 1, 2023 date will only promote current pre-MY2010 Diesel truck owners to purchase a used MY2014 or later Diesel truck at a much lower cost than trucks with cleaner engines. By fixing the Near-Zero definition and moving up the date to match the date for the implementation of the new CTF Rate, the Ports will ensure that no more new or used Diesel trucks will be added to the Registry. This is the most significant action the Ports can take to phase out Diesel trucks and improve air quality, public health, and promote cleaner engines.

### **Extend the Fee Refund Benefit Longer for Near-Zero Low-NOx Trucks**

Furthermore, the CTF refund for the use of Near-Zero Low NOx trucks should be in place for a longer period than the proposed timeline of 2021-2027. For trucks that will serve the Ports for nearly a decade, it will be necessary to provide the CTF refund for a length of time that will warrant companies to purchase those trucks. By only subsidizing Zero-Emission trucks beyond 2027, truckers are not properly incentivized to transition to Near-Zero trucks knowing that their subsidy will expire shortly after the purchase. Extending their ability to receive the rebate through 2030 or 2033 will encourage more Low-NOx trucks to be purchased and make it easier for the Ports to achieve their goal of moving Diesel trucks to Near-Zero Low-NOx vehicles until Zero-Emissions trucks become commercially viable.

### **Clarify Tangible Steps Along the Process**

While the 2017 CAAP Update is cited throughout the study, there are no interim goals listed in the CAAP to achieve the objectives. The original CAAP drafted in 2006 is an important document that reflects the Ports’ apparent commitment to air quality, and the 2017 CAAP Update is a commendable renewal of sorts, but there is no tangible path to Near-Zero and Zero-Emissions technologies that the CAAP is supposedly going to achieve. We recommend that the Ports make a serious commitment to achieving the objectives outlined in the 2017 CAAP Update by establishing measurable milestones and benchmarks accompanied by plans and strategies to achieve them. Having lofty goals is commendable, but they mean very little unless there are clearly identifiable and measurable steps in place to achieve them.

### **Other Forces at Play**

Alternative forces may compel the Ports to act on converting the drayage truck fleet before the Ports are ready, which means the Ports must be prepared to do what they can today to prepare for

the future. Governor Gavin Newsom made a campaign pledge featuring “a goal of zero diesel pollution by 2030” during his candidacy in 2018. Are the Ports prepared to operate in a world with minimal or zero diesel pollution by end of the decade? Implementing a sufficient CTF Rate would put the Ports in a better position to thrive given that potential reality.

Beyond Governor Newsom’s goal is a CARB mandate that requires all class 7 and 8 diesel-fueled drayage trucks to have MY2010 or newer engines by January 1, 2023. It is estimated that 8,000 of the Ports’ roughly 18,000 drayage truck fleet are trucks with pre-2010 engines, which is roughly 45 percent of the current fleet. The best thing the Ports can do to help truckers with non-compliant trucks come 2023 is to establish a CTF Rate that will raise enough dollars to subsidize the cost of clean trucks. Without a strong CTF Rate, truckers will be inclined to purchase newer dirty diesel trucks, which directly contradicts the Ports’ goals for Near-Zero and Zero-Emission technologies as detailed in the 2017 CAAP Update.

### **Conclusion**

The San Pedro Bay Port Complex is a vital economic engine for our region, and we appreciate the work the Ports have done to reduce emissions over the years. Despite that important work and those efforts, we still have a significant Diesel problem. We recommend the Ports implement a strong CTF Rate that will truly transition the current drayage truck fleet to Near-Zero and Zero-Emissions technologies as outlined in the 2017 CAAP Update. By working with policymakers, community organizations, manufacturers, employees, local residents, and other stakeholders, we believe the Ports can accomplish their stated goals and objectives while making our region a happier and healthier place to live and work.

Sincerely,



Marc Carrel  
President & CEO

January 31, 2020

Mr. Mario Cordero, P.E.  
Executive Director  
Port of Long Beach  
4801 Airport Plaza Drive  
Long Beach, California 90815

Mr. Gene Seroka  
Executive Director  
Port of Los Angeles  
425 South Palos Verdes Street  
San Pedro, California 90731

Dear Mr. Cordero and Mr. Seroka:

I am writing you in response to the ongoing discussions on how to establish a clean truck rate that best supports the deployment of zero-emission drayage truck technologies at the San Pedro Bay Ports (Ports) and to protect the health of your local communities that are disproportionately impacted by air pollution.

Through the pathways established during the development of the Ports existing Clean Air Action Plans (CAAP), the California Air Resources Board (CARB) and the Ports have worked to find new innovative ways to reduce the impacts of port activities through the deployment of zero and near-zero emission technologies, operational changes, and other advanced technologies to minimize the negative health impacts freight activities have on our communities. Although we have made major strides through our collaborations, there is still significant work to be done to protect public health in the South Coast Air Basin.

The State of California has placed additional emphasis on protecting local communities from the harmful effects of air pollution through the passage of Assembly Bill 617 (AB 617) (Garcia, Chapter 136, Statutes of 2017). AB 617 is a significant piece of air quality legislation that highlights the need for further emission reductions in disadvantaged communities with high exposure burdens, such as those surrounding the Ports.

CARB has established numerous regulations and funding programs that are enabling the Ports accelerated deployment of cleaner trucks, cargo handling equipment and other freight technologies. CARB regulations on cleaner diesel engines, establishment

of an optional low NOx standard, and other cleaner freight equipment regulations will provide significant air quality benefits but actions at the local-level are necessary to achieve our goals. As the Ports consider using their authority to provide incentives for the deployment of zero and near-zero emission technologies through the establishment of new truck rates, we encourage you to consider how significant this effort could be in accelerating the deployment of clean vehicles in your region. This is a prime opportunity to build off the public funding that the Ports have utilized to demonstrate and deploy zero-emission technologies, and take aggressive steps in furthering the progress to date.

The December 2019 Draft Economic Study for the Clean Truck Fund Rate<sup>1</sup>, the Ports commissioned, identifies a range of truck rates that can be used to incentivize the purchase and operation of zero-emission trucks at the port. The study highlights the assessment of the range of rates from \$5/TEU to \$75+/TEU, showing opportunities for significant public health benefits to be accrued with minimal impact to the overall economic strength of the Ports. As the current analysis does not factor in cost savings from the public health benefits that zero-emission trucks provide, CARB encourages you to provide a comparable analysis of cost savings from the prospective reductions in premature deaths, hospitalizations, emergency room visits, and other benefits of cleaner air in your region. It also highlights the need for robust incentives to support the economic competitiveness of zero-emission trucks.

Given the costs associated with the public health and climate change impacts from the continued operation of diesel vehicles at the Ports, right now is the time to take strong action in promoting zero-emission vehicles. It is crucial that the Ports recognize that although CARB, the South Coast Air Quality Management District (SCAQMD) and others are taking steps to promote zero-emission vehicles and reduce air pollution in the South Coast region, the Ports must stand up as leaders in their area to implement a clean truck rate that adequately moves the needle towards the zero-emission vehicle and equipment goals agreed to in the CAAP. The Ports can accomplish this by focusing on setting a clean truck rate that will result in a measurable growth in the amount of zero-emission vehicles in operation in the near-term, and be sufficient enough to meet CAAP targets over the long-term.

There is a growing list of manufacturers that will be significantly increasing commercial-scale production of zero-emission vehicles and equipment in

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<sup>1</sup> Draft Economic Study for the Clean Truck Fund Rate,  
<https://cleanairactionplan.org/documents/draft-economic-study-for-the-clean-truck-fund-rate.pdf/>

Mr. Mario Cordero, P.E.  
Mr. Gene Seroka  
January 31, 2020  
Page 3

late-2020/early-2021. The Ports must utilize this opportunity to send a strong message to marketplace that there is long-term support for increased production and utilization of zero-emission trucks. This can be accomplished by establishing as initial clean truck rate that is higher than existing baseline rates placed on trucks operating at the Ports. The Ports should actively monitor and publically report on the impact the initial clean truck rate is having on the deployment of zero-emission trucks, and adjust rates to enable the Ports to meet the existing CAAP commitments.

Through our partnerships, CARB staff will continue to work with the Ports to establish a market-relevant clean truck rate, that when supported by CARB and SCAQMD's many zero-emission truck incentives programs, can make significant progress in improving your regions air quality and support California's climate change goals.

As you continue this process to find a balanced approach to protecting the health of communities surrounding the Ports, you will likely receive input from stakeholders representing the Ports decisions on this matter as a binary choice between protecting communities or economic growth. CARB wishes to support you in dispelling this myth, and is happy to work with you to identify a balanced path forward that supports California's community health protection, climate change, and economic growth goals.

Sincerely,



Richard W. Corey  
Executive Officer

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[www.CleanEnergyFuels.com](http://www.CleanEnergyFuels.com)

Todd R. Campbell  
Vice President Public Policy & Regulatory Affairs

January 31, 2020



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Port of Los Angeles  
425 South Palos Verdes Street  
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Ms. Heather Tomley  
Port of Long Beach  
415 W. Ocean Blvd  
Long Beach CA 90802

Submitted electronically to: [caap@cleanairactionplan.org](mailto:caap@cleanairactionplan.org)

Subject: Proposed Truck Rate Program

Dear Ms. Tomley and Mr. Cannon:

We are pleased to submit these comments to help the Ports craft a Truck Rate Program (TRP) that strikes the right balance between community health, regional air quality, climate change, and commerce. To be direct, fundamental changes are needed to turn the proposed TRP, which only perpetuates used diesel trucks, into the program envisioned by the Clean Air Action Plan (CAAP) – a program that uses near-zero and zero emission trucks to reduce local air pollution, improve regional air quality, and fight climate change. Our perspective is grounded in our experience with the first Clean Truck Program from 12 years ago, coupled with the awareness of both changes and advancements that have occurred since that time and the long road that lies ahead for new technologies to enter the market.

### **Clean Energy Stands Ready to Support the Ports of Los Angeles and Long Beach**

Clean Energy is the leading and largest provider of renewable natural gas (RNG) as vehicle fuel in North America. 100% of the natural gas vehicle fuel that we dispense in California is RNG. We service and support over 500 natural gas vehicle fueling stations in the US and Canada. Our fueling network includes CNG and LNG fuel for a wide variety of vehicles including light duty, medium duty and heavy duty. We partnered with the Ports of Los Angeles and Long Beach during the first Clean Truck Program to introduce alternative fuel trucks to the US market. During the ensuing 12 years, the natural gas truck industry has improved and matured into today's near-zero ultralow-NOx engine, elegantly integrated fuel systems, wide diversity of truck offerings from the 5 leading truck manufacturers, and the growing national network of fueling stations.

Clean Energy has strong roots in California. Our headquarters is in southern California. We employ over 220 people statewide. Our employees are service technicians, engineers, accountants, supply chain professionals, construction managers, salespeople, and more. We operate a regional parts supply, service and support center in Carson and service over 160 fueling stations up and down California's coast and inland valleys.

Launched by the first Clean Truck Program, Clean Energy built a national network of truck fueling stations called America's Natural Gas Highway. This is the first ever

network that allows alternative fuel trucks to travel coast-to-coast and border-to-border. We continue to build fueling infrastructure to in-fill areas that need more fueling options and in areas that need their first fueling option. Examples of this ongoing investment include the project of adding CNG dispensing to all six lanes of our Wilmington station, which is on property leased from the Ports and adding CNG dispensing capabilities at our Carson facility.

### **The Proposed Truck Replacement Program Must Be Strengthened to Drive Clean Air Results Promised by the Spirit of the CAAP**

The proposed TRP will not achieve the CAAP's (desired or intended) objectives to transition to near-zero trucks in the short term and zero emission trucks by 2035. Quite the opposite will occur. The message to the trucking industry is to continue operating used diesel trucks which the Air Resources Board identified as failing to meet current heavy-duty certification standards for NOx emissions at low speeds. This outcome is tragic for our region. First, our region suffers from the worst air quality in the nation causing people to suffer the health consequences of severe air pollution. Second, our region is on the front line of exposure to the impacts of climate change. Third, our region risks punitive federal sanctions if we do not make meaningful progress toward our extreme non-attainment status by 2023.

The oldest 8,000 diesel trucks that haul almost 50% of the containers will be banned by CARB rule on January 1, 2023. These banned trucks will be replaced by 2023 and present a once-in-a-lifetime opportunity to transition to near-zero and zero emission trucks. Fortunately, near-zero trucks, which are 98% cleaner than the old diesel trucks, are commercially available today. Unfortunately, the TRP is structured to discourage investment in near-zero trucks. The TRP imposes the truck rate on near-zero trucks after 2027, inexplicitly treating these clean trucks the same as used diesel trucks. In addition, the \$10 fee is too low to motivate a meaningful transition from diesel to advanced clean trucks. Companies are therefore left with no options other than to deploy used diesel trucks that we know can emit NOx levels up to 9 times above their certifications. This outcome will not only prolong used diesel truck operations for more than a decade at our ports, it will cement and extend a tragic outcome for our area with significant health consequences to local residents and labor alike.

The issues with the proposed TRP are not limited to just local air pollution. Some people call climate change the biggest threat faced by mankind. The Ports' own annual emissions inventories show that greenhouse gas (GHG) emissions are increasing, not decreasing. Drayage trucks are the largest source of GHG emissions from port operations. The number of drayage trucks will need to increase to keep pace with the 56%+ increase in cargo that is forecast to occur by 2035 in the economic study. Our region, and

especially the Ports, are completely vulnerable to the negative impacts of climate change, How the TRP can support increasing climate pollutant emissions with used diesel trucks is beyond comprehensible.

Trucking companies need clean truck options to help the region reduce air and climate pollutants. Trucking companies can select the clean technology option that meets their business requirements. What's more, the affordability and cost-effectiveness of near-zero RNG trucks help the Ports prevent cargo diversion and increase local jobs. The TRP should embrace near-zero and zero emission technologies as required by the CAAP. Our region faces an incredibly difficult challenge to solve air pollution and climate change within this decade. Now is not the time to tread water or disincentivize potentially meaningful options that could otherwise help companies move in a sustainable and responsible direction. Now is the time to rapidly go forward and give companies a diversity of choices to drive down air and climate pollution starting today. We simply cannot afford to wait for tomorrow and the federal government won't allow us to when they issue a federal implementation plan.

Here is the bottom line: any plan that encourages diesel trucks will never reduce air and climate pollution.

### **Clean Energy's Final Recommendations**

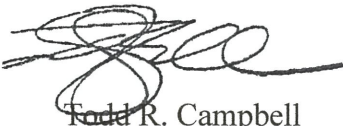
We fully support the comments submitted by the California Natural Gas Vehicle Coalition (CNGVC) and endorse their recommendations to align the TRP with the CAAP that was passed by the Harbor Commissions of both ports:

1. Define the term "Near-Zero" to mean a truck: (1) with an engine certified to CARB's 0.02 g/bhp-hr standard under the Optional Low NOx regulation; and (2) uses renewable fuel that reduces greenhouse gases by at least 50% compared to baseline diesel as determined by CARB's Low Carbon Fuel Standard.
2. Exempt Near-Zero trucks from the truck rate for the duration of the trucks useful life per the standards contained in SB1 Section 18 (Health & Safety Code Section 43021(a)).
3. Continue funding Near-Zero trucks until 2035.
4. Increase the container rate to \$40-\$50/TEU to collect more clean truck incentive funds and motivate voluntary turnover of the fleet.
  - a. Consistent with input from truckers
  - b. Provides motivation to eliminate used diesel
  - c. Reduces the incentive funding required, allows market forces to work
  - d. Per the Davies Economic Study, a truck rate in the range of \$35 to \$50 can generate enough revenue to fund the full cost of subsidy amounts (although at this level, market forces will work and not require such high subsidies)

- e. Minimal diversion risk at only 1% or less per the Economic Study.
5. Begin collecting TRP truck rates as soon as possible but no later than September 1, 2020.
6. Create a clean truck fund of \$270M by advancing the truck rate funds for the first three years of collections and begin awarding incentive funding for advanced clean trucks beginning July 1, 2020.

These recommendations will achieve the goals and commitments of the Clean Air Action Plan.

Sincerely,

A handwritten signature in black ink, appearing to read "Todd R. Campbell", with a long horizontal flourish extending to the right.

Todd R. Campbell  
Vice President, Public Policy & Regulatory Affairs

# ROAD TO CLEAN TRUCKS

## PORTS OF LOS ANGELES AND LONG BEACH

### CONTAINER RATE ANALYSIS

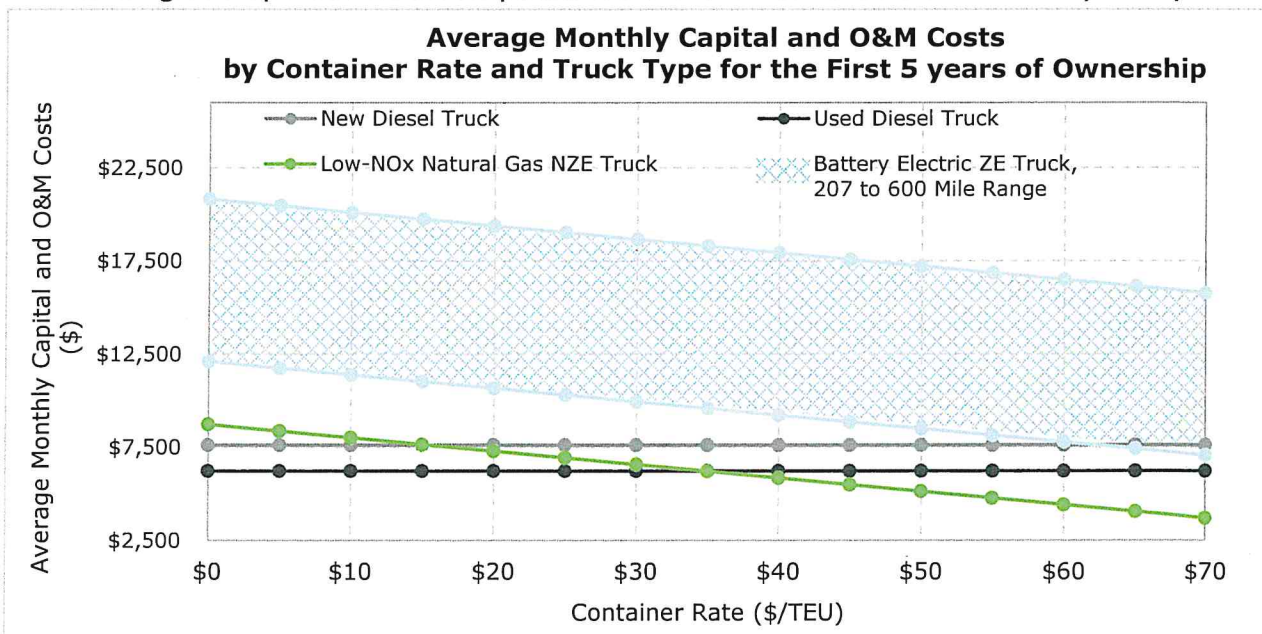


As part of their Clean Air Action Plan (CAAP), in 2020 the Ports of Los Angeles and Long Beach are planning to implement a Container Rate on containers hauled by trucks with exemptions for zero-emission (ZE) and near zero-emission (NZE) trucks. The purpose of the rate is to motivate the transition of port trucks from older diesel trucks to ZE/NZE trucks that do not emit diesel particulate matter (DPM) and dramatically reduce emissions of oxides of nitrogen (NO<sub>x</sub>). The original CAAP Container Rate was \$35 per Twenty-Foot Equivalent Unit (TEU). Clean Energy had Ramboll evaluate how Container Rate levels would affect a clean truck transition.

### KEY ASSUMPTIONS AND ANALYSIS RESULTS

Using data from the Ports' Drayage Trucks Feasibility Assessment and a proprietary survey of port trucking companies, the study relies on several key assumptions:

- ❖ Owners of NZE/ZE trucks charge Beneficial Cargo Operators (BCOs) a "Clean Truck Surcharge Rate" of 60% of the Container Rate for the life of the truck
- ❖ The Container Rate and exemption for NZE/ZE trucks apply for the life of the truck
- ❖ Zero grant funding for purchase of NZE/ZE trucks
- ❖ Used diesel trucks are 5 years old when purchased
- ❖ Financing and operational assumptions were taken from the Ports' Feasibility Study



### ANALYSIS CONCLUSIONS

The analysis shows that Container Rates less than \$35 per TEU (with a clean truck charging the BCO 60% of that fee for the life of the truck) will be too low to incentivize trucking companies to purchase NZE trucks, resulting in continued deployment of used diesel trucks with high emissions of DPM and NO<sub>x</sub>. Encouraging deployment of ZE trucks would require even higher Container Rates (greater than \$82 to \$203 per TEU).

NZE/ZE Technology	Container Rate Value to Breakeven with a Used Diesel Truck
Low NOx Natural Gas NZE Truck	\$35 per TEU
Battery Electric ZE Truck	\$82 to \$203 per TEU

For more information please contact:

Greg Roche, Clean Energy, [Greg.Roche@cleanenergyfuels.com](mailto:Greg.Roche@cleanenergyfuels.com)  
Julia Lester, Ramboll, [Jlester@ramboll.com](mailto:Jlester@ramboll.com)





THE VOICE OF **RETAIL**

January 31, 2020

Mr. Eugene D. Seroka  
Executive Director  
Port of Los Angeles  
425 South Palos Verdes Street  
San Pedro, CA 90731

Mr. Mario Cordero  
Executive Director  
Port of Long Beach  
415 W. Ocean Blvd.  
Long Beach, CA 90802

**Re: Comments on the CAAP Truck Rate Proposal, and the December 2019 Draft Economic Study for the Clean Truck Fund Rate**

Dear Executive Directors Seroka and Cordero:

The National Retail Federation (NRF) welcomes the opportunity to provide our views on the ports' recently proposed Clean Truck Rate Fund and the draft economic study released on the truck rate in December 2019.

