

**CENTER FOR COMMUNITY ACTION & ENVIRONMENTAL JUSTICE
EAST YARD COMMUNITIES FOR ENVIRONMENTAL JUSTICE
EARTHJUSTICE
NATURAL RESOURCES DEFENSE COUNCIL
SAN PEDRO & PENINSULA HOMEOWNERS COALITION
SIERRA CLUB
URBAN & ENVIRONMENTAL POLICY INSTITUTE**

February 14, 2019

Chair Parker and Members of the Committee
Mobile Source Committee
South Coast Air Quality Management District
21865 Copley Dr.
Diamond Bar, CA 91765

**Re: Update on Development of Facility-Based Mobile Source Measures in
2016 AQMP**

Dear Chair Parker and Members of the Committee:

On behalf of the undersigned organizations, we file comments on the facilities-based measure update that is before your committee. Communities have been fighting pollution from the freight industry for decades. The communities surrounding ports, railyards, warehouses, and freight corridors continue to suffer disproportionately from this industry. And the impacts are serious and grave. Given the contribution of this industry in concentrating pollution in neighborhoods in the region and its regional contribution to air pollution, it is critical that the South Coast Air Quality Management District do everything within its authority to control pollution from freight facilities. We understand that other agencies must do their part (i.e. the California Air Resources Board and the Environmental Protection Agency), but we also need our local air district to do everything it can given the seriousness of the freight pollution crisis.

As this Committee hears the updates on the various work in addressing pollution from freight facilities, we want to provide some initial input for this committee to consider.

Ports: Given community concerns with a Memorandum of Understanding (MOU) approach, it is vital that any MOU effort be fully vetted in public. As such, it is critical to start the outreach and vetting of these documents now. People concerned with breathing safe air will need time to understand how these contracts are enforceable and set forth strong metrics for emissions reductions at the largest fixed source of pollution in the region.

Warehouses: Staff should continue to examine strategies like facility caps, even if it prefers fleet certification and mitigation fees as a tool. We fear that options for legal approaches are being taken off the table prior to the requisite analysis being completed. While some strategies may aid in reductions region-wide, we remain concerned with approaches that could allow for picking winners and losers in some communities getting cleaner air and others not. We think a strong facility cap could be effective in ensuring warehouses clean up their pollution in all communities.

Railyards: We continue to find out more about the harmful impacts railyards impose on communities. The air district should pursue a strong rule to combat these facilities that impose so much health burden on communities. We are excited to start this rulemaking process in earnest.

We appreciate your consideration of these comments, and we look forward to working with the Air District to bring clean air to the communities who've been harmed by the freight industry for decades.

Sincerely,

Adrian Martinez
Michelle Ghafar
Earthjustice

Andrea Vidaurre
Center for Community Action & Environmental Justice

Taylor Thomas
East Yard Communities for Environmental Justice

David Pettit
Natural Resources Defense Council

Jessica Tovar
Urban & Environmental Policy Institute
Occidental College

Peter Warren
San Pedro & Peninsula Homeowners Coalition

Carlo De La Cruz
Sierra Club



September 17, 2019

Mr. Ian MacMillan
Mr. Victor Juan
South Coast Air Quality Management District
21865 Copley Drive
Diamond Bar, CA 91765

Re: Comments on the August 23rd Warehouse Indirect Source Rule Working Group

Dear Mr. MacMillan, Mr. Juan, and AQMD Staff:

Clean Energy appreciates the opportunity to comment on the latest staff presentation provided during the August 23rd Warehouse Indirect Source Rule (ISR) Working Group. We also would like to commend South Coast Air Quality Management District (AQMD) staff on your collective efforts to seek deeper NO_x reductions from mobile sources that demonstrably have a disproportional impact upon the South Coast Air Basin and disadvantaged communities. If the South Coast is ever to reach clean air attainment under the federal Clean Air Act's ozone standards or improve upon the health of impacted communities, the AQMD must be in the best position to transition the basin's fleet to near zero and, as they become available, zero emission medium and heavy-duty truck strategies. As a long-time partner of the AQMD, we offer our support and provide the following comments and recommendations designed to improve upon the agency's ability to move regional warehouse operations toward a cleaner future.

Near Zero Trucks must be based and have full access to In-Basin Warehouse Facilities

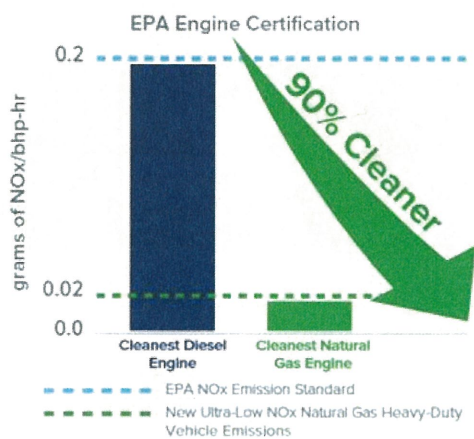
If warehouses located within the South Coast Air Basin are to meaningfully reduce truck-related emissions in the near- to mid-term, low NO_x trucks must be able to both access and be domiciled at warehouse facilities. In short, full access of such trucks that significantly cut diesel exhaust pollution – both smog and carcinogenic diesel particulate emissions – must be a part of the AQMD's emissions reduction strategy portfolio.

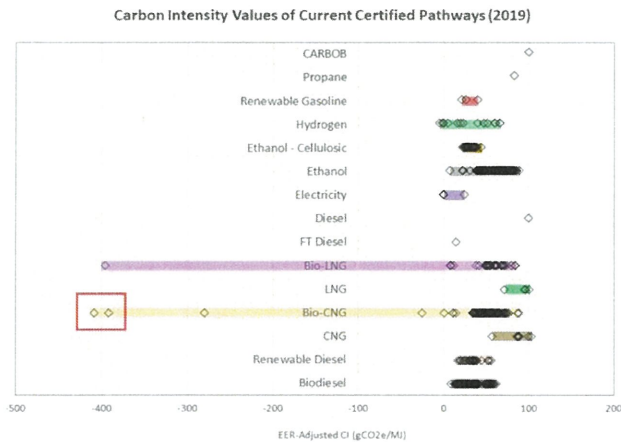
During the August 23 workshop, a stakeholder suggested that only zero emission vehicles should be allowed to either access or be domiciled at a warehouse, especially if said facility is located near or adjacent to a disadvantaged community. Adopting such a position, however, would deny any immediate air pollution relief to a heavily impacted community as the default would likely be a dirtier diesel truck. Conversely, providing incentives for warehouse operators and the fleet owners that serve them over to low NO_x trucks using renewable natural gas would deliver 90 percent fewer smog-forming emissions and potentially carbon negative emissions reductions immediately.

The South Coast AQMD Must Transition Away from Diesel Trucks as Quickly as Possible

Today's diesel trucks not only fail to meet the most stringent low NO_x standard, but likely exceed the current NO_x emission standard for heavy-duty truck engines if they use a selective-catalytic reduction (SCR) system. Specifically, diesel trucks using SCR devices were found to be ineffective in cutting NO_x emissions when operating at low speeds (i.e., drayage). In fact, we would recommend that AQMD staff review recent literature published by the California Air Resources Board clearly stating that emissions from base-line diesel trucks could be up to 9 times above the current heavy-duty truck engine standard for NO_x emissions during low speed operations.ⁱ

Low NO_x trucks powered by natural gas, however, do not depend on an SCR system and have been certified to NO_x emissions levels that are 90% below the current heavy-duty truck engine standards (i.e., 0.02 g/bhp-hr NO_x v. 0.2g/bhp-hr, respectively). Recent studies by the University of California at Riverside also have demonstrated that in-use NO_x emissions by natural gas low NO_x trucks actually show up to a 99% reduction of NO_x emissions compared to the current heavy-duty truck standards set by the US Environmental Protection Agency (EPA) and CARB.ⁱⁱ Additionally, when a low NO_x truck is powered with renewable natural gas (RNG), carbon emissions performance for a low NO_x truck can actually be carbon negative depending upon the fuel source.ⁱⁱⁱ It should be noted that the two leading providers of natural gas as a transportation fuel in the South Coast Air Basin and the State of California only sell RNG at the pump thanks to the Low Carbon Fuel Standard.





Clearly, low NOx strategies powered by RNG should play an unapologetic and prominent role in the final Warehouse Indirect Source Rule.

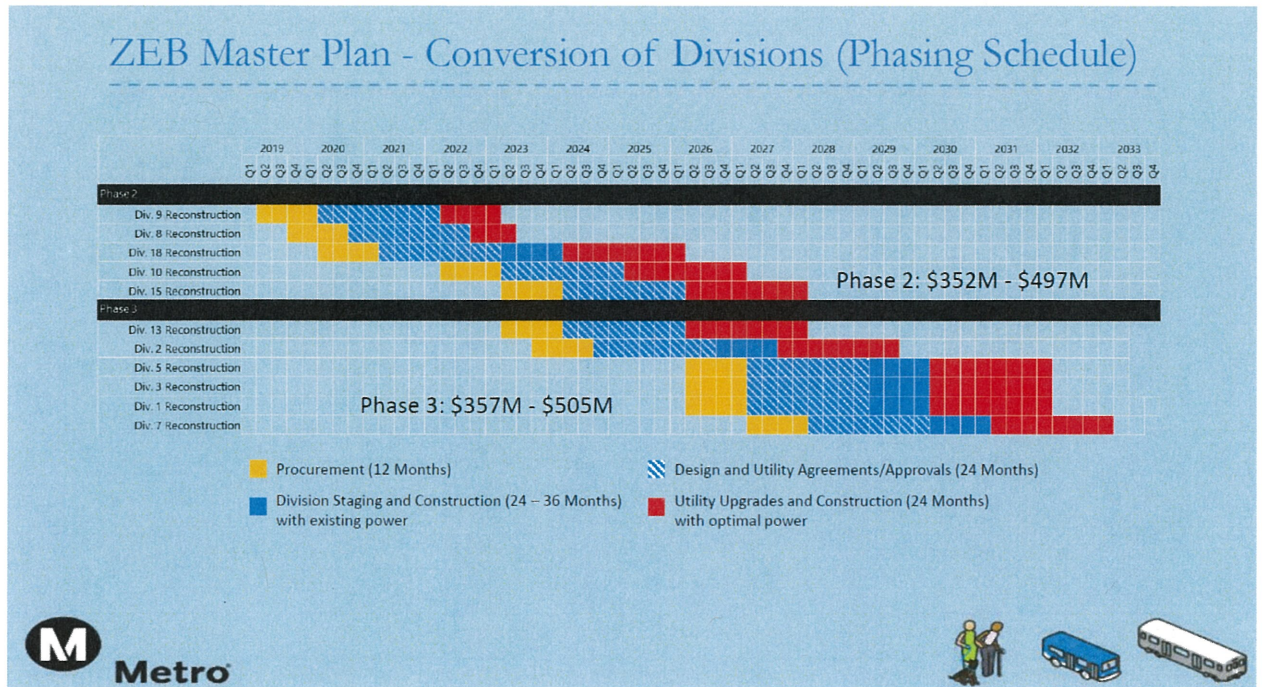
Include Renewable Natural Gas Fueling Stations in the Ongoing Warehouse ISR Mitigation Menu

After reviewing the August 23rd Warehouse ISR Working Group presentation, we strongly recommend that AQMD Staff add RNG fueling infrastructure investments on the ongoing mitigation menu as additional fueling infrastructure will be needed to fully address the South Coast’s truck pollution crisis.

A few stakeholders have argued against the inclusion of RNG fueling infrastructure with the hope that AQMD would only support zero emission fueling infrastructure projects from this point forward. They even claim that such RNG fueling investments would become stranded assets with the promise of zero emission technology on the horizon. However, RNG fueling infrastructure investments would largely make use of private capital (not public funds) and a return on investment would easily be achieved within 5 to 10 years. Further, while the desire to achieve zero emission strategies now is not lost upon us, it is highly unlikely that the region can make a regional transition for several decades due to both cost, infrastructure and logistical issues.

For example, Los Angeles County Metro’s Board of Directors committed the agency to make a full transition to zero emission buses by 2030 and Metro is now required to do so by 2040 under the California Air Resources Board’s Innovative Clean Transit rule. Despite this momentum and receiving massive federal and state public subsidies, Metro staff is quickly learning the herculean challenges of adopting a strategy that has yet to be fully commercialized. For example, Metro’s Operations, Safety and Customer Experience Committee is recommending on Thursday, September 19, to purchase 259 Contract Option forty-foot CNG buses because the transit authority cannot get the necessary zero-emission charging infrastructure in place to run more ZEBs in Metro’s fleet.^{iv} Further, there are numerous complications associated with certain zero emission bus technologies in terms of weight and range that remain unresolved and are steadily pushing out Metro’s target implementation date to no fault of Metro staff’s efforts.^v The reality

is zero emission strategies face multiple logistical, technical and cost challenges that go well beyond the operator.



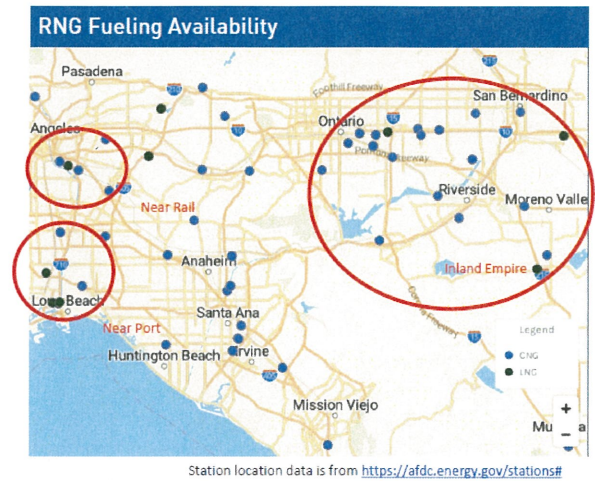
Finally, while we highly dispute the statements pertaining to the NGV industry’s ability to quickly build out public or private RNG fueling infrastructure in the 2018 Drayage Truck Feasibility Assessment released by the San Pedro Bay Port Authorities, failing to include RNG fueling infrastructure as an ongoing menu option under the proposed Warehouse ISR will result in delayed emissions reductions for the region.^{vi} For example, an agency could fail to act on adopting policies that are supportive of AQMD’s Warehouse ISR if they determine that there is insufficient fueling stations to support a clean fleet policy or transition. The AQMD’s final Warehouse ISR should take progressive steps to deny such an outcome by promoting fueling infrastructure that supports low NOx trucks using renewable and climate friendly fuel today.

Substantial RNG Fueling Is Already Available Where Port Trucks Travel

33 existing stations are located near the port, along the 710 corridor to Commerce rail yards and the Inland Empire.

Clean Energy Wilmington station has 6 dispensers. Assuming the remaining 32 stations have 2 dispensers, this gives 70 total dispensers for port trucks. Assuming 50% utilization (actual is less than 50%), the existing network can support $70 \times 116 \text{ to } 165 \text{ trucks} \times 50\% = 4,060 \text{ to } 5,775 \text{ trucks}$.

In actuality, near port stations have 12 dispensers that can handle $12 \times 116 \text{ to } 165 = 1,392 \text{ to } 1,980 \text{ trucks}$ (current utilization goes to zero as the legacy LNG trucks retire). However, to be conservative, this study uses 50% utilization.



Area	Existing Capacity to Serve Additional Trucks
Near-Port	1,392 to 1,980 Trucks
LA Basin	4,060 to 5,775 Trucks

Conclusion:

Clean Energy would like to thank and support AQMD staff's efforts to develop a meaningful Warehouse ISR. The Final Warehouse ISR must: (1) embrace low NOx trucks powered by RNG as a key mitigation strategy and (2) add RNG fueling infrastructure to the ongoing mitigation menu of the Warehouse ISR. Falling short of adopting these two progressive action items in the final Warehouse ISR's strategy would not only deny regional warehouses and fleet operators a key tool to combat both air and climate pollution generated by trucks, it would run contrary to the AQMD's own 2016 Air Quality Management Plan which heavily relies upon low NOx natural gas truck adoption as a core and central strategy to achieve the necessary NOx ton reductions to meet federal ozone attainment.

In fact, we believe both the San Joaquin Valley and South Coast air districts recently said it best in a letter to the California Air Resources Board urging CARB staff to retain low NOx funding under HVIP by stating:


"Both air districts have prioritized the need to replace a large number of long haul and other diesel (Class 7 & 8) trucks by 2024 with zero and near-zero emission technologies through transformational changes in the heavy-duty trucking sector. Additionally, both air districts, with grant funding from CARB, are working on developing and demonstrating zero emission heavy-duty (Class 7 & 8) trucks, and recognize that large scale deployments can provide a valuable option as they continue to become

*commercially available and feasible for fleets, especially with consideration or varying duty cycles. **However, these trucks are not yet commercially available.** Therefore, to reach both regions' and state's air quality goals, near-term large-scale emission reductions are required that can only be achieved by deploying currently available near-zero low NOx technologies today, with immediate reductions needed in AB 617 communities and broader regions.*

Towards that end, both districts support continued HVIP funding for zero and near-zero heavy duty (Class 7 & 8) trucks that reduce greenhouse gas and criteria pollutant emissions, especially when combined with renewable fuels that have increasing in-state production as a result of state funding. Both air districts have communities that are heavily impacted by goods movement due to the significant amount of heavy-duty diesel vehicles transporting materials on a daily basis. Bringing about significant additional reductions in freight emissions will be essential for reaching attainment with ever-tightening federal ozone and particulate standards. The development and implementation of near zero-emission low NOx technologies in the freight sector will also provide for significant reductions in toxic air contaminants that affect residents.^{vii}

If you should have any questions or would like to have further input from our team, please do not hesitate to contact me directly.

Sincerely,



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

ⁱ See California Air Resources Board. October 26, 2016. "High In-Use NOx Emissions from Heavy-Duty Diesel Trucks Equipped with SCR Systems and Their Impact on Air Quality Planning in California" by Yoon, Collins, Misra, Herner, Carter, Sax.