By way of background, NRF is the world's largest retail trade association, representing discount and department stores, home goods and specialty stores, Main Street merchants, grocers, wholesalers, chain restaurants and internet retailers from the United States and more than 45 countries. Retail is the nation's largest private sector employer, supporting one in four U.S. jobs – 42 million working Americans. Contributing \$2.6 trillion to annual GDP, retail is a daily barometer for the nation's economy.

Representing some of the largest customers of the ports of Los Angeles and Long Beach, NRF's members would be significantly affected by the proposed truck rate fund. These comments provide our views concerning some deficiencies in the draft economic study, concerns about the administrative costs of the program as it is currently envisioned, and, perhaps most important, the timing of the proposed truck fund rate.

Despite these concerns, we also want to make it clear that NRF and its member companies are committed to improving sustainability within our supply chains. The retail industry has a strong record of supporting efforts to reduce air emissions. Not only do many of our members participate in voluntary programs such as EPA's SmartWay, that are designed to improve air quality and reduce greenhouse emissions, but the retail industry played an important role in the launch of the 2006 clean truck program. For these reasons, NRF stands ready to work with you to achieve reasonable goals for zero- and near-zero (ZE and NZE) emission trucks.

Our comments are divided into two sections: Specific comments related to the economic study, and general comments about the proposed program.

## **COMMENTS ON ECONOMIC STUDY**

We applaud the ports of Long Beach and Los Angeles for their effort to be transparent and for initiating a study of the potential for cargo diversion that might result because of new container fees. We think the study's qualitative discussion of sourcing decisions reflects the complexity of this topic and the difficulty of accurately projecting potential cargo diversion. But without those qualitative caveats, we would have significant concerns about the quantitative findings of the actual regression analysis, which suggests the imposition of container fees would have no impact on BCOs that transload cargo in the region. We think the study significantly underestimates the costs of the proposal or the impacts on transloaded cargo.

### **Section 3.0 Davies Assessment of Cargo Diversion**

The elasticity analysis of the impact of container fees is far too simple to rely on in making judgments about the impact of container fees. This has been a long-standing problem with the Leachman elasticity models.

The analysis only looks at the actual cost of the rate itself as a variable, without considering a host of other factors, most important of which is the administrative costs the container fee will impose on BCOs. The study also ignores the cumulative effect of other container fees now being charged at the ports of LA and Long Beach—fees under PierPass that can no longer be avoided.

It is worth a moment to also mention that the new PierPass appointment system imposes its own problems and inefficiencies. NRF members have expressed ongoing concern that they are having difficulty in getting appointments when needed. The failure to get appointments also triggers other fees such as detention and demurrage. So, in total, the ports of LA and Long Beach are relatively more complicated and more expensive for BCOs. The addition of another container fee only exacerbates the issue.

In addition, of course, the analysis couldn't assess the impact of administrative costs because the program itself remains largely undefined. The port hasn't announced who will be collecting the fee, where the money will go, who will administer the fund, and what the money will be used for. What mechanisms will be in place to ensure the transparent review of the collection and disbursement of the fees and grants? These are key issues that need to be addressed before the collection of a new fee can even be considered.

In our view, the added complexity that a new fee – especially one with a complicated rebate program – is likely to have a much bigger impact on discretionary cargo, as the study concludes. But we do not accept the idea that transload cargo is inelastic. There are so many additional factors that go in to routing cargo, as the qualitative discussion of the results clearly notes.

### **Section 4.0 Additional Diversion Factors**

We agree with the caveats stated in Section 4.0 of the draft study regarding the uncertainties of the regression analysis and suggest that administrative costs of the contemplated fee be further analyzed.

There are also few additional factors that the ports should consider, which have implications for transportation costs and sourcing decisions:

- The impact of the ISO 2020 low sulfur fuel standard on transportation costs. As carriers move to low sulfur fuel the prices of these fuels may increase. Equally important, ocean carriers and truckers will be competing for these fuels, thereby increasing trucking rates, driving some cargo onto rail. Carriers may engage in slow steaming practices that will make supply chains longer, driving some BCOs to look for merchandise sources closer to home, possibly within the Western Hemisphere. Such sourcing changes make East- and Gulf-Coast gateways more attractive.
- Changes in the business model for US retailing. Retailers are seeing significant reduction in mall foot traffic, with resultant impacts on sales. At the same time, more retailers are offering direct to consumer supply chain options. These changes are radically changing supply chains and the distribution network in ways that cannot be fully forecast. In addition, it's important to note that the changes in the industry are putting pressure on prices and costs that make new costs particularly troublesome at this point in time.
- Tariff Policy. The study correctly identifies the volatility in the import market created by U.S. tariff policy. In our view, these new protectionist policies are unlikely to change significantly over the short range and will most likely not change over the mid-range either. High tariffs on imports on consumer goods are likely to continue for the foreseeable future, even after the next presidential election. Indeed, it's quite possible that additional trade remedy actions could also impact emerging markets like Vietnam and India, setting off a cascade of new sourcing problems that could, once again, make East- and Gulf- coast gateways more attractive.

#### Section 5.0 Stakeholder Input on Diversion

NRF appreciates the efforts of port staff to help our members understand the proposed truck rate proposal. Staff has been very generous with their time, discussing the proposal with our members on conference calls and at meetings. These efforts have improved transparency and fostered communication.

Nevertheless, we are concerned that the economic study does not reflect the views of large importers, either because importers failed to participate in outreach or because they were not contacted at all. In addition, while conversations and outreach are helpful, we believe the ports should undertake a quantitative study of the stakeholder community. Either by creating shipper surveys and/or other mechanisms for getting more concrete and actionable data especially on the likely administrative costs of the proposal.

In addition, it would be helpful if the ports would segregate the views of various stakeholder groups. The study lumps truckers and BCOs together and says almost nothing about the views expressed in stakeholder meetings, or the differences in opinion between and among stakeholder groups.

## **COMMENTS ON THE PROPOSED TRUCK RATE PROGRAM**

As noted earlier in these comments, NRF stands ready to work with the ports to encourage a shift to ZE or NZE trucks as quickly as possible. We applaud the aspirational goals in the 2017 update of the Clean Air Action Plan (CAAP). But, for the following reasons, NRF strongly opposes the timetable the ports have proposed for rolling out a new truck fee.

### **NZE and ZE Trucks Are Not Currently Available**

The ports own 2019 assessment of the availability of NZE and ZE trucks indicates that this equipment is unlikely to be available in 2021, when the fee is first slated to be imposed.

Imagine the retail executive who has to explain to top management that every loaded TEU moving through the ports of Long Beach and LA will be subject to a \$20 “clean truck” fee, but there are *absolutely no trucks meeting the standard* that can be used to mitigate the fee. When retail companies are presented with scenarios like that, and they have the option of moving discretionary cargo to some other port where this fee doesn’t apply, the chances are high that the cargo is going to be moved, especially if it’s also subject to 25% duties, or the retailer is facing competitive challenges because of new business models in retailing.

### **The Ports’ Economic Study Concludes That A Fee is Unnecessary**

The ports’ own economic analysis, which appears in Section 7 of the Draft Economic Study, clearly makes the point that the imposition of a new container fee has virtually no impact on early adoption of cleaner trucks. Indeed, Figure 7.1 on page 27 makes the case graphically.

According to the analysis, the ports could reach a fleet of 100% ZE or NZE trucks simply by adding a requirement that the California Air Resources Board (CARB) regulation which will require all trucks to be 2010+ by 2023 and also requiring new trucks entering the ports truck registry to be model year 2014 or newer. This scenario basically requires all new entries to the truck registry to be NZE or ZE starting in 2023. (Which may not be technically feasible in any case.) The modeling in the study suggests that this regulatory approach gets the ports to ZE or NZE by 2034, within the goal set in the 2017 revision of the CAAP.

The economic study further shows that the addition of a fee to the scenario outlined above, has *absolutely no impact* on new technology adoption.

It is also worth noting that on January 21, 2020, the Environmental Protection Agency (EPA) published an Advanced Notice of Proposed Rulemaking<sup>1</sup> seeking comments on its own Clean Trucks Initiative (CTI) and plans to move forward with new emission standards for NOx heavy duty truck engines, further complicating the regulatory landscape. It seems premature to begin assessing a fee when it is not clear whether CARB standards or EPA standards will apply.

#### The truck fee raises significant revenues without any detail of how the money will be spent

The ports have suggested that a \$10/TEU fee would raise about \$90 million a year in revenues that could be used to fund the conversion to ZE or NZE trucks. Leaving aside the study results that suggest that a fee has little impact on the rate at which new technology will be adopted, this new container fee would, over its 15 year life, raise a total of \$1.3 billion. Even assuming revenues will drop as cleaner trucks are adopted, the fee's total revenue will approach \$1 billion over 15 years. It's completely unclear how this money is going to be spent, who will be deciding how the money is spent, and who will administer the fund.

NRF is deeply concerned that a container fee with the potential to raise this kind of revenue to be handed off to some as-yet unnamed organization will be difficult to eliminate after 15 years, especially if it's imposed before real NZE or ZE trucks are even available. Indeed, our experience with PierPass, which was supposed to be temporary, forms our views on this subject.

On its face the new container fee appears to be an effort to raise a great deal of money that we fear is going to be very hard to forego in the future.

#### The proposed fee is markedly different than the 2006 CAAP Clean Truck Fee

NRF and its member companies supported the 2006 CAAP Clean Truck program. Large retailers were instrumental in shaping that program, which was successful because of several factors that are missing from this proposal. 1) the cleaner trucks were readily available, 2) the fee was imposed as an *incentive* to switch to cleaner technology, not as a means to raise money for a truck fund, and 3) the fee clearly phased out when the goal was met.

At this writing, it's unclear when viable ZE and NZE trucks and the concomitant infrastructure will be available at the ports. When that happens at some future time, a truck fee like the one imposed in 2006 might accelerate adoption of new technology, and NRF would be willing to endorse such a program if an analysis suggests that incentive will speed up the process. Indeed, our members would likely be early adopters of ZE and NZE trucks because of already-existing corporate commitments to sustainability.

But that's not what has been proposed. Instead, the ports have proposed nothing short of a container fee designed to raise money. NRF members won't be able to mitigate the fee until at least 2023 and maybe not even then.

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<sup>1</sup> Advance Notice of Proposed Rule: Control of Air Pollution from New Motor Vehicles: Heavy-Duty Engine Standards - <https://www.govinfo.gov/content/pkg/FR-2020-01-21/pdf/2020-00542.pdf>

## CONCLUSION

NRF welcomes this opportunity to provide our comments on the proposed truck rate and the recently released economic study. We stand ready to continue to work with the ports toward the speedy adoption of ZE and NZE trucks. We support the ports efforts to set aspirational goals.

But we strongly urge the ports to slow down the adoption of the truck rate. First of all, the ports need to wait for the CARB manufacturing standard to be finalized. There is no need to rush ahead with a fee until we know the parameters of that standard. When that is fully in place, a further assessment needs to be made on available technology.

The ports should move ahead with adopting new truck registry standards and reevaluate the efficacy of 2007-type truck fee once those elements are in place.

We are not opposed to economic incentives for early adoption of new technology. But the ports should demonstrate that the technology is available, and that the regulatory environment is ready for such incentives. Until then, the imposition of new container fees is likely to harm the ports competitive advantage against other import gateways.

We look forward to continuing to work with the ports on these important issues. If you have questions, please contact me. Thank you for considering our thoughts on the draft economic study and the Clean Truck Fund Fee proposal.

Sincerely

A handwritten signature in black ink, appearing to read "Jonathan Gold". The signature is fluid and cursive, with a large initial "J" and "G".

Jonathan Gold  
Vice President, Supply Chain and Customs Policy

January 31, 2020

Chris Cannon  
Port of Los Angeles  
425 Palos Verdes Street  
San Pedro, California 90731

Matt Arms  
Port of Long Beach  
415 West Ocean Boulevard  
Long Beach, California 90802

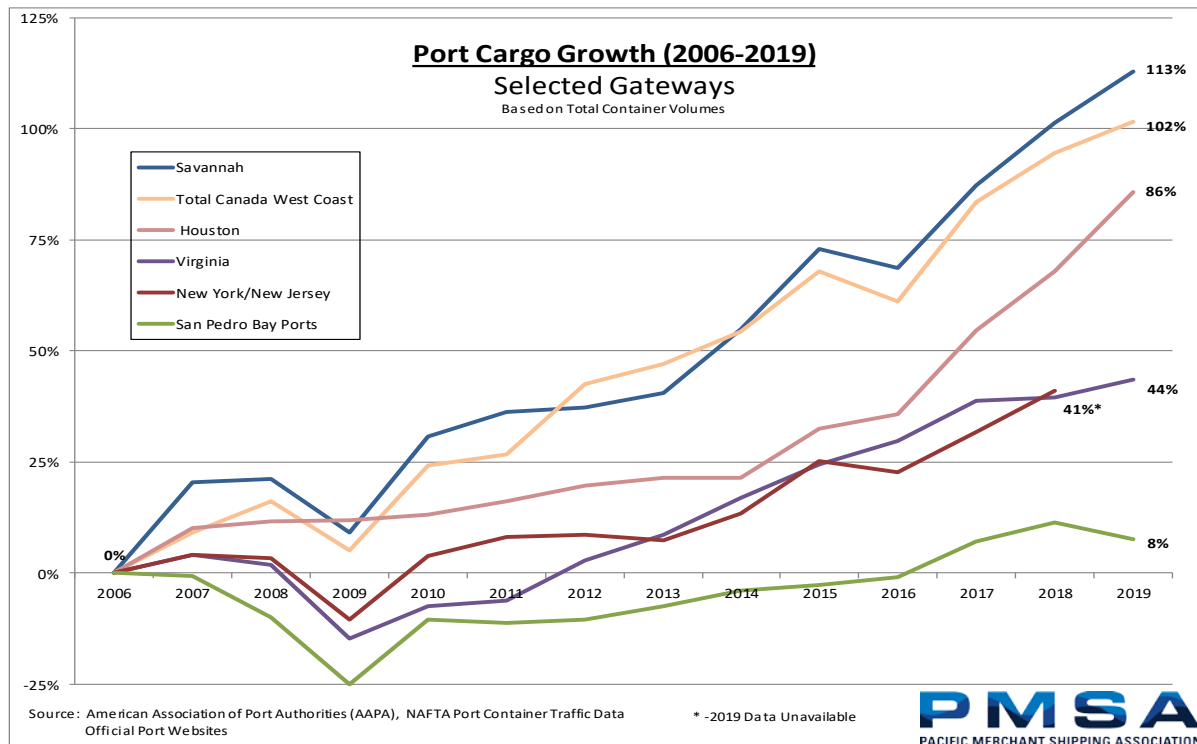
Subject: Comments on Draft *Economic Study for the Clean Truck Fund Rate*

Dear Messrs. Cannon and Arms:

Thank you for the opportunity to comment on the draft *Economic Study for the Clean Truck Fund Rate*. Our primary concern is that the proposed Clean Truck Fund Rate will have a profound impact on the competitiveness of the San Pedro Bay gateway. Circumstances today are radically different than during the first iteration of the Clean Air Action Plan (CAAP) and Clean Trucks Program (CTP).

**0.57% Annual Growth & Diversions**

The San Pedro Bay ports are in a very different growth environment than existed during the original CAAP and CTP.



In 2006, the San Pedro Bay ports hit their pre-recession peak. Unfortunately, that peak marked the end of a long growth cycle. Since 2006, San Pedro Bay volumes are up only 8% over 13 years, a compound annual growth rate (CAGR) of only 0.57%. As illustrated in the graph above, San Pedro Bay's competitors are far outperforming San Pedro Bay. As a result, San Pedro Bay has suffered nearly two decades of declining market share.

By contrast, Savannah has grown by 113% over the same period, a CAGR of 5.99% or ten times the growth rate of San Pedro Bay. The Port Authority of New York and New Jersey has grown 41% through 2018 or a 2.9% CAGR and presents a real risk of becoming the 2<sup>nd</sup> biggest port in the nation. **Last year, San Pedro Bay declined 3.3% compared to 2018.**

Long-term anemic growth is always a concern. However, the proposed CTR would add pressure to ports' ability to grow. The draft Economic Study states that the CTR would result in up to 1.4% cargo diversion and over 3.5 million TEU over the course of the program. While PMSA believes that those diversion estimates are grossly understated for reasons described below, even the reported level of diversion would wipe out the growth the ports have experienced since 2006.

Diesel truck emissions have already been reduced by 96% according to the ports' own emissions inventories – and the San Pedro Bay port truck fleet is the cleanest in the nation. In order to reduce emissions a further 4%, the ports are proposing to wipe out a decade of growth.

### **How Much is 3.5 Million TEU Worth?**

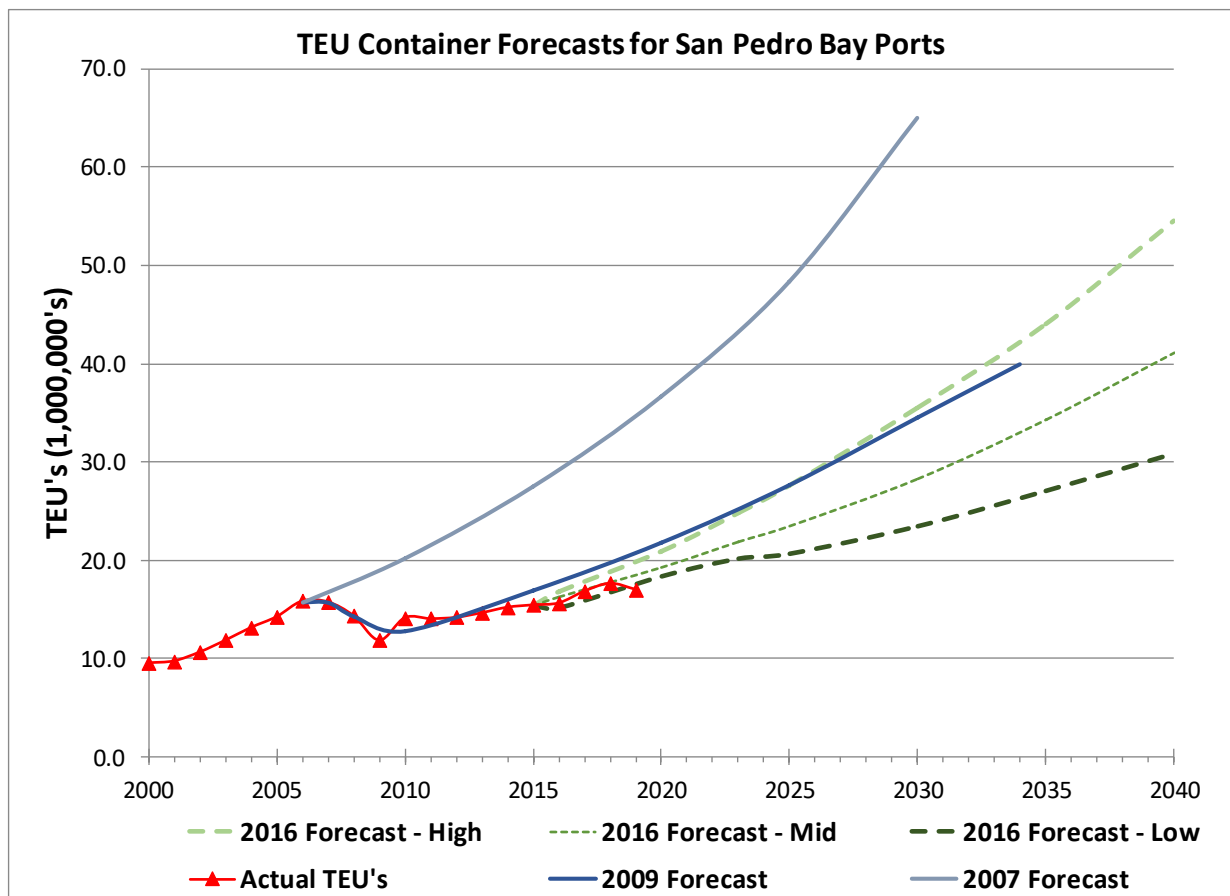
The Economic Study did not evaluate the economic impacts of the proposed CTR. It should be revised to include the impact of diversion on our communities. Cargo moving through the San Pedro Bay ports provide jobs and economic activity to our local communities. Communities like San Pedro, Wilmington, and Long Beach thrive or suffer based on the health of the ports. The economic impact of lost jobs, lost economic activity, and lost tax revenue should be evaluated and included in the draft report. Decision makers should understand the opportunity cost and the communities they will impact by adopting the CTR.

### **Other Factors**

In addition to the changing growth climate since the original CAAP and CTP were proposed, when the San Pedro Bay ports were still growing strongly, other important factors have changed. At the time of the original CTP, the next generation of trucks were commercially available, a robust secondary market in new generation trucks would develop over the course of the program, and a supportive regulatory environment existed in the form of Proposition 1B incentive funding and the statewide Port Drayage Truck Rule. None of those conditions exist today. The zero emissions trucks are not only not commercially available, but the technology has not been successfully demonstrated, as outlined in the ports' own Feasibility Assessment. There can be no confidence in the development of a secondary zero emission truck market since no commercial new zero emission heavy-duty truck market currently exists. Finally, the State is not backing the updated Clean Trucks Program like they did the original program. There is no Proposition 1B and no update to the State Truck and Bus Rule exists.

**Checked Forecasting Past**

Unfortunately, the San Pedro Bay ports have a checkered history regarding forecasting. Prior forecasts have not compared favorably with ultimate outcomes and those outcomes were for the worst. Below is a graph of the San Pedro Bay ports’ last three forecasts. The 2007 forecast was prepared just as the financial crisis and Great Recession emerged, by its estimate the San Pedro Bay volumes should be 36.7 million TEU in 2020. In light of the Great Recession, the forecast was promptly updated in 2009 with a forecast of 21.8 million TEU in 2020. Most recently, the forecast was updated again in 2016. In order to hedge bets, this forecast included a high growth, medium growth, and low growth scenario. Those three scenarios were each bounded by a high and low range for a total of nine different trendlines. The figure below, in addition to the 2007 and 2009 forecasts, presents three of the nine trendlines for 2016: the high-bound high growth scenario, the medium growth scenario, and the low-bound low growth scenario. As of 2019, with 16,969,664 TEUs, San Pedro Bay is below the low-bound of the low growth scenario.



Due to the great difficulty in successfully forecasting cargo volume trends, the ports should proceed with extreme caution with regard to the diversion estimates presented in the draft *Economic Study*. Even with “small” diversion rates presented in the report that would impact over two million TEU over the

course of the program, any change could have enormous impacts on cargo volumes. As a result, the ports need to evaluate and present the uncertainty of the diversion analysis and subject the diversion model to a sensitivity analysis.

### **Impact on Exports Not Evaluated**

As the draft Economic Study states:

*Due to data constraints, a quantitative estimate of export elasticity was not conducted for this evaluation.*

Trade discussions between Washington and Beijing have emphasized on increasing U.S. exports to China. As a result, these two ports are increasing their marketing emphasis on exports. It is unbelievable that a quantitative assessment of the CTR on exports was not conducted. The draft report concedes:

*[M]any of the goods exported through the Ports are lower value commodities such as wastepaper and plastics, hay and animal feed, and raw cotton. In general, lower value commodities are likely to be more sensitive an increase in supply chain costs.*

Without the inclusion of an impact on exports, any estimate of diversion presented in the report is simply wrong. The purpose of the *Economic Study* is to inform decisionmakers of the potential consequences of their decision and weigh competing needs in making their decision. Without an evaluation of impacts on exports, decisionmakers will not have the necessary information to make an informed decision.

### **Economic Theory versus Economic Reality**

One of the cornerstones of the previous and proposed CTP is that the fee was and will be assessed to cargo owners. This approach was taken because trucking companies are likely unable to pass on costs and the low margin environment of port drayage, particularly due to the high cost investment in new, clean technologies needed. Experienced port stakeholders believe that the CTP would have different outcomes if the fee was assessed against the trucker rather than the cargo owner. Yet, the draft report states:

*The Davies team used a model to estimate the potential impacts of the CTF Rate under various assumptions regarding CTF Rate levels and capital subsidies. This model assumed that rates would be borne by the truckers and not the BCOs.*

Does anyone believe that truckers and cargo owners have either (1) the same pricing power or (2) the same ability to avoid fees? Cargo owners have a demonstrated ability to avoid fees and shift costs to other logistics stakeholders like trucking companies. Cargo owners also have the option of using other gateways, which is not an option for a local trucking company. Anyone would intuitively conclude that cargo owners can and will respond differently to cargo fees than trucking companies. The net result is that the impact of diversion is likely to be grossly underestimated - particularly in an environment of already declining market share. This is a major flaw in the study.

**Analysis Ignores the Time Component of Elasticity**

One of the challenges in evaluating elasticity is that it may change with time. Initial price changes may be relatively inelastic due to a lack of options, for instance an existing commitment such as a warehouse lease. Over time, options for responding to price changes will evolve; a warehouse lease may end. As result, elasticity may change over time if the price changes endure. The updated CTP is a program that will last 15 years. Elasticity will evolve over such a long period. As ocean carrier, terminal, and warehouse commitments expire, cargo owners will have the option to evaluate their gateway of choice. The study needs to evaluate how cargo diversion will change over time.

Combined with the lack of export analysis and lack of discussion on economic impacts, the draft report grossly underestimates the impact of the CTR and does not provide decisionmakers with enough information to weigh the consequences of their decision. The draft report should be substantially revised and released for subsequent review.

**Ports Must Require State Matching Funds**

Port users cannot and should not be asked to solely fund the replacement of the Port Drayage Fleet. The current port drayage fleet is the cleanest fleet in the nation as a result of the CARB Drayage Truck rule and the state's related dedication of hundreds of millions of dollars in Proposition 1B funding working in conjunction with the original CAAP and CTP to modernize local fleets. If there is going to be another wholesale fleet replacement, the ports must insist on State and local agency participation through funding commitments.

Port drayage activity makes up less than 10% of regional truck miles traveled, yet the proposed program impacts only trucks that serve the port. More importantly, most trucks engaged in drayage serve non-port customers more than the port, based on the ports' own data. As a result, replacing the port drayage fleet at an accelerated rate as compared to the regional truck fleet is a broad public good that the broad public should support. The CAAP already states:

*To support the transition to the near-zero and zero-emission trucks, significant allocations of federal, state and local grant funding will be necessary.*

That commitment should be made a component of the CTP. The State and other local agencies should demonstrate that this is a worthwhile effort by committing funds. The ports can insist on this by requiring matching funds from the State. The ports should commit that no more than one dollar of port user funds are committed for every dollar of State and local agency matching funds. If reducing the last 4% of port drayage emissions is the public priority, it should not be difficult to get matching fund commitments. If this effort is not a priority for the State and local agencies, the ports should not risk the jobs that sustain our communities on a program the State and local agencies are not willing to back.

**Repeated Call for a Competitiveness Action Plan**

During the development of the CAAP update, PMSA repeatedly urged the ports to prepare and adopt a Competitiveness Action Plan. A Competitiveness Action Plan would demonstrate the ports commitment to removing the barriers to cargo flowing through the San Pedro Bay gateway. Since the CAAP was

adopted in 2017, the San Pedro Bay ports have grown 0.4% or 81,964 TEUs. Under the proposed CTR, even that growth would be wiped out. The ports need a commitment to competitiveness and preserving jobs as public as their commitment to clean air.

**Mitigate the Competitive Impact**

Finally, in adopting any CTR, the ports should identify ways to mitigate the impact of diversion. The ports would not approve a project without a commitment to mitigate the project's environmental impacts, similarly the ports should not adopt a fee without adopting mitigation for its economic impact.


**Conclusion**

In summary, it is clear that the draft Economic Study underestimates the impact of diversion and fails to consider the economic impacts of cargo loss. As a result, PMSA requests that the ports should take the following steps:

- ✓ Estimate the economic impact of diversion
- ✓ Evaluate the uncertainty of the diversion analysis
- ✓ Conduct a sensitivity analysis of the diversion model
- ✓ Estimate the diversionary impact to exports
- ✓ Estimate changes in elasticity with time
- ✓ Properly evaluate the impact on cargo owners versus truckers
- ✓ Develop a Competitiveness Action Plan
- ✓ Require one dollar in State and local agency funding for every port user dollar
- ✓ Mitigate the Competitive Impact of the CTR
- ✓ Recirculate the draft Economic Study for subsequent review

Thank you for considering PMSA's comments on behalf of marine terminal and ocean carrier members. PMSA looks forward to working with both ports as it continues to reduce environmental impacts while improving competitiveness.

Sincerely,



Thomas Jelenic  
Vice President

cc: Gene Seroka, Port of Los Angeles  
Port of Los Angeles Board of Harbor Commissioners  
Mario Cordero, Port of Long Beach  
Port of Long Beach Board of Harbor Commissioners



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+1 949 236 5520

**VIA E-EMAIL**

January 31, 2020

Mr. Chris Cannon  
Port of Los Angeles  
425 South Palos Verdes Street  
San Pedro CA 90731

Ms. Heather Tomley  
Port of Long Beach  
415 W. Ocean Blvd  
Long Beach CA 90802

**Re: Proposed Clean Truck Fund Rate and Economic Study**

Dear Ms. Tomley and Mr. Cannon:

On behalf of Agility Fuel Solutions (“Agility”), I am writing in regard to the proposed Clean Truck Fund Rate (“CTF Rate”) that is being prepared by the Port of Los Angeles and the Port of Long Beach (collectively, the “Ports”) to comply with the Clean Air Action Plan (“CAAP”). Specifically, Agility is concerned that the proposed CTF Rate, among other things: (1) disregards many of the Economic Study’s conclusions with respect to changing the composition of the Ports’ fleets; (2) ignores the practical reality of non-attainment; and (3) would benefit from a more fully developed incentive program. In addition, Agility supports, and hereby incorporates by reference, the comments submitted by the California Natural Gas Vehicle Coalition. Agility will not repeat the points raised in that comment letter here. Agility recognizes the competing environmental and economic interests that the Ports must balance when developing the CTF Rate. Agility encourages the Ports to think creatively when weighing these competing interests. Finally, Agility appreciates the time and energy the Ports have spent developing and evaluating the CTF Rate and commends the Ports’ work towards achieving a goal that is central to Agility’s purpose: *“clean air everywhere.”*

Agility is the leading global provider of highly-engineered and cost-effective clean fuel solutions for medium- and heavy-duty commercial vehicles, working with original equipment manufacturers to develop products for their vehicle platforms. Agility also works with dealers and fleet operators directly to educate them about their clean fuel options, support their adoption of clean fuel vehicles, and provide ongoing customer care. Agility and its affiliates’ products include natural gas, hydrogen, and battery electric energy storage and delivery systems, Type 4 composite natural gas cylinders, propane and natural gas engine fuel systems, and propane dispensers. Agility is the most recognized brand for performance, reliability, durability, and safety of its fuel systems, as well as its engineering capabilities and superior end-to-end customer service. Agility appreciates the Ports’ consideration of the following comments.

1. The proposed CTF Rate disregards many of the Economic Study's conclusions with respect to changing the composition of the Ports' fleets.

In analyzing possible options for the CTF Rate, the Economic Study modeled three scenarios without subsidies and three scenarios with subsidies. Regarding the scenarios without subsidies, the Economic Study concluded that, even at the highest studied rate (\$70/TEU), the incremental cost of the rate would not be sufficient to offset the higher costs of using a near-zero emission ("NZE") or zero-emission ("ZE") truck. Thus, without subsidies, the CTF Rate alone would not incentivize fleets to change their composition to clean alternatives.

To the contrary, the study concluded that fleet composition **could be** changed if NZE and ZE trucks are subsidized to make their capital costs equivalent to used diesel trucks. Taking this one step further, the Economic Study expressly concluded **that a CTF rate between \$35 and \$50 could generate sufficient revenue to fund the full cost of the subsidy amounts.** See Economic Study at 86. To be clear, this means that a container rate of \$35 could incentivize the Ports' fleets to change their composition to clean fuel options.

Yet, the Ports appear to have disregarded these conclusions, instead developing the CTF Rate in a vacuum, without considering the full suite of available options. Indeed, the Ports' proposed \$10 CTF Rate will, at the Ports' own admission, do nothing to actively drive change.

It is not clear why a rate of \$35—which would incentivize change in the composition of the Ports' fleet—was not more thoroughly considered. Such a rate balances the Ports' environmental and economic considerations, while improving air quality in the near-term. It offers a compromise-solution that sets the stage for achieving air quality goals and ensuring the long-term success of the CAAP. Accordingly, Agility urges the Ports to consider adopting a CTF Rate of at least \$35 as a win-win solution for the community and its stakeholders.

2. The Ports' position towards the CTF Rate ignores the practical reality of non-attainment.

The proposed CTF Rate fails to take into account the practical implications of local air districts' potential failure to satisfy federal clean air attainment objectives. Indeed, California continues to suffer from the worst air quality in the nation and federal attainment deadlines are looming for the South Coast Air Quality Management District (SCAQMD), the San Joaquin Air Pollution Control District (SJAPCD), and at least seven other California air basins. These regions are ranked by the American Lung Association as among the top ten worst airsheds in the nation. As such, the local air districts must reduce regional NOx emissions by up to 45% by January 1, 2023 or face federal regulatory and financial consequences.

The Ports seem to have devoted little time to recognizing what non-attainment may look like for the region. Specifically, if the air districts fail to achieve attainment by the scheduled deadlines, the U.S. Environmental Protection Agency will likely implement a federal implementation plan. With that comes significant uncertainty, a complete loss of local control over regulatory enactments, and likely substantial economic sanctions through restrictions on the Ports and other regional activities. Everyone can agree that this is the worst-case scenario. Thus, it is incumbent on the Ports to take a stronger stance and implement a CTF Rate that will incentivize change.

3. The CTF Rate would benefit from a more fully developed incentive program.

The CTF Rate is expected to generate approximately \$90 million per year. These funds will then be used to provide incentives to support the transition to NZE and ZE trucks. However, the details of this incentive program have not been developed. This is not only concerning, but it is avoidable. The Ports have had ample time to develop an incentive program, and should do so in short order, prior to the pending adoption of the CTF Rate.

Without a more fully developed incentive program, it is unclear whether the CTF Rate will functionally enable the Ports to achieve their CAAP goals, or whether (more likely) it will fall dramatically short. At the very least, the Ports should develop an incentive program term sheet, setting forth the basic structure of how the program will function, identifying critical milestones, and outlining (at least at a high level) the path towards achieving the CAAP goals.

4. Other considerations.

Agility encourages the Ports to consider creative solutions to the regional clean air problem. For example, the Ports could implement a tiered CTF Rate structure, whereby the rate increases over time. This would provide cargo owners with time to adjust and prepare for future rate increases, while ultimately arriving at a rate that will incentivize fleets to change their compositions to clean air options. There are likely myriad other creative solutions that could better balance the competing interests than the currently proposed \$10 CTF Rate.

In closing, the Southern California region deserves a comprehensive CAAP program that makes air quality a priority. The proposed CTF Rate of \$10 falls short, both of achieving CAAP goals and holding the Ports accountable for driving change.

Agility appreciates your consideration of the foregoing comments. We are happy to discuss any issue further or answer any questions.

Best regards,



Ashley Remillard  
Vice President, Legal  
Agility Fuel Solutions  
ashley.remillard@agilityfs.com



January 31, 2020

Chair Bonnie Lowenthal and Commissioners  
Board of Harbor Commissioners  
Port of Long Beach  
415 West Ocean Boulevard  
Long Beach, California 90802

Chair Jaime L. Lee and Commissioners  
Board of Harbor Commissioners  
Port of Los Angeles  
425 South Palos Verdes Street  
San Pedro, California 90731

**Re: Draft Economic Study for the Clean Truck Fund Rate**

Dear Chair Lee, Chair Lowenthal, and Commissioners:

The Coalition for Clean Air urges the Port of Los Angeles and Port of Long Beach Board of Harbor Commissioners to reject the proposed truck rate.

Don't Make This Your Ford Pinto Moment

*"Right is right, and wrong is wrong, and a body ain't got no business doing wrong when he ain't ignorant and knows better."* Mark Twain, *The Adventures of Huckleberry Finn*

In the 1970s, Ford manufactured a car called the Pinto. They knew that the car could catch fire when involved in rear-impact and other accidents. They conducted a cost-benefit analysis to calculate the cost of fixing the problem versus the number of people who would burn to death or be injured in accident-related fires. They valued the cost of fixing the problem at \$11 per vehicle. They set the value of a human life at \$200,000. They concluded that the cost of fixing the vehicles would be \$137 million and the cost of the lives lost, the injuries incurred, and the vehicles destroyed to be \$49.5 million. Five years later, after a series of damaging news stories, a protracted battle with the National Highway Traffic Safety Administration, and more than 100 lawsuits, Ford recalled the Pinto.

Today, you operate the largest port complex in the United States. You acknowledge that air pollution from your operations harms public health and the environment. You know that the State of California has found diesel particulate matter to be a toxic air contaminant responsible for premature death, lung cancer, headaches, fatigue, nausea, cough, labored breathing, chest tightness, wheezing, eye irritation, nasal irritation, phlegm, chronic bronchitis, pulmonary dysfunction, lung tissue inflammation, alveolar proteinosis, and other maladies. You understand that the State of California in its *Sustainable Freight Action Plan* found that air pollution from freight operations results in an estimated 2,200 premature deaths per year at a cost of \$20 billion annually. You recognize that much of the diesel exhaust and smog-forming oxides of nitrogen from your operations come from drayage trucks that service the ports. Your own analysis shows that you could virtually eliminate air pollution from port drayage trucks by adopting a \$35 to \$50 per loaded 20-foot equivalent (TEU) container truck rate.

The South Coast Air Quality Management District has told you that the failure to meet Clean Air Act deadlines will result in devastating economic and other sanctions, and that you must maximize port drayage truck emission reductions in order for the region to stand any viable chance of avoiding those sanctions. Yet, your staff has proposed a truck rate insufficient to transition port drayage trucks to the cleanest available technologies and put you on a path to achieve your goal of 100% zero-emission trucks operating at the ports by 2035.

Businesses may be obligated to put profits before people, but government agencies have an obligation to put the public interest ahead of the interests of those wanting to increase their material wealth.

Don't make this your Ford Pinto moment. You know what's right. You're not ignorant. Fix the problem. Don't wait for Clean Air Act sanctions to force you to do it.

### You've Made a Lot of Money

While participating in the truck rate decision-making process, I have heard a lot of concerns about what the ports can and cannot afford to do. I have reviewed your audited financial statements from 2009 to 2018. You have made a lot of money. The budget surplus during this time period has been more than \$3 billion. You can afford this.

San Pedro Bay Ports Profits, 2009-2018										
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
POLA FYE Surplus (in millions)	\$ 46	\$ 105	\$ 108	\$ 133	\$ 116	\$ 170	\$ 192	\$ 99	\$ 103	\$ 93
POLB FYE Surplus (in millions)	\$ 124	\$ 120	\$ 104	\$ 142	\$ 390	\$ 284	\$ 231	\$ 173	\$ 146	\$ 155
Cumulative Total (in millions)	\$ 170	\$ 395	\$ 607	\$ 882	\$ 1,388	\$ 1,842	\$ 2,265	\$ 2,537	\$ 2,786	\$ 3,034

Sources: Port of Los Angeles (POLA) financial statements (<https://tinyurl.com/POLA-FS>) and Port of Long Beach (POLB) financial statements (<https://tinyurl.com/LongBeach-FS>).

### Equal Protection

The 14<sup>th</sup> Amendment to the Constitution of the United States holds that “[n]o state shall make or enforce any law which shall . . . deny to any person within its jurisdiction the equal protection of the laws.” The equal protection amendment applies to San Pedro Bay Port operations and decisions. Those port adjacent community members impacted by the noise, traffic congestion, and air pollution caused by port activities bear an unequal share of the costs of freight transportation in California. They have a right to breathe clean air and you have an opportunity to help remedy the injustice they experience from the ceaseless parade of trucks going to and coming from your port terminals. Please take their needs seriously. They depend upon you to guarantee they benefit from equal protection under the law.

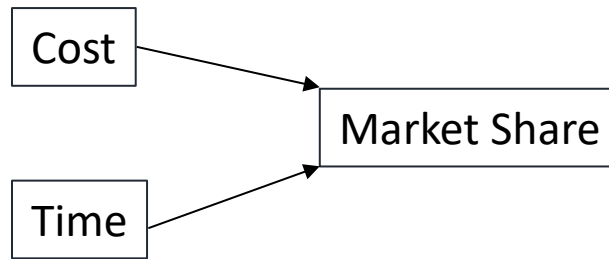
### Leadership

There are times when you must take a risk and do the right thing. Taking those risks requires courage. Leadership is the willingness to do the right thing, the necessary thing, despite the risks involved. There comes a time when you know you should take a stand. This is one of those times. It will not be easy.

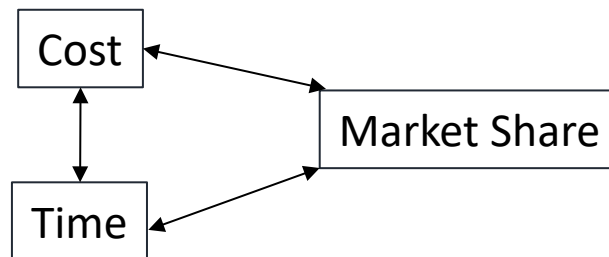
There may be consequences. Please be the leader that port-impacted community members need you to be. Vote to put the ports on the path to their zero emission goals. The proposal before you won't do it. It will only happen if you vote to make it happen.

### The Causal Model Is Too Simplistic

The analysis in the draft truck rate study is based upon the presumption of a simplistic and inaccurate model. The model assumes a cause and effect relationship between two "independent" variables (shipping costs and transit times) and one "dependent" variable (market share):



In reality, market share can also have a causal impact upon both shipping costs and transit times. Increased market share can result in greater efficiencies that decrease costs and transit times. The analysis is fundamentally flawed and should be based on a more sophisticated and realistic statistical analysis that does not presume unidirectional causal relationships among the variables:



### Our Position and Recommendation

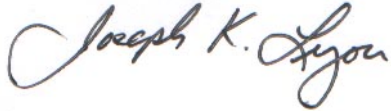
The Coalition for Clean Air opposes the proposal to set a truck rate at \$10 per TEU at the San Pedro Bay Ports. We support either (1) setting the rate at \$35 to \$50 per TEU, which the ports identify on pages 4 and 28 in the draft rate study as sufficient to subsidize fully the cost of transitioning the drayage truck fleet to meet or exceed the California Air Resources Board option low-NOx standard of 0.02 grams per brake horsepower-hour (g/bhp-hr) or (2) allow the market to solve the problem by setting no rate at all but immediately restricting all new additions to the Port Drayage Truck Registry ("registry") to trucks that can meet or exceed the optional low-NOx standard while requiring all trucks in the registry to meet or exceed the optional low-NOx standard by July 1, 2023, and changing the Clean Air Action Plan (CAAP) 100% zero-emission drayage trucks by 2035 goal to a requirement.

The ports have already established their authority to restrict the type of trucks eligible to be in the registry. In October 2018, the ports instituted a requirement that all new trucks added to the registry be model year 2014 or newer.

*"When morality comes up against profit, it is seldom that profit loses."* Rep. Shirley Chisholm

Please prove Congresswoman Chisholm wrong. Put the public ahead of profits. Clean up the trucks.  
Thank you for considering our request.

Sincerely,

A handwritten signature in cursive script that reads "Joseph K. Lyou". The signature is written in black ink and is positioned above the typed name and title.