ⁱⁱ See UC Riverside's College of Engineering – Center for Environmental Research and Technology. February 2016. "Ultra-Low NOx Natural Gas Vehicle Evaluation: ISL G NZ" by Johnson, Jiang, and Yang.

ⁱⁱⁱ See <https://ww3.arb.ca.gov/fuels/lcfs/fuelpathways/pathwaytable.htm>.

^{iv} See <https://metro.legistar.com/LegislationDetail.aspx?ID=4136484&GUID=63368C2C-DCBE-4B38-A8DD-577532AB42F8>

^v See LA County Metro's "Zero Emission Bus (ZEB) Program Update. July 18, 2019. Operations, Safety, and Customer Experience Committee.

^{vi} See <http://www.cleanairactionplan.org/documents/final-dravage-truck-feasibility-assessment.pdf/>

^{vii} Joint San Joaquin Valley Air Pollution Control District and South Coast Air Quality Management District comment letter to the California Air Resources Board dated September 13, 2019 re: San Joaquin Valley Air Pollution Control District & South Coast Air Quality Management District Comments on the Discussion Draft of the Low Carbon Transportation Funding Plan.

4675 MacArthur Court, Suite 800
Newport Beach, California 92660 USA
949.437.1400 fax: 949.612.1894

www.CleanEnergyFuels.com

Todd R. Campbell
Vice President Public Policy & Regulatory Affairs

November 26, 2019



Mr. Ian MacMillan
Mr. Victor Juan
South Coast Air Quality Management District
21865 Copley Drive
Diamond Bar, CA 91765

Re: Comments on the November 13th Warehouse Indirect Source Rule Working Group

Dear Mr. MacMillan, Mr. Juan, and South Coast Air Quality Management District Staff:

Clean Energy appreciates the opportunity to comment on the latest staff presentation provided during the November 13th Warehouse Indirect Source Rule (ISR) Working Group. We also would like to commend South Coast Air Quality Management District (AQMD) staff on your collective efforts to seek deeper NOx reductions from mobile sources that demonstrably have a disproportional impact upon the South Coast Air Basin and its disadvantaged communities. If the South Coast is ever to reach clean air attainment under the federal Clean Air Act's ozone standards or improve upon the health of impacted communities, the AQMD must be in the best position to transition the basin's fleet to near zero and, as they become available, zero emission medium and heavy-duty truck strategies.

As a long-time partner of the AQMD, we offer our support and provide the following comments and recommendations designed to improve upon the agency's ability to move regional warehouse operations toward a cleaner future.

The following comments are being made after review of the newly proposed language:

Warehouse Size Must be Clarified in Rule Language:

Clean Energy recommends that language referring to warehouse size be consistent with the calculations on warehouse size made throughout the document. To do so, we recommend changing the draft language's references to warehoused size located in the AQMD from:

"with greater than 100,000 square feet of indoor floor space in a single building"

to:

"with equal or greater than 100,000 square feet of indoor floor space in a single building"

Instances where "equal or" should be amended into the draft rule's language are on pages: 2305-1, section (b); 2305-3, section (d)(1); and, 2305-7, section (e)(1)(A).

Implementation of Warehouse Rule based on Warehouse Size

Staff is recommending that this rule be phased in over a three-year period covering 2021-2023 based on three warehouse sizes: $\geq 250,000$ sq. ft. (2021); $\geq 150,000$ sq. ft. (2022), and $\geq 100,000$ sq. ft. (2023). Clean Energy questions why there would be any delay in adopting mitigation measures for sources of pollution at warehouses, especially when the South Coast Air Basin needs to come into attainment with the federal Clean Air Act for ozone in 2023. Given this sense of urgency, it seems to make more sense to require all warehouses equal or greater than 100,000 sq. ft. subject to rule starting in July of 2021. In that way, the rule may see some economies of scale benefits come into play over compliance costs if more, not less, regulated warehouses need to purchase advanced clean trucks and other warehouse mitigation strategies to meet rule obligations. Has staff done any type of analysis as to what the benefits and costs would be to stretch out this rule as currently proposed? Given the enormous costs associated with air pollution and the real possibility of federal sanctions if we fail to meet federal attainment deadlines under the Clean Air Act, it would make more sense for AQMD to implement this rule forward as soon as possible.

Other Considerations for Rule Acceleration

As staff develops values for WAIRE points, another way to accelerate proactive action would be to reward early action. For example, actions done in advance by warehouse owners or operators who do not currently have any WAIRE obligations would receive a multiplier of WAIRE points that could be used toward compliance. This option certainly should be considered if staff insists on staggering warehouse compliance of the regulation based on size. One recommendation would be, actions taken two years in advance of obligations receive a 2X multiple and actions taken one year in advance would receive a 1.5X multiple.

Default WATTs Calculation due to a Force Majeure

Staff suggests that if a warehouse operator fails to know the number of annual truck trips made to a warehouse due to a force majeure or for whatever reason, a default WATTs calculation shall be used to determine an owner or operator's compliance requirements. Such calculations should be used only as a last resort and be heavily weighted in favor of public health. In other words, a default WATTs calculation should be set in such a way that a warehouse owner or operator would prefer to voluntarily report out the actual WATTs values at each warehouse facility over taking the default WATTs calculation. This principle would be similar to default pathways established under the Low Carbon Fuel Standard (LCFS) whereas the default would not generate the level of credits that one would normally expect at a fuel production facility. By doing so, the producer is motivated to submit a detailed pathway to maximize a plants low carbon fuel accreditation.

Mitigation Fee

Although no fee has been set by Staff in the proposed language, it goes without saying that such a fee must serve as a real deterrent to a warehouse owner or operator who would otherwise opt to violate the rule if the penalty was inconsequential. We will be very interested in the rationale behind whatever figure staff ultimately proposes for the \$XX amount for each WAIRE point.

Warehouse Activities Definition

We are concerned about the potential abuse that could occur if staff allows supporting office administration, maintenance or manufacturing areas within a warehouse, etc., not count as warehouse activities. It is quite possible that such areas could be created permanently or temporarily to intentionally avoid obligations under the proposed warehouse rule. Further, the AQMD's ability to enforce and prosecute those who take advantage of this loophole with fraudulent intent would be a challenge for Staff. We highly recommend the removal of these exemptions to warehouse activities.

Near-Zero Emission (NZE) Trucks Definition

We strongly support this definition as it ensures that the rule will put the cleanest low NOx truck option onto the South Coast Air Basin's roads.

WAIRE Menu

We highly recommend the following changes to the WAIRE Menu to make sure that the AQMD achieves meaningful reductions in air pollution from warehouse operations.

- Acquire ZE/NZE Truck: Support
- NZE/ZE Truck Visits: Support
- Acquire ZE Yard Truck: Support if amended to include NZE Yard Truck to this item as NZE trucks, as defined by the rule, now come in 6.7L, 8.9L and 11.9L engine options.
- Install Onsite ZE Charging or Fueling Stations: Oppose. We recommend this option's removal from the WAIRE menu. The usage of such stations at the facility is what helps achieve emissions reductions at a warehouse. The actual act of installing a charging or fueling station does not reduce emissions in or around a warehouse if there is no volume exhibited. This action therefore should not receive WAIRE credit.
- Use Onsite ZE Charging or Fueling Stations: Oppose unless amended to include NZE fueling stations. Clean Energy believes that the state LCFS already incentivizes the use of low carbon charging or fuel use by volume. However, if staff elects to maintain this action item under the WAIRE menu, it should also include the usage of renewable fuel at NZE fueling stations located at or near warehouses. The value of the WAIRE credit value should also be determined by the CI value of the renewable fuel at a charging or fueling station using the CI values under the California Air Resources Board's LCFS program.
- Install Onsite Energy Systems: Oppose. We recommend removing this action from the WAIRE menu as it does nothing to reduce air pollution at warehouse facilities which is the rule's objective.
- Use Onsite Energy Systems: Oppose. We recommend removing this action from the WAIRE menu as it does not actually reduce air pollution at a warehouse which is the rule's objective.
- Community Benefits: Support. Any action that better informs the community on the health risks and impacts is important information to collect and share with the community.

Conclusion:

Clean Energy would like to thank and support AQMD staff's efforts to develop a meaningful Warehouse ISR. If possible, we would like to meet with you to discuss the above amendments and recommendations in person prior to the next Warehouse Workshops in December.

Also, if you should have any questions or would like to have further input from our team, please do not hesitate to contact me directly.

Sincerely,



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

**CENTER FOR COMMUNITY ACTION & ENVIRONMENTAL JUSTICE
EARTHJUSTICE
EAST YARD COMMUNITIES FOR ENVIRONMENTAL JUSTICE
LEADERSHIP COUNSEL FOR JUSTICE & ACCOUNTABILITY
LONG BEACH ALLIANCE FOR CHILDREN WITH ASTHMA
NATURAL RESOURCES DEFENSE COUNCIL
SAN PEDRO & PENINSULA HOMEOWNERS COALITION
SIERRA CLUB
TEAMSTERS LOCAL 1932
WAREHOUSE WORKER RESOURCE CENTER**

December 6, 2019

Ian MacMillan
Planning and Rules Manager
South Coast Air Quality Management District
21865 Copley Drive
Diamond Bar, CA 91765

Re: Comments on Preliminary Draft Warehouse Indirect Source Rule (Proposed Rule 2305)

Dear Mr. MacMillan:

On behalf of the undersigned coalition of community and environmental organizations, we submit these comments on the preliminary draft warehouse indirect source rule proposed by South Coast Air Quality Management District staff during the November 13, 2019 meeting of the warehouse working group. Our coalition is actively involved in this group because communities adjacent to warehouses are consistently and disproportionately harmed by the freight industry every day. We have advocated *for years* for a strong and equitable warehouse rule that will achieve necessary emissions reductions. Indeed, it is well past time for the warehouse industry to see effective and meaningful regulation, and to finally be a good neighbor to the communities burdened by dirty air and unacceptable health risks. The Air District must therefore use this opportunity to pass a strong rule that advances both short- and long-term solutions for the air quality and health crises caused by this industry. The health burden placed on current and future generations of children, pregnant mothers, and our elders and families as a whole must stop now. The time for delay is long over.

While we appreciate the robust work done so far to develop a strong warehouse rule, and commend the Air District's decision to move away from a credit trading program that would simply amount to pollution trading and we know would not work, the draft rule can do more to better reflect the reality of warehouse operations and the pollution crisis in the region. The Inland Empire has seen a proliferation of these facilities in recent years, and the Southern California Association of Governments projects even more warehouse space will be built or retrofitted in

the future.¹ These facilities continue to be sited in neighborhoods throughout the South Coast air basin that routinely show high levels of ozone and fine particulate matter. In fact, the region continues to rank as one of the most polluted areas of the country, recently receiving an "F" from the American Lung Association for ozone and fine particulate matter pollution.² After operating for years under a business model that places industry over our health, this industry must be held accountable for business decisions that contribute to consistent and toxic pollution in our neighborhoods.

And there is no question that the Air District can ensure accountability here, under its considerable legal and regulatory authority to develop a strong warehouse rule that tackles the freight pollution crisis. Under the California Health and Safety Code, the Air District is expressly required to provide a warehouse facility-based measure that addresses "high-level, localized concentrations of pollutants" throughout the South Coast air basin.³ Thus, we request that Air District staff update the draft rule to reflect our comments below prior to submitting it to the Air District's Governing Board for adoption in May 2020.

I. The Rule Must Apply to Warehouses 100,000 Square Feet or Larger in Size.

Throughout the draft rule, the language indicates it applies to warehouses that are either greater than 100,000 square feet in size, or greater than *or equal to* 100,000 square feet, shifting between the two interchangeably. (Compare Proposed Rule 2305(b), (d)(1), and (e)(1)(A) with Proposed Rule 2305(d)(1)(C), (e)(3)(A).) Given that the former option likely exempts from the rule many facilities that the rule actually intends to cover, the final rule should clearly and consistently state it applies to warehouses that are greater than or equal to 100,000 square feet.

In addition, the draft rule defines a warehouse as a "facility consisting of one or more buildings that stores cargo," yet notes it only applies to "a single building" that meets its size requirements. (Proposed Rule 2305(b), (c)(22).) We have seen many facilities in our communities that consist of smaller buildings clustered near each other, however, with one operator running all the warehousing activities in each building. A limitation to single buildings thus may not reflect the reality of warehouse operations, and may again unintentionally exempt certain facilities that should be regulated. The final rule must account for warehousing activities spanning several neighboring buildings that together may meet the 100,000 square feet requirement.

II. The Points Compliance Obligation Must Reflect the Disproportionate Impacts on Environmental Justice Communities.

The specifics of the warehouse points compliance obligation are still left largely undefined in the draft rule. The stringency value, annual variable, and points for each menu item are critical to creating a strong rule, and we anticipate participating in the technical working

¹ So. Cal. Assn. of Governments, [Industrial Warehousing in the SCAG Region](#) (Apr. 2018) at p. 81.

² Am. Lung Assn., [State of the Air 2019](#) at pp. 69-70.

³ Health & Saf. Code, § 40440(b)(3).

group and providing more detailed comments once these factors are defined. We want to ensure at this point, however, that the points obligation for each warehouse accounts for nearby sensitive receptors, and that facilities located in environmental justice communities and/or neighbor sensitive receptors must receive a higher points obligation. A just and equitable warehouse rule must ultimately aid in region-wide emissions reductions and avoid approaches that could allow for picking winners and losers, with some communities getting cleaner air and others not. A compliance obligation that reflects the disproportionate impacts faced by disadvantaged communities will be effective in ensuring warehouses clean up their pollution in *all* communities.

The draft rule further fails to specify exactly how warehouse owners and operators will determine their final points compliance obligation each year. We presume the Air District will provide owners and operators their precise obligation using the equation in Proposed Rule 2305(d)(1), however, the draft rule does not describe this process. We suggest the final rule lay out the process, including how and when the Air District will communicate the final obligation, in order to ensure consistency in the rule's application.

Finally, and again for the sake of clarity, the final rule should also define "sensitive receptors" as used in the table of menu items, e.g., residential areas, schools, hospitals, daycare facilities, nursing homes, parks, or other areas where occupants are more susceptible to the negative impacts of pollution.

III. The Mitigation Fee Option Should Be Minimal.

As with the points compliance obligation, the draft rule does not specify the mitigation fee rate. (Proposed Rule 2305(f).) Yet it is imperative that the mitigation fee option not become a "pay to pollute" alternative, with facilities simply paying their way out of their compliance obligation each year rather than investing in the on-site menu items. The current draft rule language seems to allow for just such an alternative, simply making the fee progressively more expensive each year that an operator fails to meet its compliance obligation using on-site menu items. Unfortunately, we have seen time and time again that the industry would rather pay more than change their operations or invest in meaningful emissions reduction measures. Thus, the final rule must properly limit the role of a mitigation fee in an operator's compliance obligation.

To that end, the mitigation fee must appropriately cost more than the menu options in order to incentivize on-site investments, and the points generated per dollar must be further discounted for those facilities located near sensitive receptors and/or in environmental justice communities. The final rule should also specify how and where the mitigation fees generated each year will be used. Given that our members bear the brunt of this industry's operations, we expect such fees will fund emissions reduction projects in our communities.

IV. The Freight Sector Must Move to Zero-Emissions.

We want to be abundantly clear that our community members want zero-emissions technology as part of any warehouse rule, in order to truly address the air quality and health crises caused by the warehouse industry. Any investment in "near-zero" equipment and

infrastructure at this point is counterproductive and should not be included in this rule. The on-site menu items still include the purchase of near-zero trucks as one of many options to earn points, yet near-zero technologies ultimately delay the development and implementation of the zero-emissions equipment necessary to clean up pollution in our communities.

We continue to hear industry representatives push near-zero technology in our working group meetings, but near-zero is often used as code for traditional combustion technologies burning methane gas. These technologies provide no bridge to advancing zero-emissions technologies, and ultimately create barriers to the transition to and implementation of zero-emissions infrastructure. Moreover, the communities listed on this letter are those that bear the brunt of the natural gas and oil infrastructure that supports these combustion technologies. These communities do not want the continued negative climate and health impacts that accompany the propagation of fossil fuel technology, equipment, and infrastructure.

Near-zero advocates talk about their technologies being available now as an argument why the region should invest robustly in natural gas infrastructure and vehicles. We remind the Air District that zero-emissions technologies are developing rapidly and by the time compliance obligations start for this rule, we expect significant further developments in the zero-emissions technologies space.

The freight sector must move to zero-emissions to meet not only our greenhouse gas reduction targets, but also to be consistent with the directives and plans adopted at the regional, State, and even global level. Indeed, the transition to zero-emissions will happen, and the Air District is wise to begin planning and demonstrating a clear foundation for it.

V. The Final Rule Must Address CEQA Obligations.

The draft rule does not address the interplay between compliance with the final warehouse rule, and facilities' compliance with obligations under the California Environmental Quality Act (CEQA). Yet we anticipate seeing future CEQA documents where warehouse owners and operators claim they will address air pollutant emissions, for example, through the warehouse rule, thereby punting their CEQA obligations rather than properly analyzing and mitigating the impacts of their projects through the CEQA process. The Air District must clarify and formalize in the final rule that owners and operators cannot use future compliance with this rule as satisfying CEQA's disclosure and mitigation requirements, regardless of the warehouse rule's application.

VI. Our Communities Cannot Afford Further Delays in the Rulemaking Process.

The warehouse rule should have been before the Air District's Governing Board in December of this year. Instead, the rule is now tentatively scheduled to go to the Governing Board in mid-2020. We cannot keep pushing the adoption of this rule further into the future, even as pollution continues to envelop our communities. We want to remind the Air District that we expect a finalized and adopted warehouse rule by May 2020.

We appreciate your consideration of these comments, and reiterate our support for the important work done so far to develop a meaningful warehouse rule. We look forward to working with the Air District to lift up the voices of our community members and tackle the harms caused by the warehouse industry.