Joseph K. Lyou, Ph.D.  
President & CEO

VIA ELECTRONIC MAIL

Attachments:

*Grush, E.S., and Saunby, C.S., undated, Fatalities associated with crash induced fuel leakage and fires.*

*Froines, J.R., 1998, Findings of the Scientific Review Panel on the Report on Diesel Exhaust.*



Inter Office

Environmental and  
Safety Engineering

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FATALITIES ASSOCIATED WITH CRASH  
INDUCED FUEL LEAKAGE AND FIRES

E. S. Grush and C. S. Saunby

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PURPOSE AND BACKGROUND

The NHTSA has issued Notice 2 of Docket 70-20 and Notice 1 of Docket 73-20, both regarding fuel system integrity. In this study, information has been developed concerning two of the issues raised in the Notices: the frequency of fire-related fatalities and the distribution and likelihood of fuel spillage by impact direction and type.

CONCLUSION

The NHTSA estimate of 2000 to 3500 fatalities yearly in fire-involved motor vehicle crashes appears to overstate the seriousness of the fire problem. Examination of in-depth accident data sources indicates that most fatalities in fire-accompanied crashes die from injuries not associated with the fire itself. Thus the National Safety Council estimate of 600 to 700 fire deaths each year is probably more appropriate than the higher NHTSA figure.

The actual number of fuel leakage incidents is relatively evenly distributed into four basic crash types: frontal, side, rear, and rollover. However, the likelihood of a given crash resulting in fuel spillage is much higher for rear impacts (26 percent with spillage in the sample studied) than for other crash types, such as frontals (3.5 percent spillage).

The cost of implementing the rollover portion of the amended Standard has been calculated to be almost three times the expected benefit, even using very favorable benefit assumptions. The yearly benefits of compliance were estimated at just under \$50 million, with an associated customer cost of \$137 million. Analyses of other portions of the proposed regulation would also be expected to yield poor benefit-to-cost ratios.

## METHOD AND RESULTS

### Number of Fire Fatalities

The NHTSA states that "motor vehicle collisions accompanied by fire account for between 2000 and 3500 fatalities annually." This range is about the same as that proposed by Sliepcevich and others from the University of Oklahoma Research Institute in an NHTSA-sponsored report. (1) The National Safety Council (NSC), on the other hand, has suggested (2) a somewhat lesser number (600-700) of persons dying annually in motor-vehicle fires resulting from accidents.

One explanation for the large difference in these estimates may relate to what is actually being counted: total deaths in fire-involved motor vehicle crashes or deaths from fire in fire-involved crashes. It has been reported that, as crash severity increases, the chance of a resultant fire increases in turn. (3) Thus the set of crashes which do involve fire tends to include severe accidents which are believed to be more likely to result in fatality regardless of the occurrence of fire. It may be, therefore, that many fatalities in fire-involved crashes result from the crash forces themselves, with fire being simply a concomitant and not causal variable.

The data source available to check this proposition was the CPIR III File of in-depth accident investigations maintained by the University of Michigan Highway Safety Research Institute. This file of 3500 crash-involved vehicles. Each crash was included in the data file due to some "special-interest" feature, typically an injury in a recent-model car; thus the file essentially consists of late-model cars and light trucks (up to 10,000 lbs. GVW) in injury-producing accidents.

From this data source were selected those occupants who were fatally injured in vehicles which sustained crash-induced fires. The 24 such occupants who were found comprise about seven percent of the total of 358 fatalities in the data sample. Extending this percentage to the nationwide total of some 40,000 occupant fatalities yields an estimate of 2800 deaths in motor vehicle accidents in which a fire took place, a number in agreement with the NHTSA and Oklahoma estimate.

The complete crash history on file for each of the 24 supposed fire fatalities was examined in detail to ascertain the actual circumstances surrounding the death, and the findings are outlined in Table 1. In over half of the instances the deceased was not burned at all, and death can be attributed only to the impact injuries. In these instances the occupant was typically ejected or extracted prior to spread of the fire. In one-fourth of the fatalities, fatal injuries were attributed to both impact and burns. These occupants most likely would have died even had there been no fire -- in fact, the fire may well have burned an already-dead body. For only five of the 24 fatalities examined was fire reasonably classifiable as the clear cause of the death. Brief synopses of the crashes from which each of the 24 deaths resulted are attached in the Appendix.

Table 1

FATALLY-INJURED OCCUPANTS OF BURNED VEHICLES

24

DEATH DUE TO IMPACT INJURIES NO ACCOMPANYING BURNS	WITH FATAL LEVEL IMPACT INJURIES WITH ACCOMPANYING BODY BURNS	DEATH DUE TO BURNS ONLY
<u>13</u>	<u>6</u>	<u>5</u>

The efficacy of the proposed fuel integrity regulation was examined for the five incidents in which occupants were burned to death. In three of the cases (AA-00143, ML-70003, SU-00041) a gross separation or rupture of the fuel system was reported. One of the cases (TR-01212), involving an improperly replaced gas tank was really not crash-related. The fifth fatality (AA-00155) was not fuel related at all, but involved a major post-crash passenger compartment fire. Thus, in the total data file concerning more than 5700 occupants, no burn deaths were reasonably attributable to fuel-fed fires except when accompanied by massive fuel tank or filler neck failure.

Results from this rather small sample of fatalities taken from a specialized data source perhaps cannot be considered definitive, in terms of predicting exact numbers. The analysis does indicate, however, that the NSC estimate of 600 to 700 yearly motor vehicle fire fatalities is certainly within reason. In addition, the detailed evaluation shows that, while the higher NHTSA estimate of deaths in cars with fire may be correct, most of these occupants in fact sustain fatal injuries not at all related to the associated fire.

The results discussed here refer to the types of vehicles in service at the present time. In future cars, with improved ejection-prevention and injury-mitigation properties, fewer occupants may sustain impact-induced fatal injuries. This would brighten the overall fatality and injury picture, of course, but might increase occupant exposure to situations in which fire would be the only hazard. On the other hand, occupants sustaining lesser injuries might be better able to cope with and escape from fire impacts which do occur, thereby reducing the risk of serious burns. Thus the influence vehicle improvements will have on the relative risk associated with fire is not clear, and cannot be practicably quantified with the limited data available.

Fuel Spillage

An NHTSA-sponsored study (4) conducted by Brayman at Calspan, Inc. contains data concerning fuel leakage for different impact directions. The source for these data was the Automotive Crash Injury Research (ACIR) accident file maintained by Calspan. The ACIR data con-

cern rural, injury-producing accidents.. Accident cases analyzed by Calspan between June 1968 and May 1969 were used by Brayman as the data sample for his study.

Table 2 shows some information developed from the Brayman study. It indicates that fuel leaks themselves are relatively evenly split among four basic crash types: frontal, side (mostly to rear half of car), rear and rollover. Thus no particular crash type is especially outstanding with regard to its contribution to any fuel spillage problem.

Certain crash types have a much greater likelihood of producing fuel spillage, however. Among 933 frontal impacts in the sample, 33, or 3.5 percent, resulted in fuel spillage. In contrast, over one-fourth of all rear impacts produced fuel leakage. Other crash types had intermediate likelihoods of leaking fuel. Thus it is clear that different crash types have widely varying propensities for resulting in fuel leaks.

It is noteworthy that, while seven percent of the cars in the Brayman (4) sample developed fuel leaks, fires (both fuel-fed and otherwise) were reported for .5 percent of the cars in this ACIR data file (3). Thus it appears as though less than seven percent of cars which develop fuel leaks subsequently burn.

#### COST/BENEFIT ANALYSIS OF STATIC ROLLOVER REQUIREMENT

The analysis discussed below concerns the static rollover requirement proposed for FMVSS 301. This discussion represents an attempt to outline an approach which can be used to address this and similar problems. While the benefit analysis is not meant to be definitive and beyond criticism, it is based on assumptions and derivations believed to be quite representative of an upper bound on the possible benefits accruing from compliance with the requirement.

Table 3 outlines the pertinent benefit and cost. The relevant benefits are those associated with the consequences of reduction in the frequency of fires in rollovers, while the presented costs relate to the incremental cost associated with meeting the specific static rollover aspects of the Standard.

#### Benefits

The appropriateness of the estimate of 700 burn deaths each year resulting from motor vehicle crashes has been discussed in the main text of this study. Data from both the Calspan fire study (3) and the Oklahoma analysis (1) of a New York State fire study (5) suggest that when occupants are burned, the injuries tend to be quite serious, and about half of the casualties sustain fatal injuries. Thus the 700 fatalities should be complemented by another 700 non-fatally (though seriously) injured occupants. Given the NSC estimate (2) of 10,000 yearly crash induced vehicle fires, about 8,500 of these fire crashes occur with no resultant occupant burns each year. Benefits from FMVSS 301 compliance based on these numbers represent an overestimate, since some undetermined number of these instances relate to large trucks not covered by the proposed Standard.

Table 2

DISTRIBUTION AND LIKELIHOOD BY IMPACT TYPE  
OF IMPACT-INDUCED FUEL SPILLAGE FOR  
PASSENGER CARS IN RURAL INJURY-PRODUCING ACCIDENTS

<u>IMPACT DIRECTION</u>	<u>NUMBER OF FUEL LEAKS</u>	<u>PERCENT OF FUEL LEAKS</u>	<u>LIKELIHOOD OF FUEL LEAK</u>
FRONT	33	25.8	33/933 = 3.5%
SIDE, FRONT HALF OF CAR	8	6.2	8/169 = 4.7%
SIDE, REAR HALF OF CAR	23	18.0	23/160 = 14.8%
REAR	37	28.9	37/140 = 26.4%
ROLLOVER	27	21.1	27/333 = 8.1%
<u>TOTAL</u>	128	100.0	128/1735 = 7.3%

SOURCE: CALSPAN REPORT NO. VJ-2839-K, DATED APRIL, 1970.

Note: Accident cases in this file are significantly biased toward high severity collisions; they are all rural, and to qualify for filing, an injury had to occur. But injuries are not nearly so frequent in rear-end crashes, in general. As a result, the proportion of fuel leaks in rear-end crashes reported here, 29%, cannot be the nationwide average. Rather, in 29% of rural rear-end collisions sufficiently severe to cause an injury, fuel leaks occur.

The proportion of fuel leaks which occur in rollovers is indicated in Table 2 to be slightly less than one-fourth\*. If this proportion is applied to the fire numbers themselves, the consequences of fire in rollovers can be estimated as 180 deaths, 180 non-fatal injuries, and 2100 other fire crashes. These values are predicated upon two postulations: rollover fuel leaks result in fire just as often as other fuel leaks, and rollover fires are just as likely to result in burns as other fires.

Table 3

BENEFITS AND COSTS RELATING TO FUEL LEAKAGE ASSOCIATED WITH THE STATIC ROLLOVER TEST PORTION OF FMVSS 208

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BENEFITS:

Savings - 180 burn deaths, 180 serious burn injuries, 2100 burned vehicles.

Unit Cost - \$200,000 per death, \$67,000 per injury, \$700 per vehicle.

Total Benefit -  $180 \times (\$200,000) + 180 \times (\$67,000) + 2100 \times (\$700) = \underline{\$49.5 \text{ million}}$ .

COSTS:

Sales - 11 million cars, 1.5 million light trucks.

Unit Cost - \$11 per car, \$11 per truck.

Total Cost -  $11,000,000 \times (\$11) + 1,500,000 \times (\$11) = \underline{\$137 \text{ million}}$ .

---

This analysis assumes that all these fires and the resultant casualties can be eliminated entirely through compliance with the rollover requirement. In addition, it is assumed that vehicle modifications designed to ensure compliance with non-rollover portions of the Standard will not reduce at all the number of rollover fires. The extent to which either of these assumptions is not completely accurate represents a measure of the extent to which benefits derived here are overestimates of the true values.

To compare the benefits of eliminating the consequences of these rollover fires with the requisite costs, the benefits and costs must be expressed in terms of some common measure. The measure typically chosen is dollars; this requires, then, converting the casualty losses to this metric. The casualty to dollars conversion factors used in this study were the societal cost values prepared by the NHTSA (6). These values are generally higher than similarly-defined costs from other sources, and their use does not signify that Ford accepts or concurs in the values. Rather, the NHTSA figures are used only to be consistent with the attempt not to understate the relevant benefits.

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\* That is, the 21.1% associated with rollovers from Table 2. In this and subsequent calculations, figures have been rounded upward. In that way, not only are the statistical assumptions in a conservative direction, but also the arithmetic.

The NHTSA has calculated a value of \$200,000 for each fatality. While the major portion of this amount relates to lost future wages, the total also includes some consideration for property damage. The NHTSA average loss for all injuries was about \$7000. Burn injuries which do occur tend to be quite serious, however, as discussed above. Thus a higher value of \$67,000, which is the NHTSA estimate of partial disability injuries, was used for each of the 180 non-fatal burn injuries. The \$700 property damage per vehicle is the NHTSA estimate of vehicle property damage costs in non-disabling injury crashes.

#### Costs

The Retail Price Equivalent (the customer sticker price with no provision for Ford profit) of vehicle modifications necessary to assure compliance with the static rollover portion of the proposed Standard has been determined by Ford to be an average of \$11 per passenger car and \$11 per light truck. While these are Ford costs, they have been applied across the industry in this analysis. Total yearly sales estimates of 11 million passenger cars and 1.5 million light trucks (under 6,000 lbs GVW) were used in conjunction with the unit cost determinations.

#### Benefit and Cost Comparison

The total benefit is shown in Table 3 to be just under \$50 million, while the associated cost is \$137 million. Thus the cost is almost three times the benefits, even using a number of highly favorable benefit assumptions. As better estimates of the parameters used in the benefit analysis become available, they could be inserted into the general analysis framework. It does not appear likely, however, that such alternate estimates could lead to the substantial benefit estimate increase which would be required to make compliance with the rollover requirement cost effective.

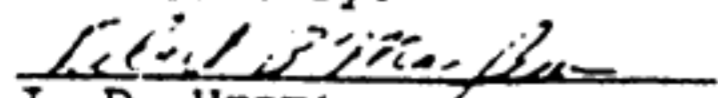
#### Benefits and Costs For Other Impact Modes

The analysis discussed above concerns only rollover consequences and costs. Similar analysis for other impact modes would be expected to yield comparable results, with the implementation costs far outweighing the expected benefits.

  
E. S. Grush  
Impact Factors

  
C. S. Saunby  
Impact Factors

Concurred By:

  
J. D. Hromi  
Principal Staff Engineer

  
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Impact Factors Manager

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Findings of the Scientific Review Panel on  
**THE REPORT ON DIESEL EXHAUST**  
as adopted at the Panel's April 22, 1998, Meeting

Pursuant to Health and Safety Code section 39661, the Scientific Review Panel (SRP/Panel) has reviewed the report *Proposed Identification of Diesel Exhaust as a Toxic Air Contaminant* by the staffs of the California Air Resources Board (ARB or Board) and the Office of Environmental Health Hazard Assessment (OEHHA) describing the public exposure to, and health effects of, diesel exhaust. The Panel members also reviewed the public comments received on this report.

Panel members participated in workshops devoted to discussion of the exposure and health issues associated with diesel exhaust in September 1994, January 1996, July 1997, and March 1998. The SRP reviewed the issues at its meetings in October 1997 and April 1998. A special meeting of the SRP was held on March 11, 1998, to hear testimony on health issues including the quantitative risk assessment from highly respected scientists invited by the Panel. Based on these reviews and information provided at scientific workshops and meetings, the SRP makes the following findings pursuant to Health and Safety Code section 39661:

**Exposure related conclusions**

1. Diesel exhaust is a complex mixture of gases and fine particles emitted by a diesel-fueled internal combustion engine.
2. The gaseous fraction is composed of typical combustion gases such as nitrogen, oxygen, carbon dioxide, and water vapor. However, as a result of incomplete combustion, the gaseous fraction also contains air pollutants such as carbon monoxide, sulfur oxides, nitrogen oxides, volatile organics, alkenes, aromatic hydrocarbons, and aldehydes, such as formaldehyde and 1,3-butadiene and low-molecular weight polycyclic aromatic hydrocarbons (PAH) and PAH-derivatives.
3. One of the main characteristics of diesel exhaust is the release of particles at a markedly greater rate than from gasoline-fueled vehicles, on an equivalent fuel energy basis. The particles are mainly aggregates of spherical carbon particles coated with inorganic and organic substances. The inorganic fraction primarily consists of small solid carbon (or elemental carbon) particles ranging from 0.01 to 0.08 microns in diameter. The organic fraction consists of soluble organic compounds such as aldehydes, alkanes and alkenes, and high-molecular weight PAH and PAH-derivatives, such as nitro-PAHs. Many of these PAHs and PAH-derivatives, especially nitro-PAHs, have been found to be potent mutagens and carcinogens. Nitro-PAH compounds can also be formed during transport through the atmosphere by reactions of adsorbed PAH with nitric acid and by gas-phase radical-initiated reactions in the presence of oxides of nitrogen.

4. Diesel exhaust includes over 40 substances that are listed by the United States Environmental Protection Agency (U.S. EPA) as hazardous air pollutants and by the ARB as toxic air contaminants. Fifteen of these substances are listed by the International Agency for Research on Cancer (IARC) as carcinogenic to humans, or as a probable or possible human carcinogen. Some of these substances are: acetaldehyde; antimony compounds; arsenic; benzene; beryllium compounds; bis(2-ethylhexyl)phthalate; dioxins and dibenzofurans; formaldehyde; inorganic lead; mercury compounds; nickel; POM (including PAHs); and styrene.
5. Almost all of the diesel particle mass is in the fine particle range of 10 microns or less in diameter ( $PM_{10}$ ). Approximately 94 percent of the mass of these particles are less than 2.5 microns in diameter. Because of their small size, these particles can be inhaled and a portion will eventually become trapped within the small airways and alveolar regions of the lung.
6. The estimated population-weighted average outdoor diesel exhaust  $PM_{10}$  concentration in California for 1995 is 2.2 microgram per cubic meter ( $Fg/m^3$ ). Several independent studies have reported similar outdoor air diesel exhaust  $PM_{10}$  concentrations. The 1995 estimated average indoor exposure concentration is approximately 1.5  $Fg/m^3$ .
7. The population time-weighted average total air exposure to diesel exhaust particle concentrations across all environments (including outdoors) is estimated to be 1.5  $Fg/m^3$  in 1995. This total exposure estimate may underestimate many Californians' actual total exposure because it excludes elevated exposures near roadways, railroad tracks, and inside vehicles. Near-source exposures to diesel exhaust may be as much as five times higher than the 1995 population time-weighted average total air exposure. It also excludes other routes of exposure to diesel exhaust, such as ingestion and dermal absorption.
8. Diesel engine exhaust contains small carbonaceous particles and a large number of chemicals that are adsorbed onto these particles or present as vapors. These particles have been the subject of many studies because of their adverse effects on human health and the environment. A recent study conducted for the Health Effects Institute showed that, despite a substantial reduction in the weight of the total particulate matter, the total number of particles from a 1991-model engine was 15 to 35 times greater than the number of particles from a 1988 engine when both engines were operated without emission control devices. This suggests that more fine particles, a potential health concern, could be formed as a result of new technologies. Further study is needed since the extent of these findings only measured exhaust from two engines and engine technologies.
9. The major sources of diesel exhaust in ambient outdoor air are estimated to emit approximately 27,000 tons per year in 1995. On-road mobile sources (heavy-duty trucks, buses, light-duty cars and trucks) contribute the majority of total diesel exhaust  $PM_{10}$  emissions in California. Other mobile sources (mobile equipment, ships, trains, and boats) and stationary sources contribute the remaining emissions.

10. Significant progress has been made as a result of federal and state regulations that have addressed particulate matter levels from diesel engines. Emissions of on-road mobile source diesel exhaust  $PM_{10}$  in California are expected to decline by approximately 85 percent from 1990 to 2010 as a result of mobile source regulations already adopted by the ARB.
11. The results of a study funded by the ARB at the University of California, Riverside, indicate that the diesel exhaust from the new fuel tested contained the same toxic air contaminants as the old fuel, although their concentrations and other components may differ. Further research would be helpful to quantify the amounts of specific compounds emitted from a variety of engine technologies, operating cycles, and fuel to characterize better any differences between old and new fuels and technologies.

### **Health effects associated with diesel exhaust**

12. A number of adverse short-term health effects have been associated with exposures to diesel exhaust. Occupational exposures to diesel exhaust particles have been associated with significant cross-shift decreases in lung function. Increased cough, labored breathing, chest tightness, and wheezing have been associated with exposure to diesel exhaust in bus garage workers. A significant increase in airway resistance and increases in eye and nasal irritation were observed in human volunteers following one-hour chamber exposure to diesel exhaust. In acute or subchronic animal studies, exposure to diesel exhaust particles induced inflammatory airway changes, lung function changes, and increased the animals' susceptibility to infection.
13. A number of adverse long-term noncancer effects have been associated with exposure to diesel exhaust. Occupational studies have shown that there may be a greater incidence of cough, phlegm and chronic bronchitis among those exposed to diesel exhaust than among those not exposed. Reductions in pulmonary function have also been reported following occupational exposures in chronic studies. Reduced pulmonary function was noted in monkeys during long-term exposure. Histopathological changes in the lung of diesel-exposed test animals reflect inflammation of the lung tissue. These changes include dose-dependent proliferations of type II epithelial cells, marked infiltration of macrophages, plasma cells and fibroblasts into the alveolar septa, thickening of the alveolar walls, alveolar proteinosis, and focal fibrosis.
14. Studies have shown that diesel exhaust particles can induce immunological reactions and localized inflammatory responses in humans, as well as acting as an adjuvant for pollen allergy. Intranasal challenge with diesel exhaust particles in human volunteers resulted in increased nasal IgE antibody production and a significant increase in mRNA for pro-inflammatory cytokines. Co-exposure to diesel exhaust particles and ragweed pollen resulted in a nasal IgE response greater than that following pollen or

diesel exhaust particles alone. Effects of intratracheal, intranasal, and inhalation exposures of laboratory animals are supportive of the findings in humans. These effects include eosinophilic infiltration into bronchi and bronchioles, elevated IgE response, increased mucus secretion and respiratory resistance, and airway constriction.