Sincerely,

Adrian Martinez
Michelle Ghafar
Earthjustice

Andrea Vidaurre
Center for Community Action & Environmental Justice

Taylor Thomas
East Yard Communities for Environmental Justice

Rebecca Zaragoza
Leadership Counsel for Justice & Accountability

Sylvia Betancourt
Long Beach Alliance for Children with Asthma

Heather Kryczka
Natural Resources Defense Council

Peter M. Warren
San Pedro & Peninsula Homeowners Coalition

Carlo De La Cruz
Sierra Club

Randy Korgan
Teamsters Local 1932

Sheheryar Kaoosji
Warehouse Worker Resource Center

cc:

Chair Burke and Members of the Committee
Mobile Source Committee
South Coast Air Quality Management District

Wayne Natri
Executive Officer
South Coast Air Quality Management District



December 6, 2019

Ian MacMillan
Planning & Rules Manager
South Coast Air Quality Management District
21865 Copley Drive
Diamond Bar, CA 91765
Via email - imacmillan@aqmd.gov

Re: First Draft of Proposed Rule 2305 – Warehouse Indirect Source Rule

Dear Mr. MacMillan:

Thank you for the opportunity to review and provide comments on the first draft of the South Coast Air Quality Management District (SCAQMD) Facility Based Mobile Source Measure – Warehouse Indirect Source Rule (Warehouse ISR). We appreciate how much work you and the other SCAQMD staff have put into this proposed rule, and look forward to continuing to work with you on an effective rule for full implementation.

Founded in 1971, the Coalition for Clean Air protects public health, improves air quality, and prevents climate change. We submit these comments in the hopes that they will be taken in the cooperative spirit in which they are offered.

I. Necessary Details of Warehouse Actions and Investments to Reduce Emissions (WAIRE) Program Must Be Clarified

Under section (d) (1) (A) Requirements, the SCAQMD has left much undefined and without the ability for the public to determine how the WAIRE points will be calculated. The equation to calculate annual WAIRE program points required per warehouse includes the following:

$$WPCO = WATTS \times Stringency \times (Annual Variable)$$

However, “Stringency” is completely undefined, leaving interested members of the public wondering exactly how SCAQMD will calculate the required WAIRE points according to its own equation. Similarly, the “Annual Variable” is to be determined according to Table 1 (Proposed Warehouse ISR, 2305-11). When reviewing Table 1, however the Annual Variables in that table are also undefined.

Without hypothetical or placeholder values to insert into SCAQMD’s proposed equation, it is impossible to determine what a proposed WAIRE point value would be for warehouses. Without some indication of what SCAQMD is proposing for both Stringency values and Annual Variables, the first draft of the Warehouse ISR is frustratingly vague and ambiguous. We hope that these values will be much

more fully fleshed out by SCAQMD staff before our next Warehouse ISR meeting on Tuesday, December 10.

II. The Initial Requirement Dates Are Too Far Out

In table 2, the initial reporting dates are listed as follows:

Warehouse Size (sq. ft.)	Initial Reporting Date
Greater than or equal to 250,000	July 30, 2021
Greater than or equal to 150,000	August 2, 2022
Greater than or equal to 100,000	August 1, 2023

However, from the draft rule, it is unclear why such a large range of reporting dates is included. If the rule is voted upon and implemented next year, why would smaller warehouses have approximately three years to provide their initial reports? Why can't the warehouses be required to report their initial information sooner, so that the SCAQMD can begin implementation expeditiously? I hope this can be addressed at our next Working Group Meeting.

III. The Mitigation Fees Must be Increased Annually by a Larger Percentage

Again, as with the values of the equation discussed above, the proposed rule provides no value for each WAIRE point. (Proposed ISR, 2305-9, section (f)(1).) Further, the SCAQMD proposes that if a warehouse operator does not complete at least 50% of their WAIRE points obligation, the mitigation fee will rise by 10% the following year. (Proposed ISR, 2305-9, 10, section (f)(2).) We propose that the fee rise by **20%** in the event of deficient compliance in a WAIRE year. This way, the operator will have even more incentive to comply with the WAIRE compliance rule. This is also to ensure that warehouse operators will simply pay the mitigation fee rather than make good faith efforts to comply with the WAIRE points SCAQMD rule.

Conclusion

Again, we appreciate the opportunity to comment and provide constructive criticism on the SCAQMD proposed Warehouse ISR. We understand that an element of uncertainty is part of the development of the Warehouse ISR, as it is new to SCAQMD. However, to make the rulemaking meaningful to public stakeholders, SCAQMD must do a better job of providing enough information about the proposed Warehouse ISR so that we can have appropriate input into it. In its current form, it is very difficult to determine if the proposed Warehouse ISR has developed a useful way to measure WAIRE points for warehouses in the South Coast Basin.

Sincerely,

Jerilyn López Mendoza

Jerilyn López Mendoza
Senior Policy Advocate



Kevin Maggay
Energy and Environmental Affairs
555 W. 5th Street
Los Angeles, CA 90013

tel: 213-244-8192

Email: kmaggay@semprautilities.com

December 6, 2019

Mr. Ian MacMillan
21865 Copley Drive
Diamond Bar, CA 91765
Transmitted to: imacmillan@aqmd.gov

Re: PROPOSED RULE 2503 - WAREHOUSE INDIRECT SOURCE RULE

SoCalGas appreciates the opportunity to comment on the South Coast Air Quality Management District (SCAQMD) Proposed Rule 2305: Warehouse Indirect Source Rule (ISR) – Warehouse Actions and Investments to Reduce Emissions (WAIRE) Program (Proposed Rule). SoCalGas would like to offer the following comments for consideration for the Proposed Rule.

WAIRE Points Should Prioritize State Implementation Plan (SIP) Creditable Actions and Investments.

The Working Group presentation given on November 13, 2019, states that the number of WAIRE points earned for each menu item will be based on cost, direct emission reduction, and local benefit. While these are important considerations, SoCalGas recommends that SIP creditable emission reductions also be a top priority when determining WAIRE point values. Warehouse ISRs and the other Facility Based Mobile Source Measures were identified as control strategies in the 2016 Air Quality Management Plan to meet the 2023 attainment deadline for ozone. This can only be achieved through SIP creditable emission reductions. While other actions or investments that reduce exposure or enable emission reductions, such as installing filtration systems or electric vehicle chargers, are beneficial, they do not help to achieve the purpose of the Facility Based Mobile Source Measures of producing emission reductions that can be counted towards the SIP. Therefore, SIP creditable reductions should be prioritized.

Early Actions Should Receive Weighted WAIRE Points

With the federal Clean Air Act ozone attainment deadline quickly approaching in 2023, it is important to achieve as many emission reductions as possible and as soon as possible to meet attainment. Early action would be those that can be deployed immediately with commercially available technologies, such as heavy-duty trucks that meet the California Air Resources Board Optional Low Nitrogen Oxide (NOx) standard of 0.02 grams per brake horsepower hour. Early SIP creditable actions should be given weighted WAIRE points to encourage early action.

A Standardized Process to Add Actions and Investments to the WAIRE Menu Should be Developed

The WAIRE menu included in the Proposed Rule language contains only nine actions and investments that receive WAIRE points. While this is the first version and will certainly be expanded, SoCalGas recommends developing a continuous, standardized process to add items to the WAIRE menu. A standardize process may include:

- Streamlined application process.
- Technical review committee with regularly scheduled meetings.
- Acceptance guidelines.
- Minimum requirements/criteria guidance document

Providing requirements and WAIRE point methodologies will give technology developers and solution providers an opportunity to pursue solutions with some amount of certainty that it will be eligible for WAIRE points.

Hydrogen Production Should Receive Additional WAIRE Points

Hydrogen fueling is mentioned in the WAIRE menu, which will achieve emission reductions for the WAIRE program. In addition to fueling, onsite hydrogen production should generate additional WAIRE points. Producing hydrogen on site reduces emissions from transporting the fuel and is a significant financial investment.

Natural Gas Fueling Infrastructure Should be Included in the WAIRE Menu

The WAIRE Menu includes the addition of alternative fuel infrastructure and specifically states electric and hydrogen infrastructure. Gas infrastructure should also be eligible to generate WAIRE points. Natural gas trucks are the only commercially available Class 8 trucks suitable for goods movement. Supporting the immediate deployment of Low NOx natural gas trucks would significantly assist the region to meeting the 2023 attainment deadline.

Thank you again for the opportunity to comment on the Proposed Regulation. If you have any questions, please feel free to contact me.

Respectfully submitted,



Kevin Maggay
Energy and Environmental Affairs Program Manager

To: Ian MacMillan and Victor Juan, South Coast Air Quality Management District
From: Britta McOmber, UCLA Luskin Center for Innovation
Date: December 6, 2019
RE: Proposed Rule 2305 Warehouse Indirect Source Rule - Warehouse Actions and Investments to Reduce Emissions (WAIRE) Program

LCI commends the South Coast Air Quality Management District for crafting a Warehouse Indirect Source Rule. We would like to support SCAQMD in development of the final rule that would reduce GHG emissions and harmful diesel emissions from associated heavy-duty truck (HDT) traffic while incentivizing the transition to the cleanest available HDTs. We believe a well-designed Warehouse ISR could improve air quality, public health, and quality of life for communities with concentrated warehousing development. Our potential ability to help quantifiably estimate some of these benefits will depend on the level of specificity available from SCAQMD pertaining to the proposed rule. Thus, please consider these questions for future revisions and workshops of Proposed Rule 2305.

Sensitive Receptors and Local Benefit Weighting

We would appreciate a better understanding of how the rule will define “Sensitive Receptors” within (c) Definitions. Working group meetings^{1, 2} have discussed the proximity of warehouses to sensitive receptors as an important component of the weighted Localized Benefit in the equation that will determine the value of WAIRE points. There should be a clear definition of this term in the draft rule itself, as it is referenced in the WAIRE Menu. The definition could include a specific description of the populations most vulnerable to the impacts of poor air quality (who), and the types of land uses or facilities where vulnerable populations are located or concentrated (type). SCAQMD could further consider a definition of what is meant by “Local Benefit” in the draft rule; for example, defining the distance from a warehouse at which Sensitive Receptors would influence the value of WAIRE Points (proximity).

1. Will “Sensitive Receptors” and/or “Sensitive Sites” be defined under (c) Definitions in a future version of Proposed Rule 2305?
2. Will “Sensitive Receptors” be defined separately from “Residential Receptors” and “Worker Receptors”? Does SCAQMD intend to include “Residential Receptors” and “Worker Receptors” as components of the weighted Localized Benefit?
3. When is the expected timeline for release of the Supplemental Handbook that will include default calculations of Costs, Local Benefits, and Direct Emission Reductions for each menu item?

¹ Facility-Based Mobile Source Measures Warehouse Working Group. (Aug 23, 2019). *South Coast Air Quality Management District*.

² Facility-Based Mobile Source Measures Warehouse Working Group. (Sep 19, 2019). *South Coast Air Quality Management District*.

Reporting, Notification, and Recordkeeping

We are not aware of text in the draft rule regarding who bears the responsibility of identifying or reporting the number of “Sensitive Receptors” in close proximity to warehouses and distribution centers. It would be useful to specify the role of SCAQMD or some other independent entity in doing so under a uniform approach. This metric could follow the format of other initial site information required in the report, including the number, type, and proximity of Sensitive Receptors (i.e., there are two schools within one mile of the Facility A).

4. Will identification of “Sensitive Receptors” be the responsibility of SCAQMD staff, the responsibility of the warehouse owner/operator, or another entity?

Transferring WAIRE Points to a Different Warehouse

We also have a question about Section (d)(3)(A) Transferring WAIRE Points to a Different Warehouse. It states “If a warehouse operator conducts warehousing activities at more than one warehouse, then WAIRE Points earned for one warehouse may be used at the other warehouse(s) under the operational control of that same warehouse operator. Only those points that are earned in excess of a warehouse operator’s WAIRE Points Compliance Obligation at that site may be transferred. Any WAIRE Points transferred to a different warehouse shall be calculated using the values specified in the WAIRE Menu in Table 3.” We are unsure if this provision could unintentionally weaken a key goal underpinning the Rule, namely the *local* in “[t]o facilitate local and regional emission reductions through actions and investments at warehouses.”³

5. Could there be some mechanism or language added to this section of the Proposed Rule that would restrict the transferring of WAIRE Points between warehouses with the same operator in a way that maximizes local benefits?

Transparency

Finally, an attendee of the November 13th Warehouse ISR working group raised a question about transparency of Proposed Rule 2305: What information from the Annual WAIRE Reports would be available to the public? While we appreciate there may be industry-sensitive information in the Annual Reports that warehouse owners/operators may want to protect, LCI as a public serving research entity would appreciate having access to information about the associated investments. We also recognize that it is important that communities with high concentrations of warehousing activities and residents in close proximity to warehouses have the ability to know which warehouse owners/operators are, and are not, in compliance with the Rule.

³ *Facility-Based Mobile Source Measures Warehouse Working Group. (Sep 19, 2019). “Warehouse ISR Working Group.” South Coast Air Quality Management District. Slide 28.*

Thank you for your substantial effort to prepare the Proposed Warehouse Indirect Source Rule. I also appreciate the consideration of SCAQMD staff in reviewing these questions, and look forward to further discussions and working group meetings on the content of the rule.

Sincerely,

Britta McOmber
Staff Researcher, Luskin Center for Innovation
UCLA Luskin School of Public Affairs
3323 Public Affairs Building, Box 951656
Los Angeles, California 90095
Office: (310) 825-7202
Email: bmcomber@luskin.ucla.edu

**CENTER FOR COMMUNITY ACTION & ENVIRONMENTAL JUSTICE
EARTHJUSTICE
EAST YARD COMMUNITIES FOR ENVIRONMENTAL JUSTICE
SIERRA CLUB
TEAMSTERS LOCAL 1932**

January 24, 2020

Chair Burke and Members of the Committee
Mobile Source Committee
South Coast Air Quality Management District
21865 Copley Drive
Diamond Bar, CA 91765

Re: Comments on Preliminary Draft Warehouse Indirect Source Rule (Proposed Rule 2305)

Dear Chair Burke and Members of the Committee:

On behalf of the undersigned coalition of community and environmental organizations, we submit these comments on the preliminary draft warehouse indirect source rule that is before your Committee. Our coalition represents the communities who live and work adjacent to warehouses and who are consistently and disproportionately harmed by the freight industry every day. After years of advocating for a strong and equitable warehouse rule that will achieve necessary emissions reductions, our communities can no longer afford a business model that places industry over our health. We need our Air District to use its considerable legal and regulatory authority to develop a strong warehouse rule that tackles the region's freight pollution crisis. Indeed, the warehouse industry must be held accountable for business decisions that contribute to consistent and toxic pollution in our neighborhoods.

As this Committee hears updates today on the progress of the warehouse rule, we provide the following input for the Committee's additional consideration:

I. The Freight Sector Must Move to Zero-Emissions.

As we have repeatedly emphasized to Air District staff, our community members expect zero-emissions technology as part of any warehouse rule, in order to truly address the air quality and health crises caused by the warehouse industry. Any investment in "near-zero" equipment and infrastructure at this point is counterproductive and should not be included in this rule. Although we commend the staff's decision to not grant points for near-zero infrastructure in the "WAIRE" menu of in-site investment items, the current menu still includes the purchase of near-zero trucks as one of many options to earn points toward compliance. In addition, we are deeply concerned that zero-emissions truck trips earn the same number of points as near-zero truck trips in the current menu. Given that the lion's share of air quality benefits from the rule stem from the use and operation of trucks, zero-emissions trucks must be elevated and granted a greater points value in the final menu. Near-zero technologies only delay the development and implementation of the zero-emissions equipment necessary to clean up pollution in our communities.

We continue to hear industry representatives push near-zero technology in our working group meetings, but near-zero is often used as code for traditional combustion technologies burning methane gas. These technologies provide no bridge to advancing zero-emissions operations, and ultimately create barriers to the transition to and implementation of zero-emissions infrastructure. Moreover, the communities listed on this letter are those that bear the brunt of the natural gas and oil infrastructure that supports these combustion technologies. These communities do not want the continued negative climate and health impacts that accompany the propagation of fossil fuel technology, equipment, and infrastructure.

Near-zero advocates talk about their technologies being available now as an argument why the region should invest robustly in natural gas infrastructure and vehicles. We remind the Air District that zero-emissions technologies are developing rapidly and by the time compliance obligations start for this rule, we expect significant further developments in the zero-emissions technologies space. We must take this opportunity to elevate zero-emissions technology and infrastructure in this rule—and begin phasing out near-zero—in order to ensure effective and meaningful regulation of the warehouse industry.

The freight sector must move to zero-emissions to meet not only our greenhouse gas reduction targets, but also to be consistent with the directives and plans adopted at the regional, State, and even global level. Indeed, the transition to zero-emissions will happen, and the Air District is wise to begin planning for it.

II. The Points Compliance Obligation Must Reflect the Disproportionate Impacts on Environmental Justice Communities.

The specifics of the warehouse points compliance obligation are still being finalized in the warehouse working group. The stringency value, annual variable, and points for each menu item are critical to creating a strong rule, and we anticipate providing more detailed comments as these factors are further developed. We want to ensure at this point, however, that the points obligation for each warehouse accounts for nearby sensitive receptors, and that facilities located in environmental justice communities and/or neighbor sensitive receptors must either receive a higher points obligation or attain zero-emissions operations on an accelerated timeline. A just and equitable warehouse rule must ultimately aid in region-wide emissions reductions and avoid approaches that could allow for picking winners and losers, with some communities getting cleaner air and others not. A compliance obligation that reflects the disproportionate impacts faced by disadvantaged communities will be effective in ensuring warehouses clean up their pollution in *all* communities.

Although the preliminary draft rule does not define "sensitive receptors," any final rule should include a definition that encompasses residential areas, schools, hospitals, daycare facilities, nursing homes, parks, or other areas where occupants are more susceptible to the negative impacts of pollution. Thus, for example, the rule would require that any facilities built near schools receive a greater warehouse points compliance obligation, or attain zero-emissions operations faster. Whether by its stringency or accelerated implementation, the rule must accommodate an evolving points system that truly reflects the reality of warehouse operations in the region.

We also note that the current menu of on-site investment items does not include designated on-site resting areas for workers and truck drivers that prevent parking and idling in nearby communities. This item would address one of the major impacts of freight operations in our communities.

III. Our Communities Cannot Afford Further Delays in the Rulemaking Process.

The warehouse rule should have been before the Air District's Governing Board in December of this past year. Instead, the rule is now tentatively scheduled to go to the Governing Board in mid-2020. We cannot keep pushing the adoption of this rule further into the future, even as pollution continues to envelop our communities. We want to remind the Air District that we expect a finalized and adopted warehouse rule by May 2020. We appreciate the Air District's staff pushing hard on this rule, and we encourage Committee members to support staff meeting the May 2020 deadline given the importance of this rule.

We appreciate your consideration of these comments, and appreciate the robust work done so far to develop a meaningful warehouse rule. We look forward to working with the Air District to lift up the voices of our community members and tackle the harms caused by the warehouse industry.

Sincerely,

Adrian Martinez
Michelle Ghafar
Earthjustice

Andrea Vidaurre
Center for Community Action & Environmental Justice

Taylor Thomas
East Yard Communities for Environmental Justice

Carlo De La Cruz
Sierra Club

Randy Korgan
Teamsters Local 1932

cc:

Wayne Nastri
Executive Officer
South Coast Air Quality Management District

Ian MacMillan
Planning and Rules Manager
South Coast Air Quality Management District

4675 MacArthur Court, Suite 800
Newport Beach, California 92660 USA
949.437.1400 fax: 949.612.1894

www.CleanEnergyFuels.com

Todd R. Campbell
Vice President Public Policy & Regulatory Affairs

January 15, 2020



Mr. Ian MacMillan
Mr. Victor Juan
South Coast Air Quality Management District
21865 Copley Drive
Diamond Bar, CA 91765

Re: Comments on the December 10 Warehouse Indirect Source Rule Working Group

Dear Mr. MacMillan, Mr. Juan, and South Coast Air Quality Management District Staff:

Clean Energy appreciates the opportunity to comment on the latest staff presentation during the Warehouse Indirect Source Rule (ISR) Working Group on December 10, 2019. We would like to provide the following comments on the proposed WAIRE point system:

WAIRE methodology must prioritize actual, quantifiable and SIP creditable emissions reductions.

We believe there is too much emphasis in the proposed WAIRE menu system to make investments that do not necessarily result in real, tangible, and quantifiable emissions reductions. Given that the South Coast airshed must reach federal clean air attainment standards in less than 3 years, WAIRE points should be focused and heavily weighted on the emissions reduction side of the equation.

We therefore recommend that AQMD staff place greater emphasis and weight on the action side of the menu and less on the investment side of the menu. We would also recommend that WAIRE points allocated toward investments be held until the regulated party can demonstrate to AQMD staff that the investment is helping the related facility to generate WAIRE points on the action side of the menu.

Using your example on slide 5, company A makes a \$20K investment but cannot demonstrate a regional emissions reductions or local benefit.

Company B makes a \$20K investment and can demonstrate a 60 lb. NOx reduction and a 0.4 DPM reduction.

Under our proposal, company A would be eligible for 1 WAIRE point but does not receive that WAIRE point until company A can demonstrate to AQMD staff that the investment was being used as intended. Company B, however, would receive 5 WAIRE points because company B can demonstrate to AQMD staff that their investment is being used.

The last thing the South Coast air basin needs is a rule that promotes stranded asset investments that achieve no real emissions reduction. By making the credit for an investment dependent upon usage, the rule will incentivize the regulated party to proactively plan for

system installation and usage in advance. The way the WAIRE system is currently proposed, the AQMD staff did not develop the rule in such a way that compels the regulated party to make investments that will lead to real reductions.

Early Adopter Bonus

We strongly encourage AQMD staff to consider an “early adopter bonus” for facilities that commit to achieving emission reductions prior to rule capture of the regulated party. While we do not have any specific recommendations on what multiplier should be used, one possible starting point could be as follows:

- 2x credit generation for actions completed 3 or more years in advance of rule capture;
- 1.5x credit generation for actions completed 2 or more years in advance of rule capture;
- 1.25x credit generation for actions completed 1 year or less in advance of rule capture.

Equal Treatment

Near-zero (defined as 0.02 NOx) should be treated equally as zero emissions technologies for onsite mitigation and under the Warehouse ISR for that matter. It is widely known that so-called zero emission strategies are not free of polluting emissions when the power generation is not from renewable sources. In fact, the South Coast Air Quality Management District expressed on numerous occasions that low NOx trucks certified at 0.02 grams NOx are essentially equivalent to zero emission battery electric trucks and buses based on the profile of the regional electrical grid. Of course, powerplants within the region are often located in disadvantaged communities and this pollution should not be overlooked. Additionally, in-state sources of renewable natural gas are increasingly coming online and have the ability of delivering up to minus 400 carbon intensity levels for low NOx trucks which could result in low NOx trucks being better on climate emissions than zero emission platforms. It is for all of these reasons that we believe the Warehouse ISR should not treat zero and near zero (low NOx trucks) any differently when it comes to credits or as options on the WAIRE menu.

Project Costs Do Not Equate to Emissions Reductions

Project cost tiers shown in the point system approach are too low if cost should be included at all. Including cost provides a path to accumulate points without a corresponding level of emissions reductions. It would be better to have an optional mitigation fee that can then be used to fund real quantifiable emission reductions. If costs are used to generate points then the costs should be amortized over the useful life of the equipment rather than upfront, and they should be awarded based on actual use of the equipment. Using cost as a point parameter may prevent the regulated party from using public funding.

Specific Comments on the Draft WAIRE Menu

- Add NZ as an option to every item that only shows ZE.
- Eliminate points for purchasing vehicles and only award points for actual use.
- Eliminate points for car charging, car charging does not eliminate DPM or other truck emissions.

- Allow trucks to be purchased by a 3rd party to address businesses that do not own/operate trucks, but they could fund 3rd party trucking companies.
- Points should only be earned upon completion of infrastructure projects, not over incremental development milestones. Even better, infrastructure points should be earned based on use.

Conclusion:

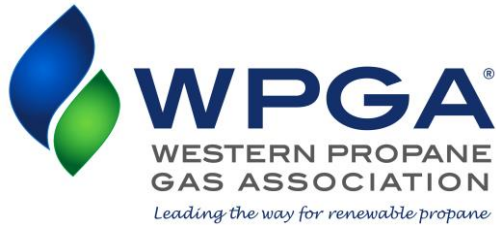
Clean Energy would like to thank and support AQMD staff's efforts to develop a meaningful Warehouse ISR. The development of the WAIRE menu in terms of how actions are valued, how WAIRE points are generated, and how the WAIRE menu incentivizes regulated parties to comply is critical to the rule's success. We hope AQMD staff takes our comments under full consideration so that the Warehouse ISR can achieve the maximum amount of emissions reductions in the shortest period of time.

If you should have any questions or would like to have further input from our team, please do not hesitate to contact me directly.

Sincerely,

A handwritten signature in black ink, appearing to read 'Todd R. Campbell', with a stylized flourish at the end.

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



February 12, 2020

Mr. Ian MacMillan
Mr. Victor Juan
South Coast Air Quality Management District
21865 Copley Drive
Diamond Bar, CA 91765

RE: Warehouse Indirect Source Rule

Dear Mr. MacMillan, Mr. Juan, and South Coast Air Quality Management District Staff:

Thank you for the opportunity to comment on the South Coast Air Quality Management District's (SCAQMD) development of the Warehouse Indirect Source Rule (ISR) and WAIRE program aimed at reducing and facilitating local and regional emission reductions associated with warehouses and mobile sources attracted to warehouses. The Western Propane Gas Association (WPGA) seeks to be a valuable contributor in both the development of the rule and the policies and procedures that may emerge as a result of these discussions.

WPGA would like to commend SCAQMD staff on your efforts to seek deeper NO_x reductions from mobile sources that have a disproportional impact upon the South Coast Air Basin and disadvantaged communities. We believe as the South Coast strives to reach federal clean air attainment and improve upon the health of impacted communities, near-zero and low-NO_x technologies using renewable fuel are the most efficient and cost-effective way to address GHG and NO_x emissions, especially in the near-term.

When looking toward the future, the propane industry is investing heavily in renewable propane, derived from sustainable sources like beef tallow or vegetable oil. The carbon intensity for renewable propane is on par with that of electric and prioritizing near-zero and low-NO_x technologies, such as those using renewable propane, in the ISR will play an important role by sending a signal to the market of the importance of in-state production of renewable propane and the continued production of low-NO_x engines to help reduce greenhouse gas emissions for decades to come.

The Western Propane Gas Association appreciates your work in this area and hope AQMD staff take a holistic view of the role near-zero and low-NO_x technologies using renewable fuels can play in reducing emissions associated with warehouses and mobile sources attracted to warehouses.

Sincerely,

Ben Granholm
Regulatory Affairs Specialist

April 9, 2020

Victor Juan, Program Supervisor
South Coast Air Quality Management District
21865 Copley Drive
Diamond Bar, CA 91765

RE: Comments on the Draft WAIRE Menu Technical Report

Dear Victor,

The Lion Electric Co. appreciates the opportunity to provide comments on the Draft WAIRE Menu Technical Report for Warehouse Indirect Source Rule (ISR). Lion strongly supports the South Coast Air Quality Management District's continued efforts to accelerate the deployment of zero-emission vehicles and infrastructure to reduce harmful GHG and criteria pollutant emissions in our state's most impacted communities.

Lion is a leading Original Equipment Manufacturer of all-electric vehicles, including zero-emission school buses and zero-emission trucks and shuttle buses, with deployments in California, New York, Massachusetts, and other states across the nation. Today, there are currently over 300 Lion electric school buses in operation in North America that have been carrying kids to school every day safely for the last three years, with over six million miles of service provided.

Please see below for our comments.

The estimated incremental cost for a Class 8 zero-emission (ZE) truck is listed as being \$150,000 in Table 2 of the draft report. However, with the average diesel Class 8 truck costing about \$150,000 and a typical ZE Class 8 truck costing roughly \$500,000 for a longer range truck (a cost more accurately outlined in Table 9), the incremental cost is actually closer to \$350,000. This is a substantial increase from the initially proposed \$150,000 and of course results in the proposed WAIRE points achieved per ZE Class 8 truck purchase being lower than reasonably expected. With a more accurate incremental cost being closer to \$350,000, this would mean that the WAIRE points earned for a ZE Class 8 truck purchase should be 14 ($\$350,000 / \$25,000 \text{ AUM} = 14$). With more WAIRE points earned by warehouses for choosing ZE truck options, not only will this incentivize warehouse owners/operators to begin transitioning their fleets to zero-emission, it will also accelerate the emissions reductions realized by the Warehouse ISR.

Lion appreciates the inclusion of the Lion8 on the list of commercially available ZE trucks on page 4 of the draft report. We would like to request the inclusion of our Class 6 and 7 electric



trucks as well – the Lion6 and Lion7. In addition, we also offer the Lion8 Tractor and Lion8 Straight-body Truck. These trucks represent our other commercial electric truck offerings and are available to suit the needs of a variety of fleets, including those that serve warehouses. Lion thanks South Coast Air Quality Management District (SCAQMD) for considering our vehicles.

The total cost of ownership (TCO) charts (Tables 7-10) present a default operating life of 12 years for all vehicle types and classes listed. As part of the operating life, a “midlife cost” is included, which is defined as a battery replacement for battery electric vehicles (BEVs). Lion would like to point out that with our three years of on-road BEV experience, we have noticed less than 0.5% rate of battery life degradation per year in our vehicles. What this means is that, at this current rate, these vehicles would not need a “midlife” battery replacement before 12 years of use because the batteries will have had only minor reductions to capacity through wear and tear. This would result in a lower TCO for BEVs as presented in Tables 8-10 specifically, because the estimated large cost of a battery replacement event would likely be factored out. In order to further protect the battery life of our vehicles, we offer a standard battery warranty of eight years, and an optional extended warranty of 12 years.

Lion strongly supports SCAQMD’s proposal to apply a multiplier of three to truck-related actions taken by warehouses to gain WAIRE points. This is an effective way to incentivize warehouse owners/operators to begin transitioning their fleets to zero-emission and to accelerate emissions reductions in the most impacted communities in the SCAQMD region. To further this, Lion respectfully recommends that the multiplier be increased to 5 for ZE truck-related actions specifically (and to keep the multiplier at 3 for near-zero emission (NZE) truck actions). This would help distinguish between the greater costs required for warehouses to acquire ZE trucks as opposed to NZE trucks, and would reward warehouse owners/operators for choosing the cleanest available technology to accelerate emissions reductions.

Lion is proud to support SCAQMD as it works to pass the Warehouse ISR. This ISR will greatly improve the air quality and health of the communities surrounding warehouses in the region and will prove a successful case study for other regions and communities across the state.

Lion appreciates the opportunity to provide comments on the Draft WAIRE Menu Technical Report and looks forward to continuing to work with SCAQMD on projects to reduce emissions in our state’s most impacted communities.

Sincerely,



Nate Baguio
Vice President of Sales





**Community Development Department
Planning Division**

14177 Frederick Street
P. O. Box 88005
Moreno Valley CA 92552-0805
Telephone: 951.413-3206
Fax: 951.413-3210

April 30, 2020

Ian MacMillan
Planning and Rules Manager
South Coast Air Quality Management District
21865 Copley Dr.
Diamond Bar, CA 91765

Subject: Comments on Draft WAIRE Menu Technical Report and Proposed Rule 2305 –
Warehouse Indirect Source Rule – Warehouse Actions and Investments to Reduce
Emissions (WAIRE) Program

Dear Mr. MacMillan:

In reviewing the WAIRE Menu Technical Report and the draft Rule, staff is concerned that the complexity of the methodology would make it costly for operators to administer and comply with the rule. While staff understands that the subject is complex, a more streamlined methodology would reduce administrative costs for operators. It is also important to build into the methodology an incentive for buying or using zero or near-zero emissions equipment. Unless there is a financial advantage of buying and/or using the zero or near-zero emissions equipment, operators may simply not buy or upgrade equipment, and will instead choose to pay the mitigation fee. Since the objective is to reduce air quality emissions, it would seem to be most beneficial to encourage the purchase and use of zero and near-zero. Based on the details in the Technical Report and the draft Rule, there is not enough information to evaluate the impacts and costs of implementation for operators. The WAIRE Menu Technical Report should not be finalized until the draft Rule is further refined, and the mitigation fee is identified.

Staff requests to be notified of the availability of the draft Final Rule and the Socioeconomic Study, and all updates on the Rulemaking process. Also, just to let you know, the link to the Proposed Rule on the SCAQMD warehouse webpage is currently not working. Thank you for the opportunity to comment and we look forward to reviewing the forthcoming documents. If you have any questions or would like to discuss further, please feel free to contact Chris Ormsby, Senior Planner at (951) 413-3229, or by email at chriso@moval.org.

Sincerely,

Manuel A. Mancha
Community Development Director

c: Patty Nevins, Planning Official
Chris Ormsby, Senior Planner
Victor Juan, Program Supervisor SCAQMD

**CENTER FOR COMMUNITY ACTION & ENVIRONMENTAL JUSTICE
EARTHJUSTICE
EAST YARD COMMUNITIES FOR ENVIRONMENTAL JUSTICE
SIERRA CLUB
TEAMSTERS LOCAL 1932**

May 1, 2020

Ian MacMillan
Planning and Rules Manager
South Coast Air Quality Management District
21865 Copley Drive
Diamond Bar, CA 91765

Re: Comments on Draft WAIRE Menu Technical Report for Warehouse Indirect Source Rule (Proposed Rule 2305)

Dear Mr. MacMillan:

On behalf of the undersigned coalition of community and environmental organizations, we submit these comments on the draft “WAIRE” menu technical report released on March 3, 2020 for the warehouse indirect source rule. Our coalition continues to appreciate the robust work done so far to develop a strong warehouse rule. We also remain concerned, however, that the draft rule still does not reflect the reality of warehouse operations and the pollution crisis in the South Coast air basin. The Air District cannot afford to waste this opportunity to ensure effective and meaningful regulation of the warehouse industry, and our communities cannot afford a weak rule. Indeed, our lives literally depend on a strong and equitable warehouse rule that will achieve necessary emissions reductions in the region—particularly as the COVID-19 pandemic exacerbates the health impacts of air pollution in our communities.

We request that Air District staff update the draft rule and WAIRE menu to reflect our comments below prior to submitting them to the Air District's Governing Board for adoption. These comments emphasize again many of the concerns and nuances we have repeatedly raised throughout this rulemaking process, some of which continue to go unaddressed. We hope this additional input helps strengthen this life-saving regulation.

I. The Rule Must Prioritize Zero-Emissions Technology.

We have repeatedly emphasized to Air District staff that zero-emissions technology is the only solution to truly address the air quality and health crises caused by the warehouse industry. Any investment in "near-zero" equipment will likely slow the transition to a zero-emissions freight sector. Such investments will compete with the zero-emissions technologies we need, create concerns about stranding assets, and thus disincentive a zero-emissions future. We therefore commend the Air District's decision to give nearly double the compliance points for the purchase of zero-emissions trucks compared to near-zero trucks in the current WAIRE menu

of on-site investments. We support this points distribution and encourage an even greater points value to reflect the sizeable emissions benefits possible from zero-emissions trucks.