15. Based on the animal studies, the U.S. EPA determined a chronic inhalation Reference Concentration value of 5 Fg/m<sup>3</sup> for noncancer effects of diesel exhaust. This estimate takes into consideration persons who may be more sensitive than others to the effects of diesel exhaust. The report supports the recommendation of 5 Fg/m<sup>3</sup> as the California Reference Exposure Level (REL) (Table 1). It should be noted that this REL may need to be lowered further as more data emerge on potential adverse noncancer effects from diesel exhaust.
16. Diesel exhaust contains genotoxic compounds in both the vapor phase and the particle phase. Diesel exhaust particles or extracts of diesel exhaust particles are mutagenic in bacteria and in mammalian cell systems, and can induce chromosomal aberrations, aneuploidy, and sister chromatid exchange in rodents and in human cells *in vitro*. Diesel exhaust particles induced unscheduled DNA synthesis *in vitro* in mammalian cells. DNA adducts have been isolated from calf thymus DNA *in vitro* following treatment with diesel exhaust particle extracts. DNA adducts have been shown to increase following inhalation exposure of rodents and monkeys to whole diesel exhaust. Elevated levels of DNA adducts have been associated with occupational exposure to diesel exhaust. Results of inhalation bioassays in the rat, and with lesser certainty in mice, have demonstrated the carcinogenicity of diesel exhaust in test animals, although the mechanisms by which diesel exhaust induces lung tumors in animals remains uncertain.
17. Over 30 human epidemiological studies have investigated the potential carcinogenicity of diesel exhaust. These studies, on average, found that long-term occupational exposures to diesel exhaust were associated with a 40 percent increase in the relative risk of lung cancer. The lung cancer findings are consistent and the association is unlikely to be due to chance. These epidemiological studies strongly suggest a causal relationship between occupational diesel exhaust exposure and lung cancer.
18. Other agencies or scientific bodies have evaluated the health effects of diesel exhaust. The National Institute of Occupational Safety and Health first recommended in 1988 that whole diesel exhaust be regarded as a potential occupational carcinogen based upon animal and human evidence. The International Agency for Research on Cancer (IARC) concluded that diesel engine exhaust is probably carcinogenic to humans and classified diesel exhaust in Group 2A. Based upon the IARC findings, in 1990, the State of California under the Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65) identified diesel exhaust as a chemical "known to the State to cause cancer." The U.S. EPA has proposed a conclusion similar to IARC in their draft documents. The 1998 draft U.S. EPA document concluded similarly that there was

sufficient animal evidence of carcinogenicity and that the human evidence was limited.

19. There are data from human epidemiological studies of occupationally exposed populations which are useful for quantitative risk assessment. The estimated range of lung cancer risk (upper 95% confidence interval) based on human epidemiological data is  $1.3 \times 10^{-4}$  to  $2.4 \times 10^{-3}$  (Fg/m<sup>3</sup>)<sup>-1</sup> (Table 2). After considering the results of the meta-analysis of human studies, as well as the detailed analysis of railroad workers, the SRP concludes that  $3 \times 10^{-4}$  (Fg/m<sup>3</sup>)<sup>-1</sup> is a reasonable estimate of unit risk expressed in terms of diesel particulate. Thus this unit risk value was derived from two separate approaches which yield similar results. A comparison of estimates of risk can be found in Table 3.
20. Based on available scientific information, a level of diesel exhaust exposure below which no carcinogenic effects are anticipated has not been identified.
21. Based on available scientific evidence, as well as the results of the risk assessment, we conclude that diesel exhaust be identified as a Toxic Air Contaminant.
22. As with other substances evaluated by this Panel and after reviewing the field of published peer reviewed research studies on diesel exhaust, additional research is appropriate to clarify further the health effects of diesel exhaust. This research may have significance for estimating the unit risk value.
23. The Panel, after careful review of the February 1998 draft SRP version of the ARB report, *Proposed Identification of Diesel Exhaust as a Toxic Air Contaminant*, as well as the scientific procedures and methods used to support the data, the data itself, and the conclusions and assessments on which the Report is based, finds this report with the changes specified during our October 16, 1997, meeting and as a result of comments made at the March 11, 1998, meeting, is based upon sound scientific knowledge, methods, and practices and represents a complete and balanced assessment of our current scientific understanding.

For these reasons, we agree with the science presented in Part A by ARB and Part B by OEHHA in the report on diesel exhaust and the ARB staff recommendation to its Board that diesel exhaust be listed by the ARB as a Toxic Air Contaminant.

I certify that the above is a true and correct copy of the findings adopted by the Scientific Review Panel on April 22, 1998.

/s/

---

John R. Froines, Ph.D  
Acting Chairman,  
Scientific Review Panel

**TABLE 1**

**NONCANCER HEALTH VALUES APPROVED BY THE  
SCIENTIFIC REVIEW PANEL  
1998**

<b>Compound</b>	<b>Health Value</b>	<b>Endpoint</b>
Acetaldehyde	9 Fg/m <sup>3</sup>	Respiratory System
<b>Diesel Exhaust</b>	<b>5 Fg/m<sup>3</sup></b>	<b>Respiratory System</b>
Inorganic Lead	4.6 x 10 <sup>-4</sup> (Fg/m <sup>3</sup> ) <sup>-1</sup>	Cardiovascular Mortality
Perchloroethylene	35 Fg/m <sup>3</sup>	Alimentary System (Liver)

Fg/m<sup>3</sup>: microgram per cubic meter

TABLE 2

CANCER POTENCIES APPROVED BY THE SCIENTIFIC REVIEW PANEL  
 FROM 1984 TO 1998  
 (in order of cancer potency)

Compound	Unit Risk (Fg/m <sup>3</sup> ) <sup>-1</sup>	Range (Fg/m <sup>3</sup> ) <sup>-1</sup>
Dioxins	3.8 x 10 <sup>1</sup>	2.4 x 10 <sup>1</sup> to 3.8 x 10 <sup>1</sup>
Chromium VI	1.5 x 10 <sup>-1</sup>	1.2 x 10 <sup>-2</sup> to 1.5 x 10 <sup>-1</sup>
Cadmium	4.2 x 10 <sup>-3</sup>	2.0 x 10 <sup>-3</sup> to 1.2 x 10 <sup>-2</sup>
Inorganic Arsenic	3.3 x 10 <sup>-3</sup>	6.3 x 10 <sup>-4</sup> to 1.3 x 10 <sup>-2</sup>
Benzo[a]pyrene	1.1 x 10 <sup>-3</sup>	1.1 x 10 <sup>-3</sup> to 3.3 x 10 <sup>-3</sup>
<b>Diesel Exhaust</b>	<b>3 x 10<sup>-4</sup></b>	<b>1.3 x 10<sup>-4</sup> to 2.4 x 10<sup>-3</sup></b>
Nickel	2.6 x 10 <sup>-4</sup>	2.1 x 10 <sup>-4</sup> to 3.7 x 10 <sup>-3</sup>
1,3-Butadiene	1.7 x 10 <sup>-4</sup>	4.4 x 10 <sup>-6</sup> to 3.6 x 10 <sup>-4</sup>
Ethylene Oxide	8.8 x 10 <sup>-5</sup>	6.1 x 10 <sup>-5</sup> to 8.8 x 10 <sup>-5</sup>
Vinyl Chloride	7.8 x 10 <sup>-5</sup>	9.8 x 10 <sup>-6</sup> to 7.8 x 10 <sup>-5</sup>
Ethylene Dibromide	7.1 x 10 <sup>-5</sup>	1.3 x 10 <sup>-5</sup> to 7.1 x 10 <sup>-5</sup>
Carbon Tetrachloride	4.2 x 10 <sup>-5</sup>	1.0 x 10 <sup>-5</sup> to 4.2 x 10 <sup>-5</sup>
Benzene	2.9 x 10 <sup>-5</sup>	7.5 x 10 <sup>-6</sup> to 5.3 x 10 <sup>-5</sup>
Ethylene Dichloride	2.2 x 10 <sup>-5</sup>	1.3 x 10 <sup>-5</sup> to 2.2 x 10 <sup>-5</sup>
Inorganic Lead	1.2 x 10 <sup>-5</sup>	1.2 x 10 <sup>-5</sup> to 6.5 x 10 <sup>-5</sup>
Perchloroethylene	5.9 x 10 <sup>-6</sup>	3.0 x 10 <sup>-7</sup> to 1.1 x 10 <sup>-5</sup>
Formaldehyde	6.0 x 10 <sup>-6</sup>	2.5 x 10 <sup>-7</sup> to 3.3 x 10 <sup>-5</sup>
Chloroform	5.3 x 10 <sup>-6</sup>	6.0 x 10 <sup>-7</sup> to 2.0 x 10 <sup>-5</sup>
Acetaldehyde	2.7 x 10 <sup>-6</sup>	9.7 x 10 <sup>-7</sup> to 2.7 x 10 <sup>-5</sup>
Trichloroethylene	2.0 x 10 <sup>-6</sup>	8.0 x 10 <sup>-7</sup> to 1.0 x 10 <sup>-5</sup>
Methylene Chloride	1.0 x 10 <sup>-6</sup>	3.0 x 10 <sup>-7</sup> to 3.0 x 10 <sup>-6</sup>
Asbestos	1.9 x 10 <sup>-4</sup> (per 100fiber/m <sup>3</sup> )	Lung: 11 - 110 x 10 <sup>-6</sup> (per 100 fiber/m <sup>3</sup> ) Mesothelioma: 38 - 190 x 10 <sup>-6</sup> (per 100 fiber/m <sup>3</sup> )

Fg/m<sup>3</sup>: microgram per cubic meter

**TABLE 3**

**Comparison of Other Organizations' Estimated 95% Upper Confidence Limits of Lifetime Risk per Fg/m<sup>3</sup> Diesel Particulate Matter from Risk Assessments Based on Epidemiologic Data with OEHHA Estimates**

<b>Method</b>	<b>Unit Risk/Range</b>	<b>Basis of Assessment</b>	<b>Reference</b>
Epidemiologic analysis	3 x 10 <sup>-4</sup>	based on smoking-adjusted pooled RR	Smith, 1998
<b>Epidemiologic analysis<sup>b</sup></b>	<b>3.6 x 10<sup>-4</sup> to 2.4 x 10<sup>-3</sup></b>	<b>case-control study of Garshick et al., 1987</b>	<b>OEHHA, Part B, Section 7.3.3</b>
<b>Epidemiologic analysis</b>	<b>2.8 x 10<sup>-4</sup> to 1.8 x 10<sup>-3</sup></b>	<b>cohort study of Garshick et al., 1988</b>	<b>OEHHA, Part B, Section 7.3.4</b>
<b>Epidemiologic analysis</b>	<b>1.3 to 7.2 x 10<sup>-4</sup></b>	<b>cohort study, time varying conc., roof (3,50) pattern</b>	<b>OEHHA, Part B, Appendix D</b>
<b>Epidemiologic analysis</b>	<b>3.8 x 10<sup>-4</sup> to 1.9 x 10<sup>-3</sup></b>	<b>cohort study, time varying conc., ramp (1,50) pattern</b>	<b>OEHHA, Part B, Appendix D</b>
Epidemiologic analysis	1.4 x 10 <sup>-3</sup>	London transport study <sup>c</sup>	Harris, 1983
Epidemiologic analysis	2 x 10 <sup>-3</sup>	epidemiologic data of Garshick (top end of U.S. EPA's range)	U.S. EPA, 1998;
Epidemiologic analysis	1.3 x 10 <sup>-4</sup> to 1.3 x 10 <sup>-2</sup>	using smoking adjusted RR and exposures of 5 or 500 Fg/m <sup>3</sup>	OEHHA, Part B, Section 7.3; bracketed risk bounds

a) Bolded values are included in OEHHA's range of risk.

b) Obtained by applying Harris' slope of 5 x 10<sup>-4</sup> (Fg/m<sup>3</sup> x yr)<sup>-1</sup> to California life table.



January 31, 2020

Mr. Mario Cordero  
Executive Director  
Port of Long Beach  
415 West Ocean Blvd.  
Long Beach, CA 90802

Mr. Eugene Seroka  
Executive Director  
Port of Los Angeles  
425 South Palos Verdes St.  
San Pedro, CA 90731

Submitted via: [trucks@cleanairactionplan.org](mailto:trucks@cleanairactionplan.org)  
Re: Proposed Clean Truck Fund Rate

Dear Mr. Cordero and Mr. Seroka:

On behalf of the individual organizations listed below, thank you for the opportunity to provide comment on the proposed Clean Truck Fund (CTF) Rate, as presented at the 8<sup>th</sup> Clean Air Action Plan (CAAP) Implementation Stakeholder Advisory Meeting on January 15, 2020.

We strongly support the San Pedro Bay Ports' CAAP commitment to transition the entire on-road drayage truck fleet serving the ports to zero emissions by 2035. Further, as members of the public-private *Transportation Electrification Partnership (TEP)*, convened by the Los Angeles Cleantech Incubator (LACI), we support an interim goal for 40 percent of all short haul and drayage trucks on the road in the region to be zero emissions by 2028, ensuring that steady progress is made toward the CAAP 2035 goal.<sup>1</sup>

The CTF Rate is a key means to achieving the CAAP 2035 goal and the analysis of potential rates should work backwards from this goal, as well as incorporate the TEP 40 percent zero emissions by 2028 goal as an important interim milestone. We, the signatories of this letter,<sup>2</sup> appreciate the effort undertaken to prepare the draft Economic Study for the Clean Truck Fund Rate, released in December 2019,<sup>3</sup> and we offer the following comments and recommendations:

**1. Increase the CTF Rate to create a significant pool of incentives.**

The proposed CTF Rate of \$10 per TEU (Twenty Foot Equivalent Unit) will not lead to the success of the CAAP 2035 goal. According to the draft Economic Study, "None of the scenarios modelled by the consultant results in a 100 percent ZE fleet by 2035."<sup>4</sup> The study further notes that a CTF Rate in the range of \$35 to \$50 per TEU would be necessary to cover the subsidies needed to result in a fully zero emission fleet by

<sup>1</sup> Los Angeles Cleantech Incubator, [Zero Emissions 2028 Roadmap](#), (November 2019), p. 7.

<sup>2</sup> These comments and recommendations are from the organizations signed below and not the entire membership of the Transportation Electrification Partnership.

<sup>3</sup> Port of Long Beach and Port of Los Angeles, [Draft Economic Study for the Clean Truck Fund Rate](#) (December 2019).

<sup>4</sup> Ibid, p. 6.

2035.<sup>5</sup> As such, we strongly recommend that the final CTF rate be increased significantly to ensure that the resulting pool of funding is sufficient to incentivize the transition to zero emissions trucks.

**2. Dedicate rate revenues to zero emissions to accelerate adoption of zero emissions trucks.**

As demonstrated by the draft Economic Study, implementing the CTF Rate itself will not result in the needed fleet transition. It is the combination of the Rate and the strategic use of the Rate Revenues that has the potential to transform the trucks in the Port Drayage Truck Registry to zero emissions by 2035. We are concerned that, if not defined clearly from the outset, these revenues may result in unnecessarily heavy investment in near-zero emissions vehicles in the short-term; such investment could lead to stranded assets and require more work to be done in later years in order to meet the 2035 goal. **We recommend that the details of how these funds are used be developed in concert with the final decision on the rate itself, and that the funding be dedicated to zero emissions trucks.**

**3. Update the *Drayage Truck Feasibility Assessment* annually.**

One of the building blocks informing the proposed Clean Truck Fee Rate is the 2018 Feasibility Assessment for Drayage Trucks,<sup>6</sup> completed in April 2019. Given the rapid pace with which the zero emissions truck market is developing and the number of variables at play, **we propose that the *Feasibility Assessment* be updated on an annual basis**, rather than every three years as required by the CAAP, to more accurately account for progress (incorporating the learnings from pilot and demonstration projects) and game-changers that are on the horizon (i.e. battery range, battery costs, battery supply, cost of ownership), and to better inform future investments.

In conclusion, we thank you for presenting the draft CTF Rate for stakeholder feedback and recommend that you incorporate the proposals above to ensure that the final version puts the San Pedro Bay Ports on a clear path to achieving the CAAP 2035 goal, and the Transportation Electrification Partnership's interim goal of 40 percent zero emissions drayage and short haul trucks by 2028.

We look forward to working with you to ensure the success of the CAAP 2035 goal and a zero emissions future.

Sincerely,

Michelle Kinman  
Director of Transportation  
**Los Angeles Cleantech Incubator**

Jennifer J. Kropke, Esq.  
Director of Workforce and Environmental Engagement  
**Los Angeles National Electrical Contractors' Association, Labor Management Cooperation Committee**

Thomas Ashley  
Vice President, Policy  
**Greenlots**

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<sup>5</sup> Ibid, p. 6.

<sup>6</sup> San Pedro Bay Ports Clean Air Action Plan, [2018 Feasibility Assessment for Drayage Trucks](#), April 2019.



January 31, 2020

Chris Cannon  
Port of Los Angeles  
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Submitted electronically to: [caap@cleanairactionplan.org](mailto:caap@cleanairactionplan.org)

Heather Tomley  
Port of Long Beach  
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Long Beach CA 90802

Subject: Proposed Truck Rate Program

Dear Ms. Tomley and Mr. Cannon:

Thank you for the opportunity to submit comments on the proposed Truck Rate Program (TRP) that is being prepared to comply with the Clean Air Action Plan as updated in November 2017 (CAAP).

The California Natural Gas Vehicle Coalition (CNGVC) is an association of natural gas vehicle and engine manufacturers, utilities, fuel providers and fleet operators serving the state. We are united in the belief that wider adoption of clean-running NGVs—a proven technology in use worldwide—is key to helping California reduce greenhouse gas emissions, air pollution and petroleum dependence. We have worked with the Ports of Los Angeles and Long Beach (Ports) for over 10 years to help improve the environment while supporting sustainable business growth. We must speak candidly in this letter because the stakes are so high to get the TRP right.

**The TRP as proposed is a diesel plan.**

Without a balanced TRP, the trucks serving the ports will remain diesel for decades to come and the CAAP commitment for near-zero and zero-emission trucks will not happen. Unfortunately, the way the proposal is constructed, the Ports will ensure that:

- Port trucks will remain used diesel trucks.
- Minimal emission reductions will be achieved.
- Greenhouse gas emissions will increase.
- The Ports will not help the South Coast Air Quality Management District reach attainment by 2023.
- The communities surrounding the Ports will suffer from diesel truck emissions for the foreseeable future.
- Only a small fraction of diesel trucks will be turned over to zero or near-zero technologies.

These unacceptable outcomes compel us to submit significant and detailed comments on how the TRP can be improved to achieve the vision and commitments of the CAAP. Without a course correction, the Ports will perpetuate used diesel trucks for the next decade and beyond. Our recommendations to align the TRP with the CAAP are:

1. Define the term "Near-Zero" to mean a truck: (1) with an engine certified to CARB's 0.02 g/bhp-hr standard under the Optional Low NOx regulation; and (2) uses renewable fuel that reduces greenhouse gases by at least 50% compared to baseline diesel as determined by CARB's Low Carbon Fuel Standard.
2. Exempt Near-Zero trucks from the truck rate for the duration of the truck useful life per the standards contained in SB1 Section 18 (Health & Safety Code Section 43021(a)).
3. Continue funding Near-Zero trucks until 2035.
4. Increase the container rate to \$40-\$50/TEU to collect more clean truck incentive funds and motivate voluntary turnover of the fleet.
5. Begin collecting TRP truck rates as soon as possible but no later than September 1, 2020.
6. Create a clean truck fund of \$270M by advancing the truck rate funds for the first three years of collections and begin awarding incentive funding for advanced clean trucks beginning July 1, 2020.

The near-zero<sup>1</sup> natural gas truck is the best solution available today for the Ports to reduce air and climate pollution while preventing diversion. The benefits of this advanced clean truck technology powered by renewable natural gas (RNG) are transformative:

- 98% lower NOx than the 8,000 oldest port trucks that will be banned by 1/1/2023
- 90% lower NOx than the certified emissions of new diesel trucks, and up to 99% cleaner than the actual in-use emissions of port diesel trucks as confirmed by testing by University of California, Riverside and University of West Virginia
- 60% to over 400% reduction in greenhouse gases compared to diesel, which is better than battery electric trucks running on 100% renewable electricity
- 100% elimination of toxic and cancer-causing diesel particulate matter
- 100% displacement of diesel fuel
- Affordable, cost-effective, and commercially available today

CNGVC has followed the TRP development process for over two years. We were encouraged by the wisdom of the Harbor Commissioners in adopting the CAAP updates in 2017 that called for a near-term transition to near-zero trucks as well as a longer-term transition to zero emission trucks. This balanced approach recognizes the critical importance of immediately correcting local air pollution and climate pollution rather than waiting for the future.

Unfortunately, the proposed TRP has diverged from the CAAP. The gap between the CAAP and the proposed TRP is so large that even the name of the program is rebranded to be called the "Clean Truck Fund Rate", which is never mentioned in the CAAP. This is more than just a symbolic change. The

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<sup>1</sup> As used in this letter, the term "near-zero" means trucks with an engine certified to CARB's 0.02 g/bhp-hr standard under the Optional Low NOx regulation, and uses renewable fuel that reduces greenhouse gases by at least 50% compared to baseline diesel as determined by CARB's Low Carbon Fuel Standard.

proposed TRP encourages used diesel trucks over near-zero trucks in the near-term and lays no foundation for zero emission trucks in the future. The proposed TRP will simply prolong the proliferation of used diesel trucks in the Ports for the next decade and more, all while only a token number of advanced clean trucks are deployed.

Most concerning is that the 8,000 oldest diesel trucks that are banned by CARB on 1/1/2023 will be replaced by used diesel trucks under the proposed TRP. These trucks will run until 2035 and longer under the protection of California Law SB1. The Ports' approach to the proposed TRP seems to have ignored this very problematic reality.