Unfortunately, zero-emissions truck trips continue to earn nearly the same number of points as near-zero truck trips in the menu, particularly for Class 4-7 trucks. This is partly due to underestimating regional (NO_x) emissions reductions from switching to zero-emission trucks, while overestimating the NO_x reductions possible from switching to near-zero trucks. In addition, we oppose the fact that the assessment assumes the local (DPM) benefits of zero-emission trucks are the same as near-zero trucks. This is just not the case. Importantly, the current WAIRE menu also reflects overly conservative cost estimates for zero-emission truck trips, even in the face of more and more data on declining battery, maintenance, and fuel costs.¹ The Union of Concerned Scientists recently summarized the results of studies conducted by the California Air Resources Board, the International Council on Clean Transportation, and ICF, all of which concluded that the total cost of ownership for Class 6 and 8 electric trucks is competitive or lower than diesel today, and are estimated to be lower than diesel in the next decade, even without financial incentives.²

Ultimately, the gulf between zero and near-zero technologies is wider than industry representatives claim, with “near-zero” just a code for traditional combustion technologies burning methane gas. Our communities refuse to continue to bear the disproportionate burdens of the natural gas and oil infrastructure that propagates these combustion technologies.

The continuing development of zero-emissions technologies has been stunning, and the evidence is growing that these technologies will be more widely available and commercially feasible by the time compliance obligations begin for this rule. The Air District has the opportunity to take bolder action here, and implement a vision for transitioning to a zero-emissions future that reflects the directives and plans adopted at the regional, State, and global level. As currently drafted, the proposed rule and WAIRE menu give no indication for when communities can expect the complete phase-out of natural gas and combustion technologies that cause negative climate and health impacts.³ Without clear targets and goals, there is no reason to have confidence the final rule will meaningfully regulate the warehouse industry, or help us meet our greenhouse gas reduction targets and air quality requirements.

¹ See, e.g., Bloomberg, [How Big Will the Battery Boom Get? Try \\$548 Billion, BNEF Says](#) (June 19, 2018) (reporting “[b]attery prices are expected to fall to \$70 a kilowatt-hour by 2030, down 67 percent from today”).

² Union of Concerned Scientists, [Ready for Work: Now is the Time for Heavy-Duty Electric Vehicles](#) (Dec. 2019) at pp. 12-13 (“With California’s policies and incentives, however, the total cost of ownership is lower than diesel today for 19 of 20 vehicle scenarios examined in the three studies.”).

³ European Federation for Transport & Environment, [Do Gas Trucks Reduce Emissions?](#) (Sept. 2019) at p. 10 (“Gas vehicles deliver negligible GHG benefits compared to diesel.”).

II. Warehouses Near Environmental Justice Communities Must Reach Zero-Emissions Operations Faster.

We understand that Air District staff are still developing the stringency value and annual variable for the final rule. We want to ensure at this point, however, that these factors are adjusted appropriately so that the points obligation for each warehouse accounts for nearby sensitive receptors. In other words, facilities located in environmental justice communities and/or those neighboring sensitive receptors must either receive a higher points obligation or attain zero-emissions operations on an accelerated timeline. We appreciate the Air District's recognition that a just and equitable warehouse rule will require such facilities to clean up their operations faster by including compliance points for local emissions reductions.

Nonetheless, the current proposed range for the stringency factor creates potentially wide differences in the annual points compliance obligation for the same facility, with lower stringencies allowing facilities to comply using just one WAIRE menu item annually.⁴ Providing such compliance pathways renders the menu useless in the face of otherwise low points obligations and will ultimately fail to reduce region-wide emissions. Our communities should not be forced to accommodate low stringency values from the get-go because facilities want to skirt meaningful compliance as long as possible. We have waited long enough for warehouses to clean up their toxic pollution in our neighborhoods.

The draft rule materials still do not define "sensitive receptors," which should encompass residential areas, schools, hospitals, daycare facilities, nursing homes, parks, or other areas where occupants are more susceptible to the negative impacts of pollution. We also note that the current menu of WAIRE items continues to omit designated on-site resting areas for workers and truck drivers that prevent parking and idling in nearby communities. This item would address one of the major impacts of freight operations in our communities.

III. Facilities Should Not Be Allowed to Pay Their Way Out of Compliance.

The latest draft rule materials indicate a mitigation fee set at \$1000 per WAIRE point. We are deeply concerned that this fee option will become a "pay to pollute" alternative, with facilities simply paying their way out of their compliance obligation each year rather than investing in the on-site menu items. The compliance examples provided by Air District staff alarmingly seem to provide for just such an alternative, listing fee totals that would satisfy a facility's entire points obligation for a compliance year.⁵ Some of these total fees are as low as a few thousand dollars for a facility to comply.⁶ In the face of such a generous compliance option, we do not doubt that facilities will choose to pay rather than change their operations or invest in long-term emissions reduction measures.

⁴ SCAQMD, *Warehouse ISR Working Group Presentation* (Mar. 3, 2020), slides 16-18.

⁵ *Id.* at slides 16-20.

⁶ *Id.* at slides 19-20.

The mitigation fee must therefore be limited, and designed to incentivize meaningful investments in technologies that can instead address the region's freight pollution crisis. Importantly, any points generated per dollar must be appropriately discounted for those facilities located near sensitive receptors and/or in environmental justice communities. And we reiterate that the final rule should also specify how and where the mitigation fees generated each year will be used. Given that our members bear the brunt of this industry's operations, we expect such fees will fund emissions reduction projects in our communities.

IV. The Rule Must Prioritize Zero-Emissions Charging Infrastructure.

We appreciate the inclusion of compliance points for zero-emissions charging infrastructure, which will serve as a necessary push for the freight sector to invest now in zero-emissions technology. We request the inclusion of additional cost points for charger installation activity that includes installation of onsite generation, distributed energy resources, and battery energy storage for electric transportation. This will reduce grid demand, support peak shaving, and support increased and efficient integration of renewables into our transportation system.

V. The Socioeconomic Analysis Should Address Community Impacts.

We understand the Air District's socioeconomic analysis must include costs to industry and potential industry responses as part of this rulemaking process. Yet any analysis of this industry is incomplete without consideration of its real health impacts on surrounding communities. Any discussion of potential impacts to jobs and the local economy must reflect data on health risks from ozone and fine particulate matter pollution and the reality that our community members are falling ill and dying because of this industry. Moreover, the analysis should include job benefits from implementation of cleaner technologies at warehouses. For example, the Los Angeles Economic Development Corporation recently determined that jobs in the electric vehicle space are a significant source of employment in Los Angeles County.⁷ We cannot focus on impacts to the industry alone at the exclusion of understanding the demographics and health data in nearby communities.

VI. This Rulemaking is Critical for Public Health.

Our coalition has advocated for years for a strong warehouse rule. It is a critical rule to protect communities adjacent to warehouses. We understand that Air District staff are working hard to push this rule forward, however, we also live in communities long burdened by disproportionately high levels of air pollution and are now more than ever at greater risk of serious illness and death in the ongoing COVID-19 pandemic.⁸ We ask that this rule be adopted by March of 2021.

⁷ Los Angeles Economic Development Corporation, [*California and SoCal EV Industry is Growing, Giving Region Global Competitive Advantage*](#) (Mar. 1, 2020).

⁸ Wu et al., [*Exposure to Air Pollution and COVID-19 Mortality in the United States*](#) (Apr. 5, 2020).

Comment letter on draft WAIRE menu technical report for warehouse ISR

Page | 5

May 1, 2020

We appreciate your consideration of these comments, and look forward to continuing to work with the Air District to strengthen the warehouse rule.

Sincerely,

Michelle Ghafar
Adrian Martinez
Earthjustice

Andrea Vidaurre
Center for Community Action & Environmental Justice

Taylor Thomas
East Yard Communities for Environmental Justice

Carlo De La Cruz
Sierra Club

Randy Korgan
Teamsters Local 1932

cc:

Wayne Nastri
Executive Officer
South Coast Air Quality Management District



May 1, 2020

Via Email ONLY

Ian MacMillan
Planning and Rules Manager
South Coast Air Quality Management District
21865 Copley Drive
Diamond Bar, CA 91765

Re: Comments on Draft WAIRE Menu Technical Report for Warehouse Indirect Source Rule (Proposed Rule 2305)

Dear Mr. MacMillan:

Thank you for the opportunity to submit these comments on the draft “WAIRE” menu technical report released on March 3, 2020 for the warehouse Indirect Source Rule. Undoubtedly, voluminous work has been done to get us to this point. We provide the following comments to continue to move us toward better air quality, health outcomes and clean job careers as follows:

I. The Rule Must Prioritize Zero-Emission Charging Infrastructure and Related Resiliency technologies:

The Rule should allocate points for zero emission charging infrastructure and allocate additional points for warehouses that install distributed energy resources (“DER”), such as on-site solar generation, battery energy storage and micro-grids. These related technologies will offset the costs of their fuel (electricity). DER can and will provide opportunities to peak shave, as well as provide much-needed resiliency. SCAQMD can and should help encourage warehouses to invest in clean technologies that provide cost, climate, and job creation benefits.

II. The Rule Should Prioritize Projects that are done via a Project Labor Agreement with local and targeted hiring provisions:

May 1, 2020

Moving away from fossil-fuel dependent transportation necessitates considering workforce development in the clean, green economy. SCAQMD can encourage apprenticeship-based job creation by allocating a high point value to jobs that commit to using a Project Labor Agreement that includes features such as prevailing wage, Veteran hire, Disadvantaged Community member, and local hiring commitments. The latter (local hiring) ensures targeted efforts to ensure that the workforce is derived from communities around the warehouse, ensuring less driving by workers to get to a job site. Put simply: less workers driving from far away distances to a job site results in less emissions, specifically nitrogen oxides.

While the AQMD is considering how an Indirect Source Rule and other actions impact goods movement industry, we respectfully request it similarly consider the tremendous workforce potential these actions can have on local job creation and take a leadership role accordingly

III. The Mitigation Fee should be higher and cost-prohibitive.

The latest draft indicates a mitigation fee set at \$1000 per WAIRE point. An incredibly low fee ensures companies will likely consider the cost-benefit analysis of simply paying the fee versus taking meaningful action in the right direction to improve good air quality and simultaneously create good green jobs along the way.

Finally, any Mitigation Fees earned should be joined with the Port of Los Angeles and Port of Long Beach's Clean Trucks Program for purposes of transitioning our goods movement trucking fleet to a zero-emission fleet.

We appreciate your consideration of these comments, and look forward to continuing to work with the Air District to strengthen the warehouse rule.

Sincerely,

Jennifer J. Kropke, Esq.

Director of Workforce and Environmental Engagement,

International Brotherhood of Electrical Workers, Local Union Eleven and National Electrical Contractors Association, Los Angeles Chapter, Labor Management Cooperation Committee

cc:

Wayne Natri

Executive Officer

South Coast Air Quality Management District

LATHAM & WATKINS LLP

May 1, 2020

VIA EMAIL

South Coast Air Quality Management District
Attn: Ian MacMillan and Victor Juan
21865 Copley Drive
Diamond Bar, CA 91765

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Milan

File No. 053552-0069

Re: Discussion Draft Rule 2305, Warehouse Indirect Source Rule (ISR) and Draft WAIRE Menu Technical Report

Dear Messrs. MacMillan and Juan:

Lineage Logistics (“Lineage”) is the world’s largest temperature-controlled logistics company handling the storage and distribution of significant portions of the nation’s food supply from harvest to local distribution centers. Lineage’s business operations include cold storage, packaging solutions, and transportation management for over 5,000 customers. Lineage owns and/or operates over two hundred warehouse facilities globally, including over 40 facilities within the State of California, a majority of which are within the South Coast Air Basin.

Lineage is at the forefront of efficiency and technological advances in the logistics industry, striving to operate its facilities as efficiently and sustainably as possible. The Lineage Applied Sciences team, consisting of scientists, mathematicians and engineers, designs and applies cutting-edge technology at Lineage facilities. Lineage looks forward to working with the South Coast Air Quality Management District (“District”) on promulgation and implementation of Proposed Rule (“PR”) 2305, Warehouse Indirect Source Rule – Warehouse Actions and Investments to Reduce Emissions (“WAIRE”) Program (“Warehouse ISR”) and seeks an open and constructive dialogue with District Staff.

The logistics sector in Southern California represents over 580,000 jobs¹ and contributes \$224.6 billion per year of economic activity.² It is essential that the Warehouse ISR does not

¹ Institute for Applied Economics, Los Angeles County Economic Development Corporation, *Goods on the Move! Trade and Logistics in Southern California* at ii (May 2017). This total includes Los Angeles, Orange, Riverside, San Bernardino, and Ventura counties, with roughly 90% of those jobs in Los Angeles, Riverside and San Bernardino counties.

² *Id.* at iii.

adversely impact the logistics sector's ability to maintain and grow those jobs and sustain their critical role in the region's economy.

As part of the PR 2305 rulemaking, the District released preliminary draft rule language for PR 2305 on November 13, 2019. The District also released the Draft WAIRE Menu Technical Report ("Technical Report") on March 3, 2020, and requested comments by April 3, 2020. Due to the ongoing COVID-19 crisis, that comment deadline was extended to May 1, 2020. Lineage would like to thank the District for extending the comment deadline due to these unusual and trying circumstances. As the logistics industry is designated as one of a handful of critical infrastructure sectors, Lineage has continued its work in the face of this global pandemic to ensure our customers' products are safely and efficiently stored and distributed, contributing to the security of the world's food supply chain.

Lineage respectfully submits the following comments on the Technical Report and the preliminary draft rule language for PR 2305.

I. DRAFT WAIRE MENU TECHNICAL REPORT

The Technical Report provides the underlying basis for how WAIRE Point values are calculated for each action on the WAIRE Menu. PR 2305 operates by requiring each warehouse operator to accumulate sufficient WAIRE Points to meet its WAIRE Points Compliance Obligation ("WPCO") for the annual compliance period. As such, proper calculation of WAIRE Points is critical in two respects. First, the ability to earn WAIRE Points for particular activities and capital expenditures provide a key incentive for warehouse operators. Second, environmental benefits sought by PR 2305 could be diminished if the WAIRE Menu incentivizes inefficient activity and investment.

A. Role of Utility Incentives

Section 1b of the Technical Report states that the costs for each WAIRE Menu action do not include incentive funds. Certain available incentive funds are limited by statute or regulation such that they may only be used for actions that are above and beyond any existing regulatory requirements, and thus may not be used to purchase equipment for compliance with the Warehouse ISR.³ Lineage requests clarification that this limitation depends on the source of the incentive funds, and it is not a limitation of the Warehouse ISR itself that incentive funds may not be used to earn WAIRE Points. For instance, certain facilities may receive incentives or rebates from electric or gas utilities and wish to use those funds to purchase equipment that would earn WAIRE Points. Lineage would like to ensure that if the utility does not place restrictions on how the funds may be used, those funds may be put toward WAIRE Menu items to earn WAIRE Points.

³ See Health & Saf. Code §§ 44281(b) (Carl Moyer Memorial Air Quality Standards Attainment Program), 44391.4(a) (Greenhouse Gas Reduction Fund), 44271(c) (Alternative and Renewable Fuel and Vehicle Technology Program); 13 CCR § 2353(c)(4) (AB 118 Air Quality Improvement Program Funding Plan).

B. When Are WAIRE Points Earned?

Certain equipment that could be purchased and installed at a warehouse to earn WAIRE Points and comply with the WPCO may require a significant lead-time between the time of purchase and the time of delivery. WAIRE Menu items for installing onsite zero-emission (“ZE”) charging or fueling infrastructure include three milestones to account for the lengthy process and to award WAIRE Points for partial completion of installation during a compliance year.

However, it is unclear when WAIRE Points are earned, and thus available for compliance, for other potentially long-term items, such as installing onsite energy systems. Lineage proposes that all current and future WAIRE Menu items that involve purchasing equipment earn the associated WAIRE Points at the time of purchase, regardless of the time for delivery, which is not fully within the control of the warehouse. For complex WAIRE Menu items that involve purchase, construction, and permitting similar to installing ZE charging infrastructure, Lineage requests that the District similarly break the WAIRE Menu item down into milestones to provide for WAIRE Points throughout the process. This segmentation would encourage these larger-scale WAIRE Menu items by rewarding warehouse operators for incremental progress achieved during a compliance period.

C. Staff Analysis of Annual Average Cost of Electricity

The costs of using charging stations provided in Table 17 of the Technical Report appear to represent a simplified accounting of energy costs. The given scenarios assume fleets of three (3) to twenty (20) trucks utilizing 150-kilowatt (“kW”) chargers, with equal amounts of charging in each time window. The actual energy consumption of large warehouse facilities with dozens to hundreds (depending on Facility throughput) of different vehicle visits per day will be much more complex.

Demand charges will be important for the loads considered in these scenarios, and it is not clear from the Technical Report whether these charges have been included. Although the SCE TOU-EV-9 rate schedule currently waives demand charges until March 1, 2024, demand charges will be phased-in after that time.⁴ Additionally, the SCE TOU-8-RTP rate schedule is more nuanced than the “on-peak,” “mid-peak,” and “off-peak” breakdown presented in Table 17, as the prices for a given hour of a given day are set based on the previous day’s temperature in Los Angeles. For example, the listed demand charge for SCE’s TOU-8-RTP rate schedule is \$12.61/kW. Applying that demand charge to the aforementioned scenarios presented in the Technical Report would result in demand charges of approximately \$5,674 to \$37,830/month, assuming the TOU-EV-9 rate schedule will be similar to the TOU-8-RTP rate schedule.

Lineage respectfully requests additional detail on the charging scenarios used to determine the annual average cost of electricity. In particular, Lineage requests the

⁴ See SCE Schedule TOU-EV-9, March 22, 2019 (available at: https://library.sce.com/content/dam/sce-doclib/public/regulatory/tariff/electric/schedules/general-service-&-industrial-rates/ELECTRIC_SCHEDULES_TOU-EV-9.pdf).

comprehensive set of information used to arrive at the costs presented in Table 17 of the Technical Report. If Lineage were to receive the requested information, then it would be happy to calculate a more precise estimate of demand charges and share that estimate with the District.

II. PROPOSED ADDITIONAL ITEMS FOR WAIRE MENU

Lineage has vast experience and has invested extensive resources in identifying the most efficient equipment and modes of operation at their warehouses. Based on Lineage's experience designing and applying cutting-edge technology at its facilities, Lineage would like to propose additional items for the WAIRE Menu. These actions and investments will reduce emissions and accordingly should be eligible to earn WAIRE Points. Lineage welcomes further discussions with the District to discuss these proposals, and any technical questions, in more detail.

A. Installation and Use of Non-Diesel Emergency Generation

In order to address the growing wildfire risk in California, and to reduce the likelihood of utility infrastructure igniting fires, the State's investor-owned utilities have begun to implement Public Safety Power Shut-offs ("PSPS") to protect public safety when fire risk is high. The nature of Lineage facilities is that the goods stored in its warehouses are required to be maintained in cold storage to meet food safety standards, and such storage conditions require power. As the occurrence of PSPS becomes more common, warehouse owners and operators, including Lineage, are currently and will continue to be required to invest in backup generation systems that were not previously necessary.

While diesel-fueled emergency generators are common, Lineage is evaluating potential non-diesel emergency generation systems. Such systems are efficient and have lower emissions than diesel generators. However, they also are significantly more expensive than diesel-fired systems. Lineage proposes that warehouse owners or operators who choose to invest in non-diesel emergency generation systems should earn WAIRE Points in order to incentivize the installation of these lower-emitting generation systems despite their increased cost. Lineage proposes WAIRE Menu items for: (1) purchase and installation of a non-diesel emergency generator, based on the incremental cost beyond that of a traditional diesel-fired system; and (2) usage of the non-diesel emergency generator, based on the annual hours of operation and the quantifiable reductions in nitrogen oxides ("NO_x") and diesel particulate matter ("DPM") compared to equivalent operation of a diesel-fired system.

B. Measures to Improve Efficiency of Refrigeration and Reduce Facility Power Consumption

Significant emissions can be associated with the energy consumption of cold storage warehouses depending on the mix of generation sources on the grid at the time energy is consumed. One of the main drivers for proposing the Warehouse ISR is the need for greater NO_x reductions in the South Coast Air Basin to meet state and federal ambient air quality standards.⁵ The most recent version of the WAIRE Menu would award WAIRE Points for

⁵ See SCAQMD, Warehouse ISR Working Group Presentation at 9 (March 3, 2020).

installation and use of onsite solar panel energy systems, though the quantity of WAIRE Points remains “to be determined.” Lineage assumes the WAIRE Points will be assigned based on the emissions reductions realized by utilizing onsite solar power that displaces power from the electricity grid. Just as use of onsite solar panels will reduce a warehouse’s grid electricity consumption and thereby reduce indirect emissions from electricity generating facilities, reductions in a warehouse’s electricity consumption similarly will achieve regional emission reductions.

Lineage has studied several aspects of its operations that could deliver energy savings. For instance, the primary point of heat entry into a refrigerated warehouse, which then requires additional thermal work by the refrigeration system to maintain the necessary temperature, are warehouse dock and room doors. Lineage has performed studies to assess the thermodynamic impact of cold storage doors, and developed the means to improve doors and reduce facility power consumption, albeit at significant cost.

Additionally, blast freezing is an energy-intensive process that occurs at the beginning of the supply chain, shortly after harvest. Lineage has been using airplane and automobile design methodologies to increase the efficiency of blast cells at its facilities. The benefits of this method for blast freezing are that it cycles trucks faster through the facility, reduces overall facility power consumption, and decreases food waste.⁶ Improved blast cells for more efficient freezing have many emission-reducing benefits, but adoption of such improved technology would not currently earn WAIRE Points.

Lineage proposes the addition of two new WAIRE Menu items to account for the emission reductions due to reducing overall facility energy consumption at cold storage facilities. First, Lineage proposes a WAIRE Menu item to earn WAIRE Points for the installation of equipment that will increase facility energy efficiency and reduce energy demand. This item would be based on the incremental cost of the high-efficiency investment, such as the higher cost of efficient room doors compared to a standard room door.

Second, Lineage proposes a WAIRE Menu item for usage of the high-efficiency improvements. Just as the use of onsite solar energy systems would earn WAIRE Points based on the kilowatt-hours of energy consumed onsite, and thus reducing an equivalent amount of demand from the grid, Lineage proposes that the WAIRE Menu include an item based on improved facility energy efficiency, measured by normalizing facility energy consumption by facility square footage, which is a metric already utilized by the U.S. Energy Information Administration (“EIA”) in their periodic Commercial Buildings Energy Consumption Survey to compare cold storage warehouses of different sizes.⁷ This measurement would focus on relevant

⁶ Reducing food waste reduces emissions associated with growing, harvesting, and transporting food. In addition, reducing food waste avoids methane emissions from landfills where wasted food often decomposes anaerobically.

⁷ See <https://www.eia.gov/consumption/commercial/>.

warehouse load such as for refrigeration, but exclude any increased electricity consumption due to electric vehicle charging and utilization of transport refrigeration unit (“TRU”) plugs.

The WAIRE Menu item would incentivize energy efficiency by classifying facilities into energy performance levels according to annualized kWh per square foot, awarding more WAIRE Points to higher performing facilities. Facilities are able to achieve higher energy performance ratings, and thus more WAIRE Points, by seeking means through which to reduce their energy usage. The WAIRE Points would be calculated based on NO_x emissions reductions (“Regional Benefit”) and DPM emissions reductions (“Local Benefit”) created by energy savings, using the same methodology that the District proposes for calculating WAIRE Points earned by the usage of onsite solar energy systems.⁸

C. Expanding “Battery Storage” to “Energy Storage”

The WAIRE Menu currently includes items for both installation and use of battery storage. Lineage requests that this item in the WAIRE Menu be broadened beyond traditional battery systems (e.g., lithium-ion batteries) to include the different types of energy storage, including thermal energy storage.

Thermal flywheeling is a means of scheduling energy consumption by essentially turning the cold storage warehouse into a thermal battery. The warehouse is super-cooled during off-peak hours – the thermal battery “charging.” During times of peak energy demand on the grid (particularly times when natural gas peaker plants are operating), the warehouse is able to lower or turn off the refrigeration system, relying on the “excess cold” of the warehouse contents to maintain temperatures in compliance with food quality and safety requirements – the thermal battery “discharging.” This flywheeling enables a cold storage facility to avoid drawing power from the grid during periods of peak demand—and peak emissions—on the grid.

While typically utilized to reduce energy costs by avoiding peak electricity rates, thermal flywheeling could be deployed to also shift energy usage to times of day when the mix of energy sources on the grid is cleanest, and away from times of day when emissions associated with the grid are highest. Cold storage warehouses require significant amounts of energy for refrigeration. Based on the estimated square footage of cold storage warehouses⁹ and the EIA’s reported energy consumption metrics for “large cold storage areas,”¹⁰ cold storage warehouses consume approximately 200,000,000 to 300,000,000 kWh per year in the South Coast Air Basin. Utilizing those warehouses as thermal batteries would achieve substantial regional emission reductions. The annualized metric for thermal energy storage could be the same as for lithium-ion battery storage, with a warehouse operator presumably reporting to the District the capacity

⁸ The Technical Report does not address the calculation methodology for “Usage of onsite energy systems” and the Point values in the WAIRE Menu currently are “TBD.”

⁹ See http://www.scag.ca.gov/Documents/Task2_FacilityInventory.pdf.

¹⁰ See <https://www.eia.gov/consumption/commercial/data/2012/c&e/cfm/c14.php>.

of the battery installed, the charge/discharge rate, and the kWh per year of usage.¹¹ In other words, WAIRE Points for thermal energy storage could be awarded according to the same methodology that the District ultimately adopts for lithium-ion battery storage.

Lineage welcomes discussions with the District regarding the potential for cold storage warehouses across the South Coast Air Basin to use thermal flywheeling to reduce regional emissions and how such actions could generate WAIRE Points.

III. WAIRE MENU SHOULD ALLOW FOR EVOLVING TECHNOLOGY

A mechanism should be included in the WAIRE Menu that will allow warehouse operators to utilize new, or newly affordable, emissions reduction technology. As it stands, the WAIRE Menu is static and means of compliance are limited to implementing pre-determined items. Over time this approach is likely to become inefficient and more costly than necessary, and potentially unworkable. As technology evolves, a process for updating the WAIRE Menu over time will allow facilities the flexibility to choose the most efficient and affordable emission reduction actions.

One potential approach is to use the existing framework that District Staff is considering for calculating WAIRE Points and apply it to novel emission-reducing actions over time. Recent Staff presentations have proposed a calculation methodology that would assign the WAIRE Menu item's cost, Regional Benefit, and Local Benefit to a "bucket" of WAIRE Point values, which are summed for a total WAIRE Point value for that item.¹² A mechanism could be built into the WAIRE Menu that would allow an operator to approach the District with a proposed action, documentation of its cost, documentation of NO_x and DPM emission reductions, and proposed WAIRE Points based on the established and pre-approved calculation methodology. In this way, the WAIRE Point values assigned to cost and emission reductions are pre-approved through the PR 2305 rulemaking process, and the flexibility of allowing for novel WAIRE Menu items can be achieved without overly taxing District resources.

Lineage believes that some mechanism to account for the evolution of technology, and the changing costs of compliance, is necessary and would welcome discussions with the District on how best to achieve this flexibility.

IV. REMOVAL OF LIMITATIONS ON TRADING AND BANKING

The purposes of the Warehouse ISR can best be achieved if the limitations on trading and banking of WAIRE Points are removed or modified. These modifications can be achieved without reducing the effectiveness of the PR 2305, will minimize overall costs of compliance, and all WAIRE Points used for compliance would continue to represent real, surplus emission reductions.

¹¹ Lineage notes that the discharge rate of a thermal battery likely is not subject to the same constraints as discharge rates for lithium-ion batteries.

¹² See WAIRE Menu Technical Report_DRAFT_3-3-20.pdf at p. 3.

Limiting a warehouse operator's ability to comply with the Warehouse ISR by restricting the trading and banking of WAIRE Points does not ensure greater emission reductions; it only serves to increase the cost of compliance. Time and again it has been shown that market-based mechanisms can effectively and efficiently achieve emission reductions. SCAQMD's own RECLAIM program, a market-based compliance program for the largest sources of NO_x and oxides of sulfur, achieved greater reductions at RECLAIM sources than non-RECLAIM sources. In the period of 1994 – 2012, reported emissions of NO_x decreased by 69% at RECLAIM sources, and 44% at non-RECLAIM stationary sources.¹³

The ability to trade compliance instruments in cap-and-trade programs has shown numerous benefits to the regulated community as well as consumers, in particular the ability to achieve the set amount of emission reductions at the lowest cost.¹⁴ Both the US Acid Rain Program and the EU Emissions Trading System have demonstrated in practice that emission reductions can be achieved at a lower cost than expected when trading is allowed and encouraged.¹⁵ Such trading allows individual facilities to assess whether the cost of purchasing a compliance instrument (similar to WAIRE Points) is more or less economical than actions they can take themselves that would achieve the same amount of emissions.

Trading mechanisms in the Warehouse ISR will set a price signal against which warehouse operators can measure the WAIRE Menu items that are potentially feasible at its facility, and thus determine the most economical way to meet its WPCO. The level of overall emission reductions is achieved at the lowest cost possible because the WAIRE Point price provides an economic incentive to find the mix of on-site emission reductions and WAIRE Point purchases that minimize costs.¹⁶

Lineage understands that the District and other stakeholders may have concerns that trading could reduce the benefits of PR 2305 in communities in close proximity to warehouses under the theory that emission reduction activities may not be conducted at such facilities. To alleviate these concerns, Lineage proposes that the District: (1) prohibit trading of any WAIRE Points earned from Local Benefit; and (2) require each warehouse operator to satisfy a specified percentage of its WPCO using WAIRE Points earned from Local Benefit. This would require that operators and the District track two buckets of WAIRE Points – those from the “Cost” and “Regional Benefit” columns (“Tradable”) in the WAIRE Menu, and those from the “Local

¹³ John Heintz and Aron Potash, *Southern California's Once Groundbreaking Cap and Trade Program is Now Riding Towards the Sunset*, 26 ENVTL. LAW NEWS 35, 36 (2017).

¹⁴ See IETA, *Benefits of Emissions Trading*, <https://www.ieta.org/resources/Resources/101s/Benefits%20of%20Emissions%20Trading.pdf> (March 2019).

¹⁵ *Id.*

¹⁶ Mac Taylor, Legislative Analyst's Office, *Cap-and-Trade Revenues: Strategies to Promote Legislative Priorities 10-11* (Jan. 21, 2016).

Benefit” column (“Non-Tradable”). Thereafter, only Tradable WAIRE Points could be traded to other operators or warehouses.¹⁷

To ensure emission reduction benefits to local communities, at the end of each compliance year a warehouse operator would need to satisfy a specified percentage of its total WPCO with Non-Tradable Points, and could satisfy the remaining portion of the WPCO using WAIRE Points earned on-site or purchased Tradable Points from other warehouse owners or operators. In this way, the local benefits of PR 2305 are protected, while allowing trading to help drive emissions reductions at the lowest cost.

Below is a table of requested modifications to PR 2305 that would facilitate compliance flexibility for warehouse operators, increasing the likelihood that PR 2305 achieves its regulatory goals.

PR 2305 Citation	Current Content	Lineage Recommendation	Reasoning
(d)(3)(A)	Allows a warehouse operator to transfer excess WAIRE Points in a given compliance year to another warehouse under the same operational control	Allow for transfer to owners or operators in other warehouses under different operational control, subtracting WAIRE Points earned from Local Benefit	Operational control should not limit the trading of WAIRE Points. Free trading among warehouse operators will encourage more numerous, larger, and earlier actions to earn WAIRE Points, and should be encouraged.
(d)(3)(B)	Allows a warehouse operator to bank excess WAIRE Points in the same warehouse in any of the next three compliance years	Allow banking of WAIRE Points without a temporal limit, subject to the requirement that the banked WAIRE Points be surplus when used for compliance.	Certain WAIRE Menu items may provide substantial emission reductions and more WAIRE Points than a warehouse operator requires. A temporal limit of three years may eliminate the incentive to take larger actions if the warehouse operator is not able to utilize all of the WAIRE Points within three years.

¹⁷ Lineage notes that Cost, Local Benefit, and Regional Benefit of WAIRE Menu likely will be tracked for purposes of compliance with the Air Quality Management Plan (AQMP). Therefore, the incremental demand on District Staff resources would be marginal and outweighed by the economic benefits trading would accrue.

PR 2305 Citation	Current Content	Lineage Recommendation	Reasoning
(d)(3)(C)	Allows a warehouse owner to earn WAIRE Points or have WAIRE Points transferred to them from an operator in the same warehouse; also allows a warehouse owner to transfer WAIRE Points to any operator in the warehouse where the WAIRE Points were earned, within three years	Allow warehouse owners to transfer WAIRE Points to any owner or operator, even if unrelated to the owner, in any future compliance year. If the WAIRE Points are utilized at a different warehouse, subtract WAIRE Points earned from Local Benefit.	For the reasons stated above, free trading among different warehouse operators and the ability to bank WAIRE Points over time will encourage more numerous, larger, and earlier actions to earn WAIRE Points and thus achieve greater emission reductions.

V. POTENTIAL OVERLAP WITH CARB TRU REGULATION

The California Air Resources Board (“CARB”) currently is promulgating a new TRU Regulation that would apply to warehouses or distribution centers with a building size greater than 20,000 square feet (“Applicable Facilities”). The most likely means of compliance with the TRU Regulation for warehouse will be the installation of TRU Plugs, and to ensure that Trailer TRUs and TRU Generator Sets on-site utilize those TRU Plugs when stationary for more than 15 minutes.

The majority of Lineage’s facilities in California are in the South Coast Air Basin. In order to assess its regulatory burden and means of compliance with all relevant state and local regulations, Lineage requests clarification regarding the potential overlap between the TRU Regulation and the Warehouse ISR. At what point would an action become ineligible for WAIRE Points because the District would interpret it to be an “action or investment required by a separate USEPA, CARB, or South Coast AQMD regulation during the compliance year”?¹⁸

For instance, facilities subject to both Warehouse ISR and the TRU Regulation may purchase and install TRU Plugs. However, it is not clear at what point such an action and investment would be considered “required” for compliance with the TRU Regulation, and thus ineligible for WAIRE Points. Would submitting a compliance plan to CARB stating that the facility intends to comply with the TRU Regulation by installing TRU Plugs be enough to render that action no longer eligible for WAIRE Points?¹⁹ Or would the action be “required” by CARB

¹⁸ PR 2305(d)(2)(A).

¹⁹ See TRU Regulation, Discussion Draft Section 2478.14 (stating that by December 31, 2022, Applicable Facility Owners shall submit a compliance plan to CARB).

only once the Applicable Facility is required to provide infrastructure for TRUs to utilize a mode of Zero-Emission Operation?²⁰

Additionally, the draft WAIRE Menu released as part of the WAIRE User Calculator on March 3, 2020, notes that for the WAIRE Menu Item “Use onsite ZE charging or fueling infrastructure” the reporting metric is “kWh of dispensed electricity beyond CARB requirements.” Lineage respectfully requests clarification as to what dispensed electricity would be “beyond CARB requirements.”

VI. CONCLUSION

We would like to thank the District for this opportunity to submit comments on the Draft WAIRE Menu Technical Report and PR 2305. Lineage looks forward to continued collaboration with District Staff on this rulemaking.

Best regards,



Joshua T. Bledsoe
Latham & Watkins LLP

²⁰ See TRU Regulation, Discussion Draft Section 2478.10(a)(2) (stating that by December 31, 2023, Applicable Facility Owners shall not permit a new Trailer TRU or TRU Gen Set to operate longer than 15 minutes while stationary unless in Zero-Emission Operation).