**The proposed TRP is entirely inconsistent with CAAP commitments.**

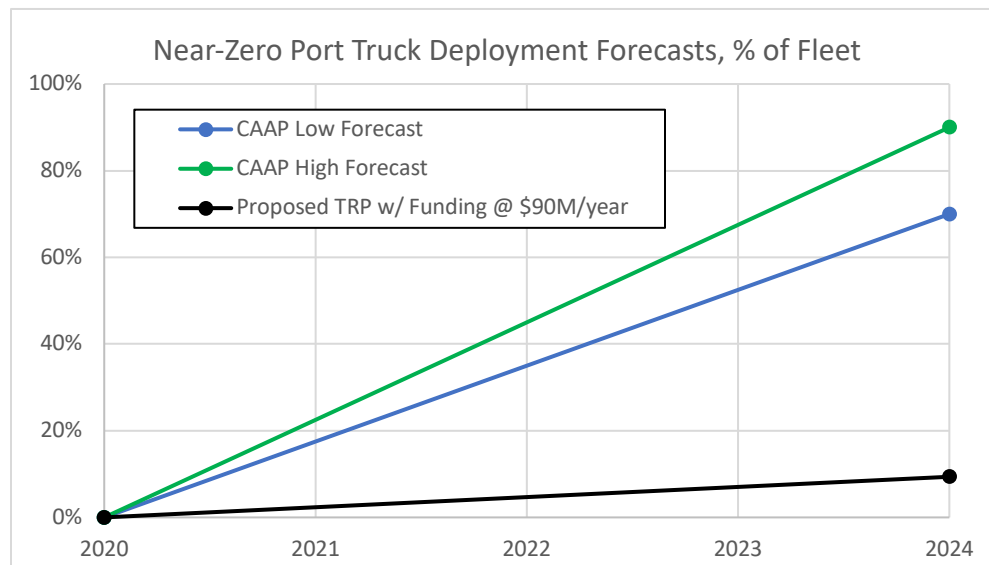
The CAAP committed to a TRP that would move the drayage market to advanced clean trucks by starting with near-zero and moving to zero:

*In order to continue reducing NOx and GHGs, through the strategies described below, the Ports' goal is to transition the current drayage truck fleet to near-zero technologies in the near-term and ultimately zero-emissions technologies by 2035.*

*Page 33 of 2017 CAAP Update*

The "Clean Truck Fund Rate" proposed by the Ports goes into an entirely different direction than the CAAP. Rather than a program that actively drives change in the market, the Ports have designed a program that collects a relatively small amount of money that will be used in a yet-to-be-determined manner to purportedly incentivize deployment of a small number of trucks.

The CAAP update projected that 70% to 90% of the Port truck fleet would be near-zero by 2024. Without explanation, the Ports' proposed TRP does not even follow any of the 5 scenarios modeled in the Economic Study. Therefore, there is no forecast for penetration of near-zero and zero emission trucks that matches the proposed plan. This calls into question how the Ports even put together the proposed TRP. In reality, the proposed TRP will only fund around 1,500 clean trucks by the end of 2024, which is less than 10% of the trucks in the drayage truck registry. A new TRP is required to meet the CAAP goals of 70% to 90% near-zero trucks by 2024.



*The Ports project that by 2024, as a result of the truck rate starting in 2020 and the 2023 requirement for any new trucks entering the service, near-zero-emission trucks could comprise roughly 70% to 90% of the drayage truck fleet. Page 40 of 2017 CAAP Update*

**Communities will continue to suffer from diesel truck emissions.**

Simply put, without driving the industry to turn over the fleet of existing trucks to cleaner advanced technologies, there will be little emission benefit. With little emission benefit, there will be little improvement to the health and wellbeing of the surrounding communities. A little over 600 trucks can be turned over per year with the estimated \$90 million fee collection, out of the current 18,000 trucks in the port drayage truck registry. This amounts to approximately 3.6% of the fleet. If the ports want to make a meaningful emission impact on the communities, the TRP needs to be much, much stronger.

**The proposed TRP encourages used diesel trucks and discourages near-zero trucks.**

The CAAP made a commitment to a near-zero transition – ‘... *the Ports’ goal is to transition the current drayage truck fleet to near-zero technologies in the near-term...’.*

However, the proposed TRP discourages near-zero trucks and penalizes companies that have already deployed near-zero trucks. The unfavorable treatment is found in two provisions of the proposed TRP.

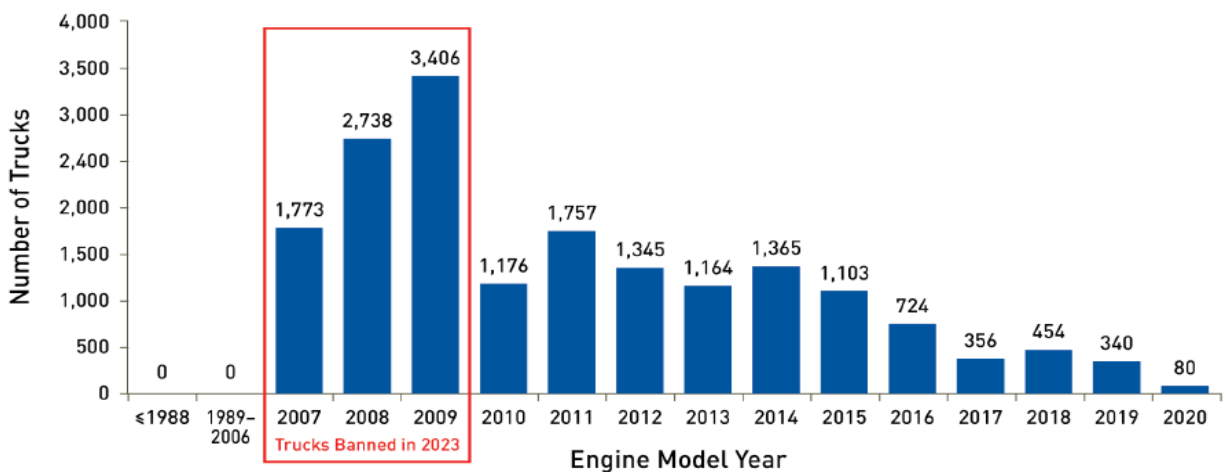
First, the near-zero exemption from the truck rate is removed after 2027. Near-zero trucks are afforded only a short window of time before they are treated the same as used diesel trucks. This is the case despite the massively lower NOx and climate pollution emissions of these advanced clean trucks. Companies that have already deployed ultra-low NOx trucks are being penalized for being early adopters and doing the right thing – behaviors that the Ports should celebrate and reward. Ultra-low NOx trucks need to be exempt from the truck rate for their useful life under SB1.

Second, eligibility for incentive funding ends after 2023. As will be discussed later, the Ports’ funding program will not be available until 2022. This means that near-zero trucks will only be eligible for funding for a two-year period in 2022 and 2023. Near-zero trucks should remain eligible for funding until 2035.

The oldest 8,000 port diesel trucks are banned from port service on 1/1/2023 and will be replaced by used diesel trucks under the proposed TRP because used diesel is encouraged over near-zero.

There are almost 8,000 trucks in the Ports that are banned from port service by the CARB Truck and Bus Rule on January 1, 2023. These are the oldest and dirtiest trucks in drayage service. These trucks could all be replaced by near-zero trucks. Instead, they will be replaced by used diesel trucks. There will be a massive pre-buy of used diesel trucks before the end of 2022 to comply with the CARB ban and they will be registered in the Drayage Truck Registry before the January 1, 2023 requirement that newly registered trucks be near-zero or zero emissions. These used diesel trucks will be able to operate free from regulation for up to 18 years under California's SB1 law. A 2014 truck can operate until 2032 (or later). A 2015 truck can operate until 2033. The situation is clear. Without changes to the TRP, used diesel trucks will continue to dominate the port past 2035. There will be minimal adoption of near-zero and zero emission trucks.

**PDTR's Truck Distribution by Engine Model Year**



The \$10 truck rate is too small to allow clean technologies to compete with used diesel trucks.

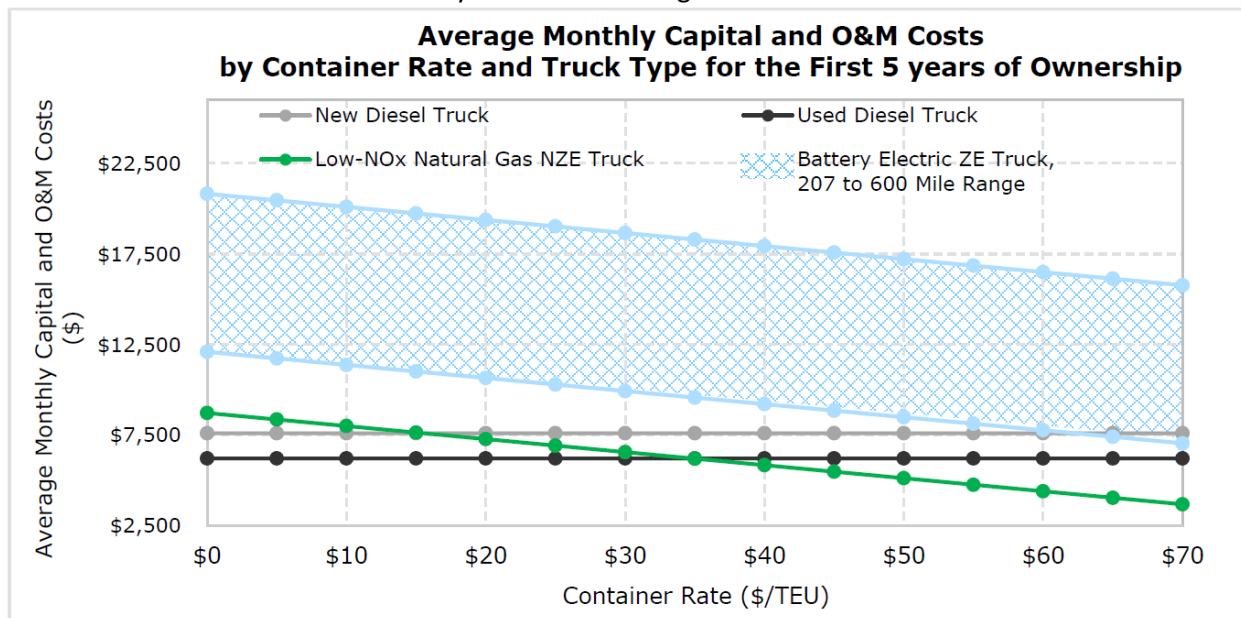
The Economic Study points out that the Ports attract used diesel trucks because they are the lowest cost option for container transportation (this lowest cost assessment does not include the costs of local air pollution, regional air quality and climate change). The \$10 rate is too small to create a level playing field whereby more expensive advanced clean trucks can compete with used diesel trucks. Under the original Advanced clean trucks Program from 10 years ago, the truck rate was \$35. This rate was high enough to level the playing field between new trucks and used trucks.

*Under the previous Advanced clean trucks Program, which imposed a fee on older trucks, roughly 90% of the trucks were replaced within three years with cleaner models while 10% chose to pay the fee in the short term. Thus, the assessment of the truck rate could result in a significant turnover to near-zero-emissions trucks in the near-term while giving fleet owners flexibility and ample time to plan for new purchases.*

*Page 40 of 2017 CAAP Update*

The market dynamics of the \$35 truck rate was one of the reasons for success of the original program and the rapid turnover of trucks. A trucker could offer their customer a discount from the \$35 truck rate and instead charge an increased drayage rate that paid for the new truck. A 40% discount saved the shipper \$14 and generated increased trucker revenue of \$21 that paid for the clean truck.

Economics have changed since the original truck rate from 10 years ago. Ramboll conducted a study to determine the breakeven truck rates between advanced clean trucks and used diesel trucks. Ramboll used the data in the Ports' technology feasibility study and information provided by drayage trucking companies. The study results are summarized in the following chart. The breakeven for near-zero natural gas trucks was found to be \$35 per TEU, and in the range of \$82 to \$203 per TEU for battery electric trucks. This study indicates that the truck rate needs to be at least \$35 per TEU for advanced clean trucks to compete with used diesel trucks, although the truck rate must be higher than \$35 to motivate early action with alternatives that are economically better than taking no action.

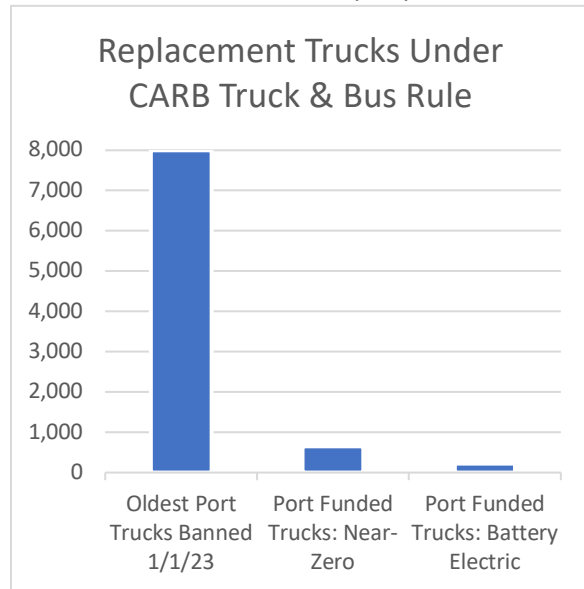


The \$10 truck rate is too small to modify behavior.

The \$10 container rate is too small to motivate a change in behavior. The \$10 rate will simply be absorbed by the supply chain. Businesses that ship goods through the Ports will see the \$10 rate as just another example of a government program that costs money but does not generate results. Businesses that shoulder the cost of government programs want to see results. The \$10 fee is so small and inconsequential that it will just be another irritant to businesses that use the Ports.

**Generating \$90 million in annual Truck Rate revenues seems like a lot of money but only incentivizes a small number of advanced clean trucks.**

The Economic Study forecasts that the \$10 truck rate will generate \$90 million per year that can be used to incentivize advanced clean trucks. \$90 million may seem like a lot of money, but in reality, it is not enough to incentivize a significant number of trucks. In addition, the amount raised per year will decline in proportion to the number of exempt trucks deployed (although the number of exempt trucks deployed under the proposed TRP will be small). The Economic Study points out that advanced clean trucks need to compete with used diesel trucks. The \$10 rate is too small to allow market forces to work their magic as occurred during the first truck rate program. Instead, massive subsidies are required to level the playing field with used diesel trucks. Using data from the Ports’ Feasibility Study, \$90 million will only fund up to 652 near-zero trucks or only 115 to 219 zero emissions trucks. Unless the Ports advance the funding to 2020 and begin incentivizing trucks immediately, a year will be required to raise the first \$90 million and then time will be required to issue grants and replace trucks. Advanced clean trucks funded by this program may not start arriving until 2022. At the end of 2022, the oldest 8,000 port trucks are banned by the CARB Truck and Bus Rule. Only a minor fraction of these oldest trucks will be replaced by advanced clean trucks under the proposed TRP. The Economic Study on page 86 states: “a CTF rate between \$35 and \$50 could generate sufficient revenue to fund the full cost of the subsidy amounts”, referring to clean truck subsidies.



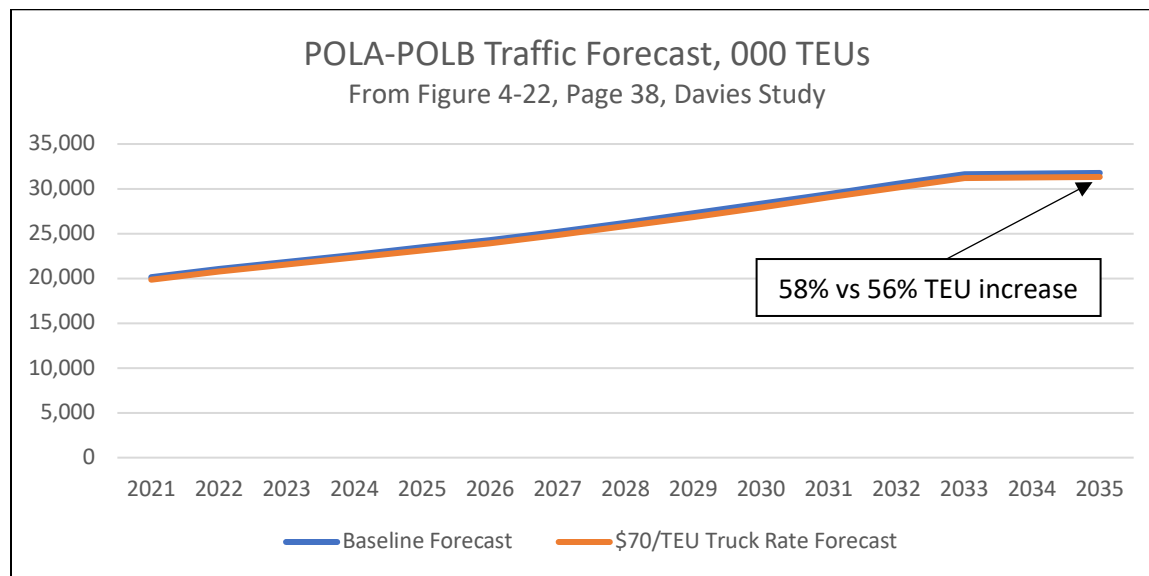
Truck Type	Truck Cost	Used Diesel Cost	Subsidy to Equalize Used Diesel	Trucks Deployed with \$90M	% of Oldest 8,000 Trucks
CNG	\$192,719	\$54,757	\$137,962	652	8.2%
Battery Electric with charger 207 mile range	\$465,000	\$54,757	\$410,243	219	2.7%
Battery Electric with charger 600 mile range	\$831,000	\$54,757	\$776,243	115	1.4%

*Note: Data from the Ports’ Drayage Truck Feasibility Study. Assumes weight of battery electric trucks does not restrict container hauling capability, allowing a one-for-one exchange between diesel trucks.*

**The narrative on diversion rather than cargo growth tips the balance to what MIGHT happen in the future from what IS happening today.**

The Ports’ Economic Study lays out many concerns about the state of the international shipping industry and many unknowns and uncertainties. These factors may or may not impact cargo. They are unknown and unquantifiable. On the other hand, not considered in the economic study are the impacts on local citizen health, regional air quality, and climate – which actually are happening today. Despite the concern

over diversion, the Economic Study makes the case for a higher container rate. The Study's cargo diversion forecast is minimal at only 1.4% at the highest truck rate studied of \$70 per TEU. To put this in perspective, data from the forecast in the economic study is plotted in the chart below. The baseline forecast has container cargo increasing to 31,772,000 TEU in 2035 while the maximum diversion case increases container cargo to 31,327,000 TEU, a difference of 445,000 TEU. Total containers increase by over 11,000,000 TEU. Containers potentially lost by diversion are only 445,000. The difference is hard to even see in the chart below. Containers increase by 58% without a truck rate and 56% with the highest truck rate. The discussion should focus on how to deploy clean trucks to handle a more than 50% increase in cargo rather than using diversion as the excuse for inaction.



The Ports must define “near-zero” to provide the trucking industry with clarity and certainty, allowing the industry to make decisions and move forward with truck replacement plans.

The CAAP update uses the term “near-zero” to refer to low-NOx trucks. However, the CAAP does not define near-zero and instead defers to CARB. The lack of a near-zero definition creates unknowns and uncertainties for trucking companies and truck owners that service the Ports. Clarity is needed so that businesses can make decisions and have certainty about their decisions. The lack of defining near-zero is holding back companies from moving forward with purchases of low-NOx trucks.

CARB’s letter to the Ports dated September 30, 2019 encourages the Ports to use CARB’s Optional Low NOx Emissions Standards regulation (Cal. Code Regs., tit. 13 S 1956.8). CARB’s letter notes that “...CARB has already certified trucks that meet the optional NOx standards in the Optional Low NOx regulation.”. CARB representatives in public meetings have stated to Port staff that CARB is not delaying the Ports with respect to a definition of near-zero and that the Ports should move forward with a near-zero definition based on CARB’s existing regulations.

CARB’s letter goes on to state: “Any incentive structure should also further drive greenhouse gas reductions by requiring the use of renewable fuels.”.

Engines that meet CARB's lowest standard of 0.02 g-bhp/hr have already been certified by CARB. Engines meeting the 0.02 NOx standard are proven in practice and set the bar for defining near-zero. Engines that have emissions higher than 0.02 NOx are not the state of the art and therefore should not be considered near-zero. Taking into consideration CARB's input on NOx standards and using renewable fuels, the definition for near-zero should be:

*Near-zero is defined to mean a truck with an engine certified to CARB's 0.02 g/bhp-hr standard under the Optional Low NOx regulation and uses renewable fuel that reduces greenhouse gases by at least 50% compared to baseline diesel as determined by CARB's Low Carbon Fuel Standard.*

**Used near-zero trucks that can help the Ports achieve very low cost emissions reductions are unwelcome under the proposed TRP.**

The Cummins Westport near-zero engine entered production in 2018. Over 4,000 trucks with this engine were sold in 2018 and 2019 across the US. Many of these truck owners will keep their trucks for 3 to 5 years and then sell them into the secondary market at a steep discount when compared to new trucks. This stream of low-cost trucks could be deployed in the Ports starting as early as 2023. The Ports should welcome these clean low-cost trucks. Instead, the proposed TRP treats these trucks the same as used diesel trucks after 2027. Additionally, pre-2018 ISX12G natural gas trucks can be repowered with the near-zero natural gas engine for a low cost emission reduction solution. The TRP should encourage all clean options so that trucking companies have choices rather than putting up barriers.

**The container rate program is seriously behind schedule of the "early 2020" deadline called for in the 2017 CAAP Update, delaying deployment of advanced clean trucks.**

The CAAP Update called for the truck rate to be in place in "early 2020". We are now in early 2020 and the truck rate is now being targeted at Q4 of 2020. The economic study uses Q1 of 2021 for the start date. Regardless, the program is far behind schedule and losing valuable time in fighting climate change and local air pollution. CARB has been targeted as part of the cause of the delay due to the lack of a new engine manufacturing standard. However, CARB has made it clear in the previously referenced September 30, 2019 letter and in public comment that CARB is not delaying the Ports. CARB has made it clear that the Ports can move forward without a new engine manufacturing standard.