May 8, 2020

Ian MacMillan, Manager
South Coast Air Quality Management District
2165 Copley Dr.
Diamond Bar, CA 91765



Submitted Electronically

Dear Mr. MacMillan:

Thank you for the opportunity to submit comments on the South Coast Air Quality Management District Air Quality Management District (SCAQMD) Draft WAIRE Menu Technical Report.

First, we would like to thank SCAQMD for extending the comment period in response to the ongoing COVID-19 crisis. We are glad for the opportunity to submit technical comments, however, the CTA continues to have serious concerns about the legality and efficacy of the proposed rule. These comments should not be construed to indicate support or an endorsement of this flawed approach.

Furthermore, we submit these comments in the midst of a generational economic crisis.

COVID-19 Crisis is Unprecedented

The still unfolding COVID-19 pandemic and associated economic crises are unlike anything our State and Nation have faced in its history. While the full scope of the economic impact from this sudden, unplanned shuttering of large swaths of commerce is yet to be fully understood, there are some clear warning signs already emerging.

As of mid-April 2020:

- 30 million Americans have filed for initial unemployment since mid-March. The 4-week moving average, which removes week-to-week volatility, jumped to an all-time high of 5.509 million, while continuing jobless claims hit a record 11.976 million in the week ended April 4th.

Fig. 1: Initial Jobless Claims 1967–2020 *Note: shaded regions = recessions*
 (Source: Macrotrends.net)

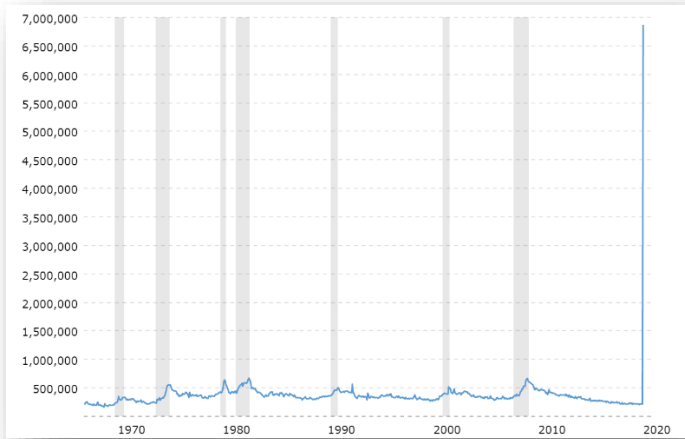
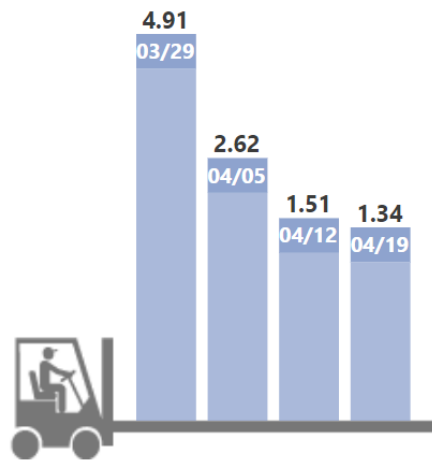


Fig. 2: Load-to-Truck Ratio (Source: DAT)
National Load-to-Truck Ratio



- After a several week-long spike in demand, general economic conditions have taken its toll on freight demand, with demand and rates falling precipitously.
- CTA has been made aware of furloughs already occurring in the trucking industry.
- Market analyst IHS estimates that 2020 Class 8 tractor sales will fall by 50% compared to 2019¹. How quickly the economy will recover is dependent on many factors which cannot be easily predicted at this time. The Legislative Analyst Office² preliminary assessment states that California is already in a recession and forecasts a possible “L-shaped” recovery marked by prolonged depressed economic activity and high unemployment.

¹ <https://www.ttnews.com/articles/commercial-vehicle-production-fall-20-globally-ihs-says>

² <https://lao.ca.gov/handouts/FO/2020/Preliminary-Assessment-of-the-Economic-Impact-of-COVID-19-041620.pdf>

- The Department of Finance (DOF) projects a \$54.3 billion budget deficit through FY 20-21. DOF states that: “The rapid onset of the COVID-19 pandemic has had an immediate and severe impact on the global, national, and state economies. In California, COVID-19 has led to the following:
 - In the last one-week reporting period, nearly 478,000 claims were filed in California for state and federal unemployment benefits. Since mid-March, more than 4.2 million claims have been filed.
 - Job losses that have occurred disproportionately in the lower-wage sectors of the economy—amplifying the wage disparity that existed before the pandemic. Finance projects that the 2020 unemployment rate will be 18 percent, a much higher rate than during the Great Recession.”³

Technical Comments (by Section)

Please see the below substantive comments on the Draft WAIRE Menu Technical Report.

Section 1a) WAIRE MENU ANNUALIZED UNITARY METRICS AND BINS

- Please explain the rationale of the relative weight given to NOx vs. PM reductions. Given the use of Carl Moyer Guidelines throughout the document, it is of note that the Carl Moyer Program applies a 20x weighting factor for PM reductions⁴ while the proposed WAIRE program would apply a 100x weighting factor to NOx reductions.
- AQMD’s proposed point system includes specific points for specific emission reduction technologies. However, there is no clear avenue or method for new or emerging technologies that may also reduce emissions. The proposal should create a clear and expedient pathway for allowing new technologies to be included in scheme without adding unnecessary barriers or hurdles.

Section 1b) COSTS

- Please elaborate on why staff believes NZE/ZE trucks purchased with restricted use state grants, such as the Carl Moyer Program, would be able to obtain WAIRE points for the usage, but not purchase, of that vehicle? Programs such as Carl Moyer typically have minimum annual usage for the life of the contract. Any usage up to the required annual minimum miles would not be considered surplus for the purposes of such a determination. And requiring such a determination by regulated entities would be infeasible for the purposes of this program.

Section 1c) REGIONAL EMISSION REDUCTIONS:

- What is the justification for using the Optional Advanced Technology Moyer cost-effectiveness threshold as the basis for calculating the value of WAIRE points? We are not aware of any statutory authority to use this cost-effectiveness threshold to set a price on NOx in the context of a regulation.

³ http://www.dof.ca.gov/Budget/Historical_Budget_Publications/2020-21/documents/DOF_FISCAL_UPDATE-MAY-7TH.pdf

⁴ https://ww3.arb.ca.gov/msprog/moyer/guidelines/2017gl/2017_gl_appendix_c.pdf

- \$100,000 per ton of NOx is out of line with recent regulations to reduce NOx. The most recent version of the California Air Resources Board's Statewide Truck and Bus Rule's cost-effectiveness was \$3,820 per ton of NOx⁵.

SECTION 2) Zero and Near-Zero Emission Truck Visits and Truck Acquisitions

- Please cite the authority under which the SCAQMD seeks to establish regulatory standards relating to the control of emissions from new motor vehicles or new motor vehicle engines.
- Please indicate whether the SCAQMD intends to pursue a Section 209 waiver.

SECTION 2b) Truck Visit

- The approach of using an average of the EMFAC inventory for the cited subcategories to establish baseline emissions for the purpose of calculating the value of zero and near-zero emission truck acquisitions and use may be problematic as early as 2024. Due to the impact of CARB's Low NOx and Advanced Clean Truck (ACT) Regulations, assumptions about the acquisition of these vehicles through natural turnover and mandated sales percentages, respectively, will be incorporated into the baseline year emissions in future revisions of EMFAC. Functionally, it will be impossible to distinguish emission reductions attributed to mandated sales percentages under the ACT and a truck visit to a regulated facility under the WAIRE program.
- The value of each truck visit will decrease on an annual basis as the weighted annual emissions of the fleet decreases.
- It is also unclear whether SCAQMD is in fact proposing the above approach or simply utilizing a baseline year of 2023. A static baseline also creates issues of additionality. In any event, SCAQMD should be clear as to how this calculation will work.
- Related to the use of EMFAC, this adds just another (more opaque) level of uncertainty for the regulated community. There are several aspects of the rule that present a moving target, as they are subject to change during the life of the rule. At the time of promulgation, a rule should provide the regulated community with a level of understanding and certainty of what their obligations are, and this rule will not do that.
- How will the SCAQMD determine deterioration for truck visits?
- As the purpose of the rule is to accelerate fleet turnover and preferentially replace retired vehicles with electric vehicles, the use of incremental cost is inappropriate, because it assumes that a fleet was already planning to purchase a new truck, at a given time. The rule is designed to use warehouse operators to pressure fleets to purchase vehicles on a timeline that is most beneficial to the

⁵https://www.arb.ca.gov/msprog/onrdiesel/background/2014/2014_pm_nox_cost.xls?_ga=2.54243629.481378052.1588276844-228088285.1525364940

warehouse achieving compliance, rather than by the business needs of the fleet. Therefore, calculations should be based on the total purchase price.

- The variation in in duty cycles and applications has always presented issues when trying to estimate emissions and apply regulation to on-road trucks. A homogeneous treatment of the sector results in a disconnect between the costs and emission reductions as translated into points, and the reality of the costs and emissions associated with each truck purchase. This is exacerbated by the calculations of point values across the “bins.” There is an inconsistent application of metrics and methodologies across the bins (e.g. annual mileage). The extensive use of averaging and various assumption result in a methodology that it is impossible to as it applies to an individual regulated entity. In the effort to simplify the rule, its application seems almost arbitrary at the facility and fleet level.

SECTION 3) Electric Charger Usage and Installation and SECTION 4) Hydrogen Filling Station Installation and Usage

- AQMD’s proposed point system has not clearly outlined how points will be assigned for investments made to reduce emission not located on the site of a warehouse. For example, if a warehouse operator develops a charging hub for multiple vehicles or hydrogen fueling station offsite, how will points be assigned for those investments?
- AQMD’s proposed point system has not included methods for assigning points to entities that work together to deploy zero emission infrastructure which are not on-site. For example, we can foresee an instance where several warehouse operators work together to finance or develop a fueling station for low or zero emission fuel vehicles. If this project is offsite and shared between warehouse operators, it is unclear how points would be assigned to the different actors involved in the project.

If you have any questions please feel free to contact Chris Shimoda at cshimoda@caltrux.org.

Thank you,

A handwritten signature in black ink, appearing to be 'CS', written over a light gray circular watermark.

Chris Shimoda, Vice President of Government Affairs
California Trucking Association

Mr. Ian MacMillan
Planning & Rules Manager
imacmillan@aqmd.gov
Mr. Victor Juan
Program Supervisor
vjuan@aqmd.gov

October 7, 2020

Recommendation to Include NZE Yard Tractors as Compliance Option Under Proposed Rule 2305

Dear Mr. MacMillan and Mr. Juan,

The Propane Education & Research Council (PERC) is pleased to provide input about how to best achieve fast, cost-effective NOx reductions under SCAQMD's Proposed Rule 2305. We submit these comments in advance of the Warehouse ISR Working Group Meeting scheduled for Friday October 9, 2020. We appreciate that SCAQMD staff has been willing to consider alternative ways to accomplish your essential end goal: to restore healthful air quality to the South Coast Air Basin and attain the federally mandated National Ambient Air Quality Standard for ozone.

Authorized by the U.S. Congress in 1996, PERC (<https://propane.com/>) is a nonprofit organization that invests in research, development and commercialization of clean-burning low-emission propane-powered technologies. PERC partners with a variety of trade associations, advocacy groups, and government agencies to promote safety and the adoption of propane as a clean domestic fuel source. Our organization supports clean-fuel/low-emission programs in applications that include transportation, agriculture, commercial landscaping, residential, and commercial buildings. For decades we have helped regional government agencies like SCAQMD to identify, assess, and widely deploy clean propane engines in these applications (see additional details at <https://propane.com/environment/>).

SCAQMD's webpage addressing facility-based mobile source measures (FBMSMs) states that the goal of PR 2305 *"is to assess and identify potential actions to further reduce emissions associated with emission sources operating in and out of warehouse distribution centers"* in the South Coast Air Basin. Our comments and inputs submitted today are fully compatible with -- and designed to strongly advance -- that important goal.

Proposed Expansion of PR 2305 to Allow NZE Yard Trucks as Compliance Options

As you know, CARB-certified near-zero-emission (NZE) propane engines are now available as commercially proven powerplants for HDVs that can deliver 90 percent (or better) NOx reductions in the two key mobile sources targeted under PR 2305: 1) Class 8 on-road heavy-duty trucks and 2) their off-road counterparts, yard trucks. Because PR 2305 already includes allowance for warehouse operators to comply using NZE on-road trucks, our recommendation to SCAQMD is to adopt a similar and parallel inclusion for NZE off-road yard trucks.

Our comments are not meant to be exclusionary about other ultra-clean fuel-technology platforms for HDVs. In fact, OEMs that manufacture NZE yard trucks are also working to commercialize ZE yard trucks using battery-electric and/or fuel cell architectures. Similarly, NZE yard truck OEMs are designing their products to

interchangeably use either NZE propane or natural gas engines, depending on their customers' site-specific needs and considerations. In summary, when it comes to OEM development and commercialization efforts, there is *significant synergy* between ZE yard tractors and NZE yard trucks, whether fueled by propane or natural gas. PERC is specifically advocating for inclusion of propane-fueled yard trucks as a compliance option under PR 2305, but our position is fuel neutral and mutually supportive of ultra-clean natural gas yard trucks as a compliance option.

Why does PERC believe that inclusion of propane yard trucks is especially important to help SCAQMD achieve its goals for PR 2305? Simply put, NZE propane vehicle technology offers the fastest, easiest, most-cost-effective, infrastructure-friendly way for warehouse operators to rapidly deploy terminal tractors that emit NOx at levels equivalent to (or lower than) the grid-related emissions of battery-electric tractors.¹ Moreover, there is important synergy between deploying NZE yard trucks in the Basin and deploying NZE school buses. For example, the PSI 8.8L NZE propane engine that is now being incorporated into an OEM yard truck (from TICO) is also being incorporated into at least one OEM school bus model. In both cases, the specific focus of commercialization and deployments are on the South Coast Air Basin.

Collateral Benefits Major Fuel-Cycle GHG Reductions

We recognize that PR 2305 is focused on reducing NOx to help the Basin attain ozone standards. However, NZE yard trucks can also deliver a major collateral benefit: full-fuel-cycle GHG reductions. This is achieved by fueling NZE engines with drop-in renewable versions of conventional propane (or natural gas), which are CARB-verified to have very low carbon intensity. As you know, renewable natural gas is already widely used to fuel heavy-duty NGVs in California, and renewable propane is already co-produced at biofuel plants like the World Energy plant in Paramount. Renewable propane is now becoming available for transportation uses like terminal tractors and school buses. In fact, the propane fuel industry has committed to use 100 percent renewable propane in California transportation applications by 2030 (see the Western Propane Gas Association press release of September 25, 2020²).

And in another significant development, Suburban Propane recently announced a deal to purchase a 39 percent stake in Oberon Fuels, Inc. (Oberon) based in San Diego.³ Oberon's development-stage production of low-carbon renewable dimethyl ether (rDME) as a transportation fuel has important synergy with the propane industry's efforts to develop a practical and affordable pathway for low-pressure renewable fuels that can be "dropped in" to NZE propane engines.

Details About Our Proposed Changes to PR 2305

Accompanying this cover letter are the following attachments, designed to assist SCAQMD staff in reviewing our recommendation to add NZE yard trucks as compliance options under PR 2305:

¹ See the analysis by Gladstein, Neandross & Associates in its "Game Changer" white paper (funded partially by SCAQMD) at https://www.gladstein.org/gna_whitepapers/game-changer-next-generation-heavy-duty-natural-gas-engines-fueled-by-renewable-natural-gas/.

² https://www.prweb.com/releases/100_percent_renewable_propane_targeted_for_california_by_2030/prweb17426932.htm.

³ Cision PR Newswire, "Suburban Propane Partners, L.P. Announces Deal to Acquire 39% Stake in Oberon Fuels and Additional Investments to Support the Ongoing Development of Innovative Solutions to Reduce Carbon Emissions," press release, September 17, 2020, <https://www.prnewswire.com/news-releases/suburban-propane-partners-lp-announces-deal-to-acquire-39-stake-in-oberon-fuels-and-additional-investments-to-support-the-ongoing-development-of-innovative-solutions-to-reduce-carbon-emissions-301133443.html>.

1. MS Word document with suggested modifications to “WAIRE Technical Menu Report” (March 3, 2020)

Using the “Track Changes” feature, we have modified this draft Staff report to add narrative incorporating NZE yard trucks as a compliance option under PR 2305. As you will see, we marked up only “SECTION 5) Zero Emissions Yard Truck Acquisition and Usage.” We used parallel language and rationale as applied by Staff in allowing NZE on-road trucks to serve as compliance options, along with a ZE on-road trucks. Just as Staff made the case for the commercial maturity and product availability of ZE yard trucks, we have proposed parallel language as rationale for adding NZE yard trucks, using credible documentation. We believe our proposed mark-up and additions provide Staff with a solid and accurate head-start on language to make this modification to PR 2305. As noted above, this will significantly enhance the District’s ability to rapidly attain cost-effective NOx reductions through implementation of this important new FBCM.

2. MS Excel spreadsheet “WAIRE User Calculator with NZE Yard truck calculations”

Using Staff’s information provided in SCAQMD’s slide presentation “WAREHOUSE ISR WORKING GROUP” dated March 3, 2020, we have reproduced in MS Excel the District’s WAIRE point system. We created a parallel, justifiable point system for adding NZE yard trucks as a compliance option. As you will see in the middle tab titled “Waire Menu,” we have added two new lines of calculations under “Acquire NZE Yard Truck” and “Use NZE Yard Truck.” We used the same methodology and formulas that Staff used to establish the relative WAIRE points for NZE on-road trucks versus ZE on-road trucks. This results in calculated total points for Acquiring and Using NZE yard trucks. The result is that -- in similar fashion to the on-road case-- NZE yard trucks get significantly fewer points than ZE yard trucks for the “Acquire” category, but nearly the same points for the “Use” category. We believe our methodology and calculations are both logical and defensible. Of course, our team would be pleased to discuss this recommendation and the methodology in a follow-on virtual meeting with Staff, if deemed useful.