The time lost cannot be regained, but further delays must be ended and mitigated. The Ports can take two steps that are within their control:

1. Begin collecting TRP truck rates no later than September 1, 2020.
2. Create a clean truck fund of \$270M by advancing the truck rate funds for the first three years of collections and begin awarding incentive funding for advanced clean trucks beginning July 1, 2020.

**The proposed TRP will not help the SCAQMD reach attainment by 2023.**

NOx emissions in the South Coast Air Basin must be dramatically reduced to comply with federal air quality attainment standards by 2023. The Ports are significant contributors to overall regional NOx emissions.

Trucks are the second largest source of NOx emissions from the Ports. Reducing NOx emissions from trucks is essential to make progress toward attainment by 2023.

Unfortunately, the TRP, as proposed, is not designed to turn over trucks or achieve emission reductions leading up to 2023. The collected fees would only result in deploying 652 near-zero trucks per year at the maximum \$90 million per year collection. This is merely a drop in the bucket compared to the 8,000 trucks that must be replaced by 2023. In fact, the way the TRP is constructed - collecting fees beginning in late 2020, developing incentive programs, then administering programs – incentives may not be disbursed until late 2021 or 2022.

If the SCAQMD is unable to meet the 2023 attainment deadline there can be dire consequences for those in the Los Angeles area. The federal government can withhold federal transportation dollars and develop a Federal Implementation Plan (FIP) to meet attainment. FIPs can have draconian measures such as no drive days and rejection of any new development in the region. No drive days, particularly for trucks could cripple the port industry for years for decades to come.

**The proposed TRP can be fixed and achieve cost-effective and immediate emissions reductions while paving the road to zero emissions.**

The following recommendations will return the TRP to the program envisioned by the CAAP:

1. Define the term “Near-Zero” to mean a truck: (1) with an engine certified to CARB’s 0.02 g/bhp-hr standard under the Optional Low NOx regulation; and (2) uses renewable fuel that reduces greenhouse gases by at least 50% compared to baseline diesel as determined by CARB’s Low Carbon Fuel Standard.
2. Exempt Near-Zero trucks from the truck rate for the duration of the truck useful life per the standards contained in SB1 Section 18 (Health & Safety Code Section 43021(a)).
3. Continue funding Near-Zero trucks until 2035.
4. Increase the container rate to \$40-\$50/TEU to collect more clean truck incentive funds and motivate voluntary turnover of the fleet.
  - a. Consistent with input from truckers
  - b. Provides motivation to eliminate used diesel
  - c. Reduces the incentive funding required, allows market forces to work
  - d. Per the Davies Economic Study, a truck rate in the range of \$35 to \$50 can generate enough revenue to fund the full cost of subsidy amounts (although at this level, market forces will work and not require such high subsidies)
  - e. Minimal diversion risk at only 1% or less per the Economic Study.
5. Begin collecting TRP truck rates as soon as possible but no later than September 1, 2020.
6. Create a clean truck fund of \$270M by advancing the truck rate funds for the first three years of collections and begin awarding incentive funding for advanced clean trucks beginning July 1, 2020.

Thank you for considering our comments. We are committed to supporting the Ports of Long Beach and Los Angeles in achieving real, immediate, and lasting reductions of air and climate pollutants while maintaining the competitiveness of the Ports.

Sincerely,

Thomas Lawson

California Natural Gas Vehicle Coalition

CC: Harbor Commissioners, Port of Los Angeles  
Gene Seroka, Port of Los Angeles  
Mike DiBernardo, Port of Los Angeles  
David Libatique, Port of Los Angeles  
Max Reyes, City of Los Angeles  
Lauren Faber O'Connor, City of Los Angeles

Harbor Commissioners, Port of Long Beach  
Mario Cordero, Port of Long Beach  
Rick Cameron, Port of Long Beach  
Noel Hacegaba, Port of Long Beach  
Matthew Arms, Port of Long Beach

## CNGVC Summary Comments on Proposed Truck Rate Program (TRP)

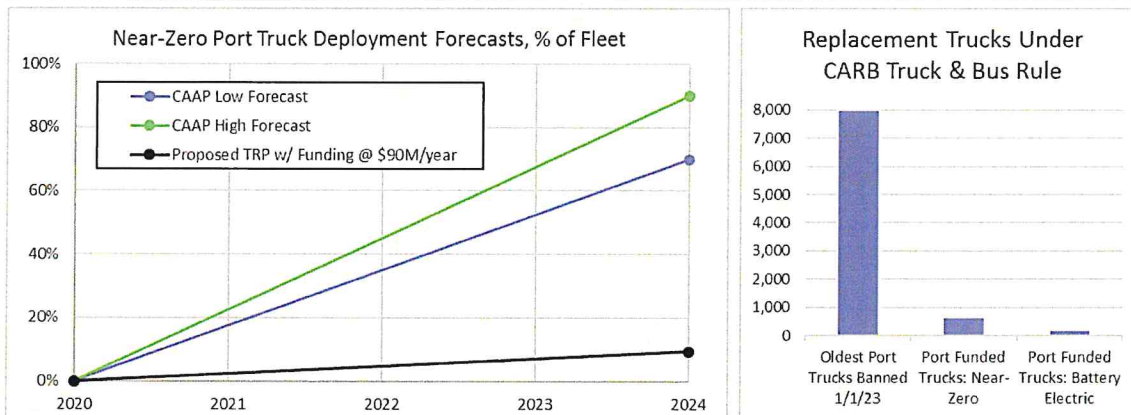
### The 2017 CAAP Update made a clear commitment to near-zero and zero-emissions trucks.

*"In order to continue reducing NOx and GHGs, through the strategies described below, the Ports' goal is to transition the current drayage truck fleet to near-zero technologies in the near-term and ultimately zero-emissions technologies by 2035." Page 33 of 2017 CAAP Update*

### Instead, the proposed TRP discourages clean trucks & encourages used diesel trucks.

1. Near-zero trucks are hit with the Truck Rate in 2028 and disqualified from funding in 2024.
2. \$10 Truck Rate is too small to motivate change or allow clean trucks to compete with used diesel.
3. \$90 million/year of Truck Rate revenue only replaces 1% to 4% of trucks each year.

### Resulting in the ongoing dominance for decades to come of used diesel trucks in the Ports.



### Causing serious consequences for air pollution, regional air quality, and climate change.

- The oldest 8,000 diesel trucks banned by CARB on 1/1/2023 will be replaced by used diesel trucks.
- Communities will continue to suffer from diesel truck emissions.
- Climate pollution from trucks will increase, not decrease.
- The proposed TRP will not help reach regional air quality attainment in 2023.

### The 2017 CAAP Update commitments can be achieved with reasonable TRP changes.

1. Define "Near-Zero" to mean a truck with an engine certified to CARB's 0.02 g/bhp-hr standard under the Optional Low NOx regulation; and uses renewable fuel that reduces greenhouse gases by at least 50% compared to baseline diesel as determined by CARB's Low Carbon Fuel Standard.
2. Exempt Near-Zero trucks from the truck rate for the duration of the truck useful life per the standards contained in SB1 Section 18 (Health & Safety Code Section 43021(a)).
3. Continue funding Near-Zero trucks until 2035.
4. Increase the container rate to \$40-\$50/TEU to collect more clean truck incentive funds and motivate voluntary turnover of the fleet.
  - a. Consistent with input from truckers
  - b. Provides motivation to eliminate used diesel
  - c. Reduces the incentive funding required, allows market forces to work
  - d. Per the Davies Economic Study, a truck rate in the range of \$35 to \$50 can generate enough revenue to fund the full cost of subsidy amounts (although at this level, market forces will work and not require such high subsidies)
  - e. Minimal diversion risk at only 1% or less per the Economic Study.
5. Begin collecting TRP truck rates as soon as possible but no later than September 1, 2020.
6. Create a clean truck fund of \$270M by advancing the truck rate funds for the first three years of collections and begin awarding incentive funding for advanced clean trucks beginning July 1, 2020.



January 31, 2020

Heather Tomley  
Port of Long Beach  
415 W. Ocean Blvd  
Long Beach CA 90802

Chris Cannon  
Port of Los Angeles  
425 South Palos Verdes Street  
San Pedro CA 90731

Submitted by email to: [caap@cleanairactionplan.org](mailto:caap@cleanairactionplan.org)

Subject: Proposed \$10 Truck Fee Program

Dear Ms. Tomley and Mr. Cannon:

My company provides drayage services in the Ports of LA and Long Beach. We dispatch 270 trucks to serve our broad base of customers. We have been in the drayage business for 18 years.

I previously submitted my view that the truck fee should be around \$100 per container. It should be per container because the size of the container has nothing to do with Clean Air and Zero Emissions. The truck is the one that affects the air and it will affect it with the same amount of NOx GHG emissions whether it's hauling a 20ft or 40ft or 45ft container. I know the BCOs are eventually paying for this and it affects them in pricing their goods, since they have more goods in a 40ft than a 20ft, hence the price per TEU is beneficial to them.

We have 70 near-zero CNG trucks. I took early action deploying these trucks to do the right thing and to prepare for the upcoming truck rate. I am greatly concerned that my early action deploying these clean trucks puts me at a disadvantage in the ports.

First, there needs to be clarity on the definition of a near-zero truck. The Ports need to clearly define near-zero as trucks certified to the CARB 0.02 low-NOx standard. I have already invested in trucks that meet this stringent standard and have proven their capabilities for port drayage.

Second, the program needs to encourage near-zero trucks. The proposed program discourages near-zero because the fee exemption ends far too soon (after 2027) and funding eligibility ends way too soon (after 2023). Ironically, the proposed plan encourages deploying used 2014 diesel trucks before the January 1, 2023 deadline instead of near-zero trucks. Companies need as many options as possible to replace diesel trucks rather than the Ports restricting clean options. Near-zero trucks need to be allowed to operate without fees for the useful life of the truck. Port incentive funding for such near-zero trucks should continue until 2035. Also by hindering a date of 2027 totally destroys any economical salvage (resale) value we had projected in this vehicle and can have a huge impact on small businesses like us.



Third, the \$10 rate is too small. The rate is too small to motivate a change in trucks or to allow new expensive clean trucks to compete with the existing used diesel trucks. Beneficial cargo owners and truckers will have to absorb this cost without any benefits. The truck fee needs to be closer to \$100 per container. We can provide a full financial and operational analysis if needed to show why this amount is need to make the long term investment.

Sincerely,

A handwritten signature in black ink, appearing to read 'Jack Khudikyan', is written over a light gray, textured background.

Jack Khudikyan  
VP / CFO  
MDB Transportation  
AJR Trucking Inc



January 31, 2020

Chris Cannon  
Port of Los Angeles  
425 South Palos Verdes Street  
San Pedro CA 90731

Heather Tomley  
Port of Long Beach  
415 W. Ocean Blvd  
Long Beach CA 90802

Submitted electronically to: [caap@cleanairactionplan.org](mailto:caap@cleanairactionplan.org)

Subject: Proposed Truck Rate Program

Dear Ms. Tomley and Mr. Cannon:

Quantum Fuel Systems LLC is engineering the future of alternative fuel storage by designing, developing and bringing innovative CNG fuel systems, transport trailers, and industry-leading Type 4 cylinders for CNG and hydrogen markets. We have more than 20 years in the natural gas and hydrogen industry, with over 100 employees and have corporate and production located in Lake Forest, California.

I am writing to express the need for a Clean Truck Fee that is fair and incentivizes fleets to use cleaner engine technology. At the most recent workshop in December there were numerous public comments from those who access the ports that express the need for a higher fee, than the proposed \$10 per TEU and \$20 per FEU. This lower proposed fee is minimal and would encourage the continued use of older engine technology that emits higher emissions and negatively impacts air quality in and around the port communities.

Today, natural gas trucks are ready and available from multiple OEM manufactures. Natural gas trucks are proven and in service everyday delivering products and services. The infrastructure has continued to grow in numbers with many public locations available to match the growing number of trucks in service. They are the right choice to move freight in and out of the Ports of Los Angeles and Long Beach while also improving air quality in the neighboring communities.

The Ports have an important decision to make regarding clean trucks. There are almost 8,000 of the oldest diesel trucks that will be banned from port operation by CARB on January 1, 2023. In just three short years, these 8,000 trucks that haul almost 50% of containers will be gone. *The question facing the Ports is will these trucks be replaced by used 2014 diesel trucks that are deployed prior to the 1/1/23 deadline? Or will the Ports seize this once-in-a-lifetime opportunity to transform the port trucking fleet to clean trucks?* We urge the Ports to not miss this opportunity.

We fully support the comments submitted by the California Natural Gas Vehicle Coalition (CNGVC) and endorse the recommendations:

1. Define "Near-Zero" as trucks with engines certified to CARB's 0.02 g/bhp-hr Optional Low NOx Standard and use renewable fuel that reduces greenhouse gases by at least 50% compared to baseline diesel.

2. Exempt Near-Zero trucks from the truck rate for the duration of the truck useful life per the standards contained in SB1 Section 18 (Health & Safety Code Section 43021(a)).
3. Continue funding Near-Zero trucks until 2035.
4. Begin collecting truck rates no later than September 1, 2020.
5. Create a clean truck fund of \$270M by advancing the truck rate funds for the first three years of collections and begin awarding incentive funding by July 1, 2020.
6. Set the container rate at \$50/TEU.

These recommendations will achieve the goals and commitments of the Clean Air Action Plan.

Sincerely,



Mark Arold  
President  
Quantum Fuel Systems LLC  
25372 Commercentre Drive  
Lake Forest, CA 92630



STAYING A STEP AHEAD  
& Leaving Small Footprints

"Member of  
The Clean Truck Coalition"

January 31, 2020

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Heather Tomley  
Port of Long Beach  
415 W. Ocean Blvd  
Long Beach CA 90802

Chris Cannon  
425 South Palos Verdes Street  
San Pedro CA 90731

Submitted by email to: [caqp@cfeanqiractionolqn.org](mailto:caqp@cfeanqiractionolqn.org)

Subject: Proposed \$10 Truck Fee Program

Dear Ms. Tomley and Mr. Cannon:

My company provides drayage services in the Ports of LA and Long Beach. We dispatch 220 trucks to serve our broad base of customers. We have been in the drayage business for 34 years.

I previously submitted my view that the truck fee should be around \$50/TEU. We have 50 near-zero CNG trucks. I took early action deploying these trucks to do the right thing and to prepare for the upcoming truck rate. I am greatly concerned that my early action deploying these clean trucks puts me at a disadvantage in the ports.


First, there needs to be clarity on the definition of a near-zero truck. The Ports need to clearly define near-zero as trucks certified to the CARS 0.02 low-NOx standard. I have already invested in trucks that meet this stringent standard and have proven their capabilities for port drayage.

Second, the program needs to encourage near-zero trucks. The proposed program discourages near zero because the fee exemption ends far too soon (after 2027) and funding eligibility ends way too soon (after 2023). Ironically, the proposed plan encourages deploying used 2014 diesel trucks before the January 1, 2023 deadline instead of near-zero trucks. Companies need as many options as possible to replace diesel trucks rather than the Ports restricting clean options. Near-zero trucks need to be allowed to operate without fees for the useful life of the truck. Port Incentive funding for such near-zero trucks should continue until 2035.

Third, the \$10 rate is too small. The rate is too small to motivate a change in trucks or to allow new expensive clean trucks to compete with the existing used diesel trucks. Beneficial cargo owners and truckers will have to absorb this cost without any benefits. The truck fee needs to be closer to \$50 per TEU to create a market incentive for change.

Also, per note as a consequence of the staff recommendation to place a fee of CNG in 2027, we have cancelled the orders for additional CNG trucks.

Sincerely,

  
Vic La Rosa  
President



# RETAIL INDUSTRY LEADERS ASSOCIATION

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Washington, DC 20003

[www.rila.org](http://www.rila.org)

January 31, 2020

Port of Long Beach  
Environmental Planning  
415 W. Ocean Blvd.  
Long Beach, CA 90802

Port of Los Angeles  
Environmental Management  
425 S. Palos Verdes St.  
San Pedro, CA 90731

To Whom It May Concern:

The Retail Industry Leaders Association (RILA) supports the goal of cleaner ports and a cleaner environment for those who live and work in the San Pedro Bay region. To that end, we encourage the ports to ensure a commonsense approach to implementing a new Clean Truck Fee (CTF), and to extend the implementation timeline in order to allow sufficient time for appropriate stakeholder input.

RILA is the U.S. trade association for leading retailers. We convene decision-makers, advocate for the industry, and promote operational excellence and innovation. Our aim is to elevate a dynamic industry by transforming the environment in which retailers operate. RILA members include more than 200 retailers, product manufacturers, and service suppliers, which together account for more than \$1.5 trillion in annual sales, millions of American jobs, and more than 100,000 stores, manufacturing facilities, and distribution centers domestically and abroad.

The retail industry is committed to sustainability, and retailers of all sizes continue to make dramatic strides in their operational sustainability performance—through energy efficiency, waste reduction, emissions reduction, and many other goal-setting and collaborative initiatives. Large shippers are currently committing significant resources both to modernize their own fleets and to work with their logistics and drayage providers on increasing the environmental performance of their fleets.

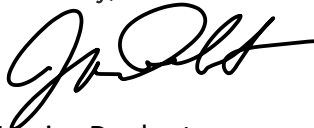
Experience has shown that for sustainability initiatives to be successful long-term, they must also be economically feasible. The largest shippers collectively move millions of containers through the ports of Long Beach and Los Angeles, and a CTF will add millions annually to the already-significant fees shippers pay to use the ports. Based on feedback from industry partners, the Plan's Economic Feasibility Study understates the potential economic and diversionary impact of the currently-proposed fee. A successful plan must be built on reliable models that stakeholders can endorse.

Furthermore, many large shippers and other industry stakeholders report not being included in the feasibility study, which would appear to be a considerable oversight. A plan of this magnitude warrants full consideration of effects on the impacted stakeholders—the ports' customers (shippers), businesses like terminals and dray operators that serve the port, and community members whose jobs depend on the ports—a not-insignificant task given the San Pedro Bay's status as one of the largest and busiest trade gateways in the world. The ports have made an admirable effort reaching out to industry stakeholders and soliciting feedback, however more time is needed for the ports to fully assess the potential impacts—environmental, economic, diversionary, and otherwise.

Lastly, questions remain as to how the program will be implemented, definitions and availability of clean truck technology, how funds will be collected, and how the funds will evolve as the program moves forward. Additional time will allow the ports to expound on the details of the program for full transparency.

RILA sees firsthand the retail industry's achievements in sustainability, and we fully support the goal of a cleaner environment for all communities. We encourage the ports to consider all impacts to ensure the goals of a Clean Air Action Plan are viable and achievable for all stakeholders.

Sincerely,

A handwritten signature in black ink, appearing to read 'Jessica Dankert', written in a cursive style.

Jessica Dankert  
Vice President, Supply Chain





**Kevin Maggay**  
Energy and Environmental Affairs  
555 W. 5<sup>th</sup> Street  
Los Angeles, CA 90013

tel: 213-244-8192

Email: [kmaggay@semprautilities.com](mailto:kmaggay@semprautilities.com)

January 31, 2020

Transmitted to: [caap@cleanairactionplan.org](mailto:caap@cleanairactionplan.org)

Port of Long Beach

Port of Los Angeles

Attn: Heather Tomley

Attn: Chris Cannon

**Re: Clean Air Action Plan Proposed Truck Rate Program**

Mr. Cannon and Ms. Tomley:

SoCalGas appreciates the opportunity to comment on the joint Port of Los Angeles and Port of Long Beach Proposed Truck Rate Program (Program). SoCalGas believes that the Program has the potential to have lasting benefits in reducing emissions and transforming the fleet of trucks serving the ports to significantly cleaner zero- and near-zero emission technologies.

The way the Program is currently proposed, however, does not meaningfully reduce emissions nor does it encourage the turnover to cleaner trucks. First, a rate of \$10 per twenty-foot equivalent unit (TEU) is not enough of a disincentive to drive the market to cleaner trucks. Second, the anticipated maximum fund collection of \$90 million per year would only turnover approximately 650 trucks to near-zero technologies if the full incremental cost is covered. That amounts to approximately 3.5% of the over 18,000 trucks serving the ports. If the ports used that funding exclusively on zero emission trucks, it would result in roughly one third of the number of trucks or even less depending on the technology. Lastly, with a low disincentive rate and only enough funding generated to turnover a few trucks, the ports are not laying a viable pathway to reach its long-term goal of reaching 100% zero emission trucks by 2035. Having a goal with no pathway sends the signal of uncertainty to the trucking industry and with uncertainty comes inaction. Without market certainty, trucking companies will be hard pressed to lead the charge on turning over trucks.

Our concern is that the results of the Program, as currently proposed, will be very little turnover of trucks and very little emission reductions. The lack of emission reductions would have significant regional and local impacts. Regionally, the South Coast Air Quality Management District is relying on the ports to help reduce port related emissions to meet the looming 2023 attainment deadline or face federally imposed sanctions and/or implementation plans. Locally, communities along truck corridors will continue to bear the emission and health burden of port trucking. Strong action and a strong Program is needed now.

Attached is the comment letter submitted by the California Natural Gas Vehicle Coalition (CNGVC). The CNGVC letter contains more detailed discussion on the points made above and SoCalGas supports the comments and recommendations made in the CNGVC letter. We believe that the recommended changes to the Program would result in a strong program that will result in reduced emissions and a transformation of the port trucking fleet.

SoCal Gas looks forward to partnering with the ports on this important effort. We will assist as best we can to get the cleanest trucks to the port to reduce emissions and keep the ports competitive.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'KM' or similar initials, written in a cursive style.

Kevin Maggay  
Energy and Environmental Affairs

Attachment



## Overseas Freight, Inc.

January 31, 2020

Heather Tomley  
Port of Long Beach  
415 W. Ocean Blvd  
Long Beach CA 90802

Chris Cannon  
Port of Los Angeles  
425 South Palos Verdes Street  
San Pedro CA 90731

Submitted by email to: [caap@cleanairactionplan.org](mailto:caap@cleanairactionplan.org)

Subject: Proposed \$10 Truck Fee Program

Dear Ms. Tomley and Mr. Cannon:

My company provides drayage services in the Ports of LA and Long Beach. We dispatch 120 trucks to serve our broad base of customers. We have been in the drayage business for 34 years. We have operated natural gas trucks starting with the first Clean Truck Program over 10 years ago.

We deployed 5 near-zero trucks a year ago. I have grants for 18 more near-zero trucks. I have held off purchasing the additional 18 trucks because this decision depends on the Ports' plans for the truck fee. The truck fee must offset the higher cost of owning and operating a new clean truck compared to the used diesel trucks that set the rates in port drayage. Now that I have seen the proposed truck fee plan, I don't know why I would deploy the additional 18 trucks. The proposed plan will put me at a business disadvantage to companies that operate used diesel trucks. I have three primary concerns.

First, there needs to be clarity on the definition of a near-zero truck. The Ports need to clearly define near-zero as trucks certified to the CARB 0.02 low-NOx standard. I have already invested in trucks that meet this stringent standard and have proven their capabilities for port drayage.

Second, the program needs to encourage near-zero trucks. The proposed program discourages near-zero because the fee exemption ends far too soon in 2027 and funding eligibility ends way too soon in 2023. The proposed program encourages deploying used diesel trucks instead of near-zero trucks. Companies need as many options as possible to replace diesel trucks rather than the Ports restricting clean options. Near-zero trucks need to be allowed to operate without fees for the useful life of the truck. Port incentive funding for near-zero trucks should continue until 2035.

Third, the \$10 rate is too low. The rate will not motivate a change in trucks or allow new expensive clean trucks to compete with the existing used diesel trucks. Beneficial cargo owners and truckers will have to absorb this cost without any benefits. I previously shared my views with you in a workshop and a follow-up letter that the truck fee needs to be closer to \$100 per container (\$50/TEU).

Sincerely,



Joseph Wang  
President & CEO  
(562) 264-2028



# Green Fleet Systems

19530 Alameda Street, Rancho Dominguez, CA 90221 • Phone: (310) 816-0610 • Fax: (310) 830-4217

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February 11, 2020

Heather Tomley  
Port of Long Beach  
415 W. Ocean Blvd  
Long Beach CA 90802

Chris Cannon  
Port of Los Angeles  
425 South Palos Verdes Street  
San Pedro CA 90731

Submitted by email to: [caap@cleanairactionplan.org](mailto:caap@cleanairactionplan.org)

Subject: Proposed \$10 Truck Fee Program

Dear Ms. Tomley and Mr. Cannon:

My company provides drayage services in the Ports of LA and Long Beach. We operate over 40 trucks to serve our broad base of customers. We have been in the drayage business for 12 years.

I previously submitted my view that the truck fee should be around \$50/TEU. We have 21 near-zero CNG trucks. I took early action deploying these trucks to do the right thing and to prepare for the upcoming truck rate. I am greatly concerned that my early action deploying these clean trucks puts me at a disadvantage in the ports.

First, there needs to be clarity on the definition of a near-zero truck. The Ports need to clearly define near-zero as trucks certified to the CARB 0.02 low-NOx standard. I have already invested in trucks that meet this stringent standard and have proven their capabilities for port drayage.

Second, the program needs to encourage near-zero trucks. The proposed program discourages near-zero because the fee exemption ends far too soon (after 2027) and funding eligibility ends way too soon (after 2023). Ironically, the proposed plan encourages deploying used 2014 diesel trucks before the January 1, 2023 deadline instead of near-zero trucks. Companies need as many options as possible to replace diesel trucks rather than the Ports restricting clean options. Near-zero trucks need to be allowed to operate without fees for the useful life of the truck. Port incentive funding for such near-zero trucks should continue until 2035.

Third, the \$10 rate is too low. The rate is too small to motivate a change in trucks or to allow new expensive clean trucks to compete with the existing used diesel trucks. Beneficial cargo owners and truckers will have to absorb this cost without any benefits. The truck fee needs to be closer to \$50 per TEU to create a market incentive for change.

Sincerely,



Gary C. Mooney  
President  
Green Fleet Systems, LLC

February 26, 2020

Mr. Eugene D. Seroka  
Executive Director  
Port of Los Angeles  
425 South Palos Verdes Street  
San Pedro, CA 90731

Mr. Mario Cordero  
Executive Director  
Port of Long Beach  
415 W. Ocean Blvd.  
Long Beach, CA 90802

RE: **Comments Opposing Clean Truck Fund Rate Proposal**

Dear Executive Directors Seroka and Cordero:

On behalf of the American Apparel & Footwear Association (AAFA), I am writing to oppose the Clean Truck Fund Rate proposal.

AAFA is the national trade association representing apparel (including legwear), footwear and other sewn products companies, and their suppliers, which compete in the global market. Representing more than 1,000 world famous name brands, we are the trusted public policy and political voice of the apparel and footwear industry, its management and shareholders, its nearly four million U.S. workers, and its contribution of more than \$400 billion in annual U.S. retail sales.

Through the power of global value chains, our members employ millions of Americans in such diverse areas as design, manufacturing, compliance, logistics, and retail. Their products – be they clothes, shoes, fashion accessories, or the materials from which these products are made – are designed, made, and sold in nearly every country around the world.

The Port of Los Angeles and the Port of Long Beach are critical partners in our global value chains. Half of all clothes and shoes sold in the United States move through this port complex.

Our members are committed to sustainability. That is why we supported the 2006 Clean Truck Program and the current Clean Air Action Plan (CAAP).

While the Clean Truck Fund Rate proposal – imposing new container fees on cargo owners – claims to further the goals embodied in the CAAP, the reality is far different.

**First**, according to the ports' own economic study (Section 7), new container fees would do nothing to further or accelerate the adoption of near zero emission (NZE) or zero emission (ZE) trucks.

**Second**, the proposal gives cargo owners a choice – introduce NZE or ZE trucks, or pay the new container fee. The problem with this choice is that the proposal could be implemented within the year, while the technology for NZE or ZE trucks won't be available until 2023, at the earliest. That means cargo owners will have no choice but to pay the fee.

**Third**, the proposal leapfrogs ahead of actual regulation. Both the California Air Resources Board (CARB) and the Environmental Protection Agency (EPA) are both considering regulations. Not only does the proposal not reflect actual regulation (because we don't know what the regulation says yet), the proposal presumes the regulator.

**Finally**, the proposal provides no clarity on how the funds raised would be spent to support the supposed goal of the fund, to accelerate the introduction of more NZE and ZE trucks. For a proposal that the port's own economic study estimates could raise, at a minimum, over \$1 billion for the ports over 15 years, that seems to be a big omission.

In light of these concerns, AAFA strongly opposes the proposal. Further, we question the motivation behind the proposal, which would be a big revenue raiser for the ports.

Just as important, our members face new challenges, including punitive tariffs and the coronavirus. The addition of yet another fee might change their calculus on how they deal with those costs.

In conclusion, we have and will continue to support the ports' efforts to improve the sustainability of their operations. However, we strongly oppose proposals, such as this one, that purport to further these goals but, in reality, do not. Instead the proposal appears to be a huge new fee on shippers at a time when the industry faces other severe economic challenges.

Thank you for your time and consideration in this matter. Please contact me at [nherman@aafaglobal.org](mailto:nherman@aafaglobal.org) if you have any questions or would like additional information.

Sincerely,

A handwritten signature in black ink, appearing to read "Nate Herman", with a long horizontal flourish extending to the right.

Nate Herman  
Senior Vice President, Policy  
American Apparel & Footwear Association (AAFA)

February 14, 2020

Mr. Mario Cordero  
Executive Director  
Port of Long Beach  
415 West Ocean Boulevard  
Long Beach, CA 90802

Mr. Eugene D. Seroka  
Executive Director  
Port of Los Angeles  
425 South Palos Verdes Street  
San Pedro, CA 90731

Dear Executive Directors Cordero and Seroka:

On behalf of the Footwear Distributors & Retailers of America (FDRA), we write to express our strong concerns with the recent proposal to assess new fees on cargo owners through the Clean Truck Fund Rate.

FDRA is the footwear industry's trade and business association, representing more than 500 footwear companies and brands across the U.S. This includes the majority of U.S. footwear manufacturers and over 90 percent of the industry. FDRA has served the footwear industry for more than 75 years, and our members include a broad and diverse cross section of the companies that make and sell shoes, from small family-owned businesses to global brands that reach consumers around the world.

Our member companies import over 2.3 billion pairs of shoes each year for U.S. consumers, and the overwhelming majority of those shoes enter through the Ports of Long Beach and Los Angeles. Ensuring that we have strong, efficient, and reliable ports directly benefits our footwear consumers throughout the U.S.

FDRA and its member companies are working hard to increase sustainability in our footwear supply chains. We appreciate the efforts that Los Angeles and Long Beach have made in this area. However, we are deeply concerned that the proposed California Clean Truck Fund Rate, which seeks to achieve zero-emission trucks by 2035, would place significant burdens on numerous footwear companies by imposing new fees on cargo owners before the impact and feasibility of the program is fully considered.

We do not understand why the ports are moving forward with imposing these new fees – which could increase significantly – without clear standards or even the equipment yet to have zero-emission trucks. It is also not apparent how this new funding stream will be allocated. Will these new fees go towards administrative costs or to support the establishment of clean trucks in California? What agency will collect these new fees and what measures are being put in place to ensure full transparency in how the funds are collected and allocated? Will these new fees sunset or continue indefinitely?

Our members already pay other fees when importing, such as those paid through PierPass, and face a heavy import tariff burden that totals \$3 billion a year. This proposal comes at a difficult time when our members are under an increasing cost burden with added tariffs on the majority of

footwear from China, the largest supplier of footwear to the U.S. Adding another fee in 2020, the clean truck fee, only compounds this burden and creates further uncertainty for companies.

We believe the Clean Truck Fund Rate, as proposed, could cause companies to consider other ports when trying to mitigate the significant cost increases they face in 2020 including new added tariffs. It is therefore critical to closely examine each of these issues and to carefully consider the full economic impact the new Clean Truck Fund Rate will have on U.S. companies and consumers before imposing any fees.

If you have further questions or need additional information, please do not hesitate to contact me at [mpriest@fdra.org](mailto:mpriest@fdra.org) or 202-737-5660.

Sincerely,

A handwritten signature in black ink, appearing to read "Matt Priest".

Matt Priest  
President & CEO  
Footwear Distributors and Retailers of America



March 3, 2020

Chris Cannon  
Port of Los Angeles  
425 South Palos Verdes Street  
San Pedro CA 90731

Heather Tomley  
Port of Long Beach  
415 W. Ocean Blvd  
Long Beach CA 90802

Submitted electronically to: [caap@cleanairactionplan.org](mailto:caap@cleanairactionplan.org)

Subject: Proposed Truck Rate Program – Availability of 0.02g NOx Trucks

Dear Ms. Tomley and Mr. Cannon:

Thank you for the opportunity to submit comments on the proposed Truck Rate Program (TRP) that is being prepared to comply with the Clean Air Action Plan as updated in November 2017 (CAAP). These comments address the ability of Cummins and our original equipment truck manufacturer (OEM) partners to deliver trucks meeting the California Air Resources Board's (CARB) optional 0.02g NOx standard into drayage applications.

Cummins certified our L9N and ISX12N natural gas fueled engines to CARB's optional 0.02g NOx standard beginning in model year 2018. For model year 2020, Cummins also certified our B6.7N natural gas fueled engine to CARB's 0.02g NOx standard. The L9N and B6.7N are produced in the Cummins Rocky Mount, North Carolina engine plant and the ISX12N is produced in the Cummins Jamestown, New York engine plant. All are in standard, regular production with no minimum or maximum quantity restrictions. A video of an ISX12N engine build can be found here: <https://vimeo.com/265472158>. The ISX12N engine is the engine ideally suited for drayage applications and is available multiple truck models from Freightliner, Kenworth, Mack, Peterbilt and Volvo.

The last few years has seen record class 8 truck orders/deliveries. These record volumes resulted in extended delivery timeframes, over a year in some cases, for any powertrain (i.e. diesel or natural gas) configuration. Beginning in the 3<sup>rd</sup> quarter of 2019, truck order volumes reduced to normal volumes and delivery times. Although manufacturers, including Cummins, have made some staff reductions, these reductions HAVE NOT impacted the ability to build engines or trucks. Since the ISX12N is a standard Cummins offering, engine production of 2,000 per month can be achieved without issue.

Since the 2018 introduction of the ISX12N, Cummins has delivered over 4,600 engines into North America class 8 service, including about 200 into San Pedro ports drayage

Cummins Inc.  
875 Riverside Parkway  
West Sacramento, CA 95605  
916-709-9562  
tom.swenson@cummins.com



service. In fact, Cummins deployed and followed 20 early build engines with San Pedro ports fleets which have accumulated over 1 million miles in revenue service and continue in operation today.

As of January 1, 2023, the CARB Truck and Bus Rule will ban pre-2010 model year engines, which comprise a significant portion (~8,000 trucks) of the drayage registry. This is a unique, one-time opportunity which will likely be replaced by used 2014 or newer trucks if the CAAP doesn't require aggressive action, including a container fee enough to justify purchasing a new versus a used truck. Cummins and our OEM partners are capable of replacing these ~8,000 trucks with 0.02g NOx trucks by the January 1, 2023 deadline provided orders are placed no later than the 1<sup>st</sup> quarter 2021.

Sincerely,

A handwritten signature in blue ink that reads "Tom Swenson".

Tom Swenson  
Business Development Manager



THE VOICE OF **RETAIL**

March 4, 2020

Ms. Bonnie Lowenthal  
President  
Long Beach Board of Harbor Commissioners

Dear Harbor Commission President Lowenthal:

I am writing on behalf of the National Retail Federation (NRF) to urge you to vote to postpone the implementation of the proposed Clean Truck Rate fee and fund for the Port of Long Beach. While we support efforts under the Clean Air Action Plan, we are concerned about the impact of the proposed fee, especially without any of the details about the underlying program.

The National Retail Federation, the world's largest retail trade association, passionately advocates for the people, brands, policies and ideas that help retail thrive. From its headquarters in Washington, D.C., NRF empowers the industry that powers the economy. Retail is the nation's largest private-sector employer, contributing \$2.6 trillion to annual GDP and supporting one in four U.S. jobs — 42 million working Americans. For over a century, NRF has been a voice for every retailer and every retail job, educating, inspiring and communicating the powerful impact retail has on local communities and global economies.

NRF's members are among the port's largest customers and would therefore be directly affected by the proposed truck rate program. We fully recognize the political pressures that the harbor commission faces from communities surrounding the port, and we stand ready to work with the port to reduce air emissions. The retail industry has a strong record of supporting previous programs under the Clean Air Action Plan. We are as anxious as other stakeholders to make the switch to near-zero and zero-emission trucking. We want to be the port's partners in this effort.

But at the same time, we have grave concerns that the truck rate is being pushed through to a vote without any regard to its efficacy in driving the change to zero-emission trucks, or the regulatory environment within which it will operate. We understand the pressure the commission is facing, but at the same time the commissioners have a duty to create a sensible program that will achieve clean air goals without driving business away from the port to other gateways.

Voting on a truck fee at this point is premature. The ports' own economic study indicates that the main driver of change within the port is likely to be new regulations developed by the California Air Resources Board (CARB) on truck engines. Indeed, the study shows that the move toward zero-emission trucks is literally unaffected by the imposition of a truck rate. The single most important factor in moving toward lower emission trucks is the regulatory framework within which the program will operate. And that framework has yet to be finalized.

NATIONAL RETAIL FEDERATION  
1101 New York Avenue, NW, Suite 1200  
Washington, DC 20005  
[www.nrf.com](http://www.nrf.com)

CARB is expected to have a standard later this year, but it still remains to be seen whether California will obtain a waiver from the federal Environmental Protection Agency to move forward with its own truck standards. While we understand the pressure the Harbor Commission feels to act, and the natural desire to be in control of its own fate, the bottom line is that we must have a truck engine standard before we can move forward with a rational program that will allow us to move toward zero-emission trucking. Without a standard, there will never be any trucks for beneficial cargo owners to use.

At the very least, action on a truck rate should be suspended until a truck standard has been established.

We would also urge that the *implementation* of any truck fee should be postponed until the following details are published for public comment:

- How will the fee be collected?
- Who will collect the fee?
- What are credit requirements for port customers to participate in the program?
- Who will administer the fund?
- What portion of the fund will go to administrative costs?
- Will there be transparency in the administrative costs?
- How will grants for new equipment be distributed?

These are not minor details. A \$10 per TEU fee collected over ten years will collect a great deal of money. The ports have a responsibility to manage that money transparently and effectively. Without details on the actual fee program itself, choosing a rate seems premature. Moreover, it's likely to create uncertainty among those doing business at the port. The commission should make it clear that no fee will be collected until these details are fully announced and vetted with stakeholders.

Finally, we fundamentally believe that the best use of a truck fee is as a means to incentivize the switch to cleaner equipment. The experience with the CAAP truck fee imposed in 2006 clearly indicates that this kind of program works to drive change. But in the absence of a standard, or available equipment it's debatable whether the fee works as an incentive. Should a fee be imposed before equipment is available, it would become another incremental cost of doing business through the Southern California international gateway. The Ports of Long Beach and Los Angeles combined are already the most expensive gateway in the nation. Adding a fee without providing opportunities to mitigate it by adopting cleaner trucks, is a risky move for the ports and likely to have a negative impact on discretionary intermodal cargo.

I have attached NRF's comments on the ports' economic study of the proposed truck rate. I urge you to read our thoughts before rushing to impose a fee without any regard to its efficacy, impact, or the regulatory framework within which it would operate.

National Retail Federation

January 31, 2020

Page | 3

As always, NRF and its members stand ready to work with you in collaboration to improve sustainability in the supply chain. Thank you for the opportunity to provide our thoughts and comments.

Sincerely,

A handwritten signature in black ink, appearing to read "Jonathan Gold". The signature is fluid and cursive, with a large initial "J" and "G".

Jonathan Gold

Vice President, Supply Chain and Customs Policy

CC: Harbor Commission Vice President Frank Colonna  
Harbor Commission Secretary Lou Anne Bynum  
Harbor Commissioner Tracy J. Egoscue  
Harbor Commissioner Steven Neal

Form email example 1

Dear Heather Tomley,

As a resident concerned about the air quality of our region, I am urging you to end the use, sale, and distribution of diesel fuel now!

While the Los Angeles-Long Beach Port Complex is a vital economic engine for our region, the diesel exhaust from the big rig trucks continue to pollute our air and contribute to major health problems. Diesel exhaust from these trucks is a major source of air pollution, greenhouse gases, black carbon, and diesel particulate matter. Diesel exhaust includes more than 40 substances listed as hazardous air pollutants by the United States Environmental Protection Agency (EPA) and California Air Resources Board (CARB).

To finance the cleanup of the oldest drayage trucks in the ports' fleet in 2007, the ports approved a Clean Trucks Fee of \$35 per TEU. This time, it is just as critical for the harbor commissioners to impose another robust fee. Imposing a fee of no less than \$35 per TEU and preferably \$50 or more will chart us on a course to removing diesel trucks from Southern California roads and help millions of children breathe easier.

We need to protect our children and their children from the many harms caused by diesel exhaust. I urge you to act now to ensure we are protecting public health.

Thank you for your time.

Sincerely,  
Kristi von der Linden  
3569 Gaviota Ave  
Long Beach, CA 90807

## Form email example 2

Dear Trucks,

As the ports continue to consider a new Clean Truck Rate as part of the update to the Clean Air Action Plan (CAAP) and Clean Trucks Program (CTP), I have serious concerns with many of the aspects of the proposed language.

I am OPPOSED to anything that could hurt our ports and I SUPPORT working with the Harbor Trucking Association (HTA) to help insure the trucking industry is not negatively impacted by the CTP and to fix the following concerns with the current CAAP.

First, the San Pedro Bay Ports (SPBP) have continued to lose market share since the first CTP. From our perspective, competitiveness of this port complex should be your number one priority. My concern with the fee is that it will either:

- A. Divert cargo to other gateways
- B. Suppress drayage rates

Second, the CTP has many issues with how it is constructed. The current language discourages the early adoption of both Near-Zero Emissions (NZE) technology and Zero-Emissions (ZE) Technology. I do not feel confident investing in NZE truck technology due to a pending rate in 2027. I would suggest not penalizing any business for investing in the best commercially available technology. Truckers who buy NZE trucks should be safeguarded from a fee while they own and operate this truck. A similar approach to the grandfathering of pre-2014 trucks prior to the ban in the Port Drayage Truck Registry (PDTR) should be considered.

Third, the current grant programs are counterintuitive. They reward late adopters and disqualify companies who proactively invest in newer cleaner trucks and those who have invested in facilities close to the port to reduce vehicle miles traveled (VMT). The ports need grant programs that address the following inequities:

- The lack of grant programs for micro-fleet operators (1-10 trucks) and the opportunities available do not benefit many of those who most need access to capital.
- We need programs that reward early adopters and are available to all members of the trucking community.

There is a tax burden with grant funding, both for the income tax of the grant and the sales tax on the full price of the equipment, essentially offset any incentive for early adoption. The grants are difficult to obtain and do not offset the cost differential of NZE and ZE trucks.

Please continue to work with the HTA to refine the CTP and adopt language that would reduce any negative impacts to the trucking industry as a whole, while developing a real pathway to emissions reduction and incentivize the adoption of cleaner equipment in a material way.

Sincerely,

jose velazquez

natividadvelazquez75@gmail.com

6665 long beach blvd  
long beach, CA 90805