PERC greatly appreciates the District’s willingness to review our proposed modifications to PR 2305’s technical documentation and the WAIRE points system, designed to improve the speed and cost-effectiveness of achieving NOx reductions by introducing NZE yard trucks as compliance option. For all the reasons described above, we believe it represents good, defensible public policy for the District to pursue under the new in-direct source rule. We look forward to participating in Friday’s Working Group meeting, and our team will be pleased to meet with Staff to further work through the concept laid out in this letter and attachments.

If you have any questions about our proposed changes to PR 2305, please give me a call. I can be reached at 804.338.0202 (cell) and 202.452.8975 (main).

Sincerely,

A handwritten signature in blue ink, appearing to read "Tucker Perkins".

Tucker Perkins
President & Chief Executive Officer

**CENTER FOR COMMUNITY ACTION & ENVIRONMENTAL JUSTICE
EARTHJUSTICE
EAST YARD COMMUNITIES FOR ENVIRONMENTAL JUSTICE
INLAND COALITION FOR IMMIGRANT JUSTICE
INLAND CONGREGATIONS UNITED FOR CHANGE
LONG BEACH ALLIANCE FOR CHILDREN WITH ASTHMA
NATURAL RESOURCES DEFENSE COUNCIL
SAN PEDRO & PENINSULA HOMEOWNERS COALITION
SIERRA CLUB
WEST LONG BEACH ASSOCIATION
WAREHOUSE WORKER RESOURCE CENTER**

October 8, 2020

Wayne Natri
Executive Officer
South Coast Air Quality Management District
21865 Copley Drive
Diamond Bar, CA 91765

Re: Comments on the Warehouse Indirect Source Rule (Proposed Rule 2305)

Dear Mr. Natri:

On behalf of the undersigned coalition of community and environmental organizations, we submit these comments on the warehouse indirect source rule. Our coalition represents the communities living and working adjacent to warehouses, who continue to be disproportionately harmed by the freight industry every single day. We appreciate the Air District staff's continued work on the warehouse indirect source rule and request that the agency move expeditiously in the development and adoption of this important regulation.

For decades, the freight industry has been polluting communities living near warehouses. These communities are exposed to toxic pollution from the warehouse industry and face unacceptable health risks as a result. While the covid-19 pandemic continues to exacerbate health impacts to communities most affected by this industry, warehouses have been profiting – and polluting – more than ever due to consumers' increased reliance on e-commerce,¹ further compounding existing health risks in nearby communities. These trends make clear that it is time to hold warehouses accountable for the harms imposed on countless residents living near these facilities. The warehouse indirect source rule is a critical measure that will address these growing disproportionate pollution burdens and provide communities

¹ See Justin Ho, *As imports boom, warehouses fill up, and businesses face a storage shortage*, Marketplace (Oct. 1, 2020), <https://www.marketplace.org/2020/10/01/imports-boom-warehouses-fill-up-businesses-face-storage-shortage-online-shopping-covid19/>.

with the basic health protections they deserve. A rule that meaningfully regulates this industry must ensure that warehouses clean up pollution in all communities.

An effective warehouse rule must prioritize zero-emissions technology and infrastructure, and create a real pathway to a zero-emissions future. Zero-emissions technology is the only solution that will meaningfully address this industry's air quality and health impacts. Our coalition does not support a rule that promotes investment in near-zero technologies, as this will only serve to slow the transition to a zero-emissions freight sector. Not only will the use of near-zero technology create barriers for zero-emissions operations and infrastructure, it will continue to perpetuate the harms imposed on our communities by the natural gas and oil industry and exacerbate the serious climate and health impacts. This rule must identify clear targets for the complete phase-out of natural gas and combustion technologies. The majority of air quality benefits will be attributable to the use and operation of trucks, and the Air District should take advantage of this opportunity to incentivize the shift towards zero-emissions trucks.

The Air District must also ensure the rule starts with sufficient stringency to provide relief to communities now. We remain concerned the compliance obligations will be paltry, which will not provide the necessary relief to communities breathing some of the dirtiest air in the nation. The industry will fight a regulation at whatever level it is set, so the Air District should let public health protection guide the stringency.

Moreover, the Air District must expand and clarify their concept of a "mitigation fund." As advocates concerned with seeing real change in communities suffering the worst impacts of air pollution, it is imperative that the mitigation fund is not used as a "pay to pollute" scheme. We need details on the Air District's strategy to ensure that warehouses actually adopt pollution abatement strategies, rather than paying their way to compliance. If the mitigation fund is used, we would like the Air District to consider requiring that the mitigation fund dollars enter the communities in which they are coming out of to provide real community benefits, such as EV subsidies for local residents.

Finally, we urge the Air District to move forward with this rule quickly. There have been numerous delays with this rulemaking process. Communities cannot continue paying for industry with their health, especially while we are still in the midst of a pandemic that puts communities suffering from poor air quality at even greater risk of serious illness and death. We respectfully request that the District ensure that community stakeholders are included in the rulemaking process, and to adopt the rule by March 2021.

We appreciate your consideration of these comments, and the staff's hard work on this important rule. We look forward to working with the agency to develop a strong warehouse indirect source rule that takes into account community needs and cleans up the warehouse industry.

Sincerely,

Regina Hsu
Adrian Martinez
Michelle Ghafar
Earthjustice

Esther Portillo
Center for Community Action & Environmental Justice

Taylor Thomas
East Yard Communities for Environmental Justice

Javier Hernandez
Inland Coalition for Immigrant Justice

Tom Dolan, Ph.D.
Inland Congregations United for Change

Sylvia Betancourt
Long Beach Alliance for Children with Asthma

Heather Kryczka
Natural Resources Defense Council

Peter M. Warren
San Pedro & Peninsula Homeowners Coalition

Carlo De La Cruz
Sierra Club

Andrea Vidaurre
Warehouse Worker Resource Center

Theral Golden
West Long Beach Association

cc:

Philip M. Fine, Ph.D.
Deputy Executive Officer
Planning, Rule Development & Area Sources

Sarah Rees
Assistant Deputy Executive Officer
Planning, Rule Development & Area Sources

Ian MacMillan
Planning and Rules Manager
Mobile Sources/ISR

From: Jiang, Hao <Hao.Jiang@disney.com>
Sent: Wednesday, November 4, 2020 5:21 PM
To: Ian MacMillan
Cc: Victor Juan
Subject: Warehouse rule - PR 2305

Ian,

I have following suggestions for you to consider.

(1) To eliminate possible perplexity in rule applicability. I suggest to revise the rule applicability as:

(b) Applicability

This rule applies to owners and operators of warehouses located in the South Coast Air

Quality Management District (South Coast AQMD) jurisdiction with greater than or equal to

100,000 square feet of indoor floor space in a single building that is may be used for

warehousing activities by one or more warehouse operators.

(2) For situations when a large building (>100,000 sq.ft.) owner installed a physical barrier or established policy to limit floor space for warehouse activity to less than 50,000 sq.ft., rule should exempt this as well.

(g) Exemptions

(1) Operators In Warehouses That Have Less Than 50,000 Square Feet That They May Use For Warehousing Activities

Warehouse operators who can only use less than 50,000 square feet of a warehouse for

warehousing activities due to physical limitation, self-imposed administrative control or terms

of their lease are not subject to the requirements in subdivision (d)(1) unless the same parent

company owns or controls multiple operators in the same building who collectively use more

than 50,000 square feet of space for warehousing activity.

(3) To assist regulated warehouses in complying with rule recordkeeping requirement, I suggest AQMD to create a recordkeeping template for warehouse to use.

Thank you

Hao Jiang, P.E.
Environmental Affairs
Disneyland Resort
714-781-4504
Hao.jiang@disney.com

**CENTER FOR COMMUNITY ACTION & ENVIRONMENTAL JUSTICE
EARTHJUSTICE
EAST YARD COMMUNITIES FOR ENVIRONMENTAL JUSTICE
SIERRA CLUB
URBAN & ENVIRONMENTAL POLICY INSTITUTE
WEST LONG BEACH ASSOCIATION**

December 3, 2020

Chair Burke and Members of the Governing Board
South Coast Air Quality Management District
21865 Copley Drive
Diamond Bar, CA 91765

Re: Warehouse Indirect Source Rule

Dear Chair Burke and Members of the Governing Board:

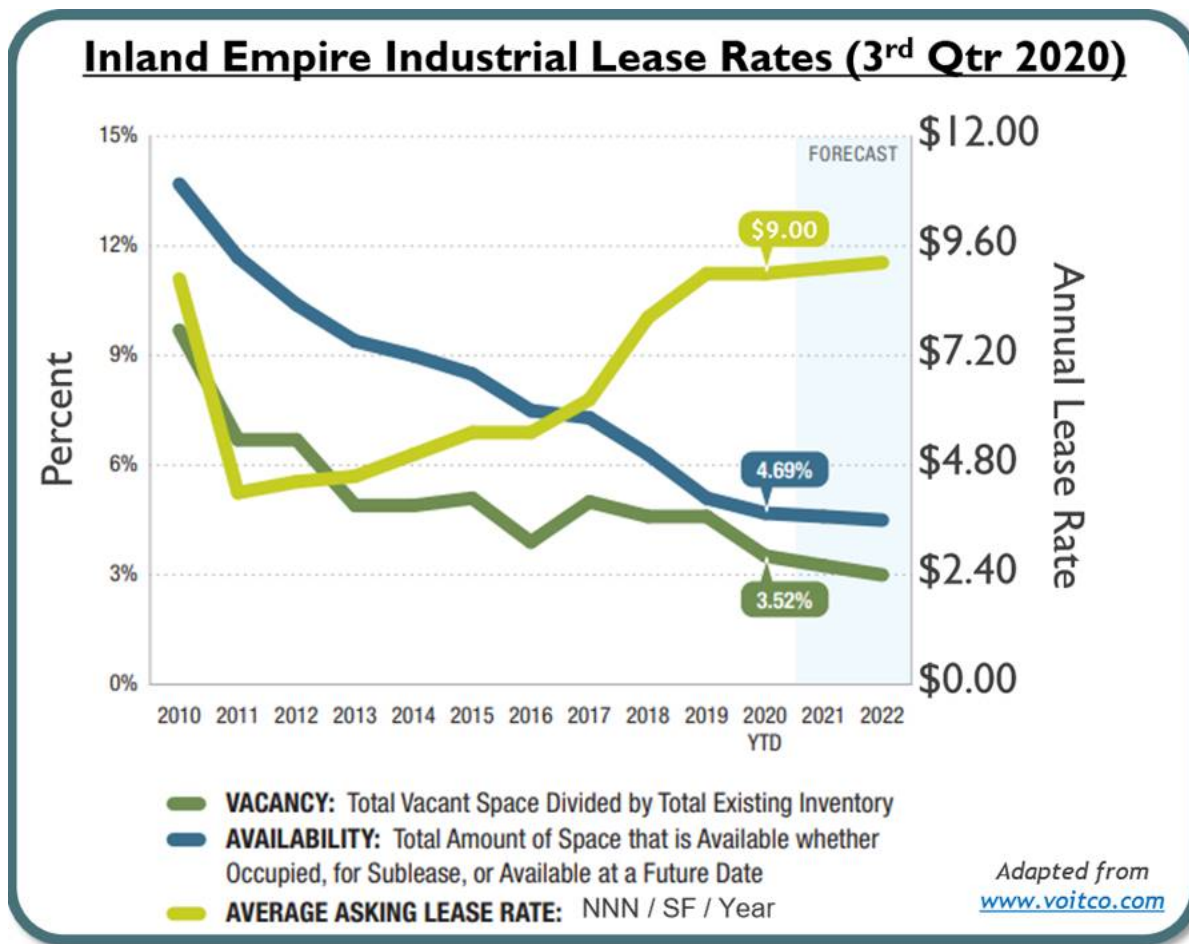
On behalf of the undersigned coalition of community and environmental organizations, we submit these comments on the warehouse indirect source rule. Our coalition represents the communities living and working adjacent to warehouses, who continue to be disproportionately harmed by the freight industry every single day. We appreciate the Air District staff's continued work on the warehouse indirect source rule and request that the agency move expeditiously in the development and adoption of this important regulation.

For decades, the freight industry has been polluting communities living near warehouses. These communities are exposed to toxic pollution from the warehouse industry and face unacceptable health risks as a result. The Governing Board's agenda is replete with information showing that mandatory programs to clean up the freight industry should be a top priority for 2021. First, the draft Community Emission Reduction Plan (CERP) for Southeast Los Angeles in Agenda Item 28 identifies the warehouse indirect source rule as a critical element of the effort to address truck and traffic pollution.¹ This is similar to all the other CERPs the agency has completed under AB 617. Second, Agenda Item 5 notes that large quantities of incentive dollars targeted towards the freight industry have largely gone unused. This indicates that voluntary approaches are not sufficient because even when the Air District can pay industry to clean up, it does not necessarily avail itself of these funds. The fact that no marine projects in our region applied for the millions of dollars of available funding is offensive to communities forced to breathe the dirty diesel soot emanating from the ports. Finally, we are reminded in Agenda Item 30 that we have failed yet again to meet another federal air quality standard. These factors all point to the need for mandatory programs to clean up the freight industry with no rule more urgent to adopt than the warehouse indirect source rule.

While the covid-19 pandemic continues to exacerbate health impacts to communities most affected by this industry, the freight industry is expanding greatly. For example, the San Pedro Bay Ports have hit historic milestones of freight volumes during several months this year. In addition, warehouses have been profiting – and polluting – more than ever due to consumers' increased reliance on e-

¹ Draft CERP, at 5b-3, available at <http://www.aqmd.gov/docs/default-source/Agendas/Governing-Board/2020/2020-Dec4-028.pdf?sfvrsn=6>.

commerce,² further compounding existing health risks in nearby communities. During the last Working Group meeting the AQMD Staff presentation included this graphic showing warehouse vacancy rates are very low even as lease rates are hitting the highest levels seen in a decade in the Inland Empire.



These trends make clear that it is time to hold warehouses and other freight facilities accountable for the harms imposed on countless residents living near these facilities. The warehouse indirect source rule is furthest along and is a critical measure that will address these growing disproportionate pollution burdens and provide communities with the basic health protections they deserve.

We appreciate your consideration of these comments, and the staff’s hard work on this important rule. We look forward to working with the Governing Board to develop a strong warehouse indirect source rule that takes into account community needs and cleans up the warehouse industry.

Sincerely,

Ivette Torres
 Center for Community Action & Environmental Justice

² See Justin Ho, *As imports boom, warehouses fill up, and businesses face a storage shortage*, Marketplace (Oct. 1, 2020), <https://www.marketplace.org/2020/10/01/imports-boom-warehouses-fill-up-businesses-face-storage-shortage-online-shopping-covid19/>.

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East Yard Communities for Environmental Justice

Carlo De La Cruz
Sierra Club

Jessica Tovar
Urban & Environmental Policy Institute, Occidental College

Theral Golden
West Long Beach Association

cc:

Wayne Nastri
Executive Officer

Philip M. Fine, Ph.D.
Deputy Executive Officer
Planning, Rule Development & Area Sources

Sarah Rees
Assistant Deputy Executive Officer
Planning, Rule Development & Area Sources

Ian MacMillan
Planning and Rules Manager
Mobile Sources/ISR

Kevin Maggay
Environmental Affairs
kmaggay@socalgas.com
858-254-7556



January 14, 2021

Ian MacMillan
Planning & Rules Manager
South Coast Air Quality Management District
21865 Copley Drive
Diamond Bar, CA 91765

Dear Mr. MacMillan,

Thank you for the opportunity to provide comments on the Proposed Rule 2305: Warehouse Indirect Source Rule (ISR Rule). SoCalGas looks forward to working with the South Coast Air Quality Management District on this effort. While the rule is not in a formal comment period, SoCalGas would like to provide the following comments to assist in its further development.

Early emission reductions should be weighted

The concept of an ISR Rule was included in the 2016 Air Quality Management Plan (AQMP) with the purpose of achieving 2023 attainment. The early focus of the ISR Rule should remain on achieving State Implementation Plan (SIP) creditable emission reductions to meet 2023 attainment. With that in mind, the ISR Rule should include provisions that heavily weight actions to achieve early, creditable emission reductions. Truck trips with technologies cleaner than baseline diesel would be an example of an action that would get immediate SIP creditable emission reductions to help meet 2023 attainment and should therefore be awarded weighted Warehouse Action and Investments to Reduction Emissions (WAIRE) points. Actions to reduce greenhouse gases or that merely enable emission reductions such as solar panels and infrastructure, respectively, should not be eligible for weighted points because they do not directly achieve SIP creditable emission reductions.

The incremental cost of hydrogen is not included in the WAIRE point calculations

Zero emission trucks are grouped together regardless of the technology – plug-in or hydrogen – and generate the same number of WAIRE points per trip. However, the number of WAIRE points generated

are partly determined by the incremental cost. Hydrogen, which has a higher incremental cost than plug-in technologies should therefore generate more WAIRE points. The WAIRE menu should include a separate line item for hydrogen powered trucks and the WAIRE points should be recalculated based on its incremental cost.

Emissions reduction calculations may be overestimated when relying on EMFAC assumptions

The emission calculations for heavy-duty truck trips are developed using EMFAC vehicle mile travelled (VMT) data based on existing diesel trucks. Plug-in heavy-duty trucks are significantly limited in the number of miles they can travel because of range capabilities as well as charging downtime. It is not realistic to believe that current plug-in truck technologies can do the same number of daily or annual VMTs as diesel trucks, therefore the emission reductions would be overstated. The amount of WAIRE points a plug-in truck can generate should be limited by its mileage. Other zero and near-zero emission technologies that have long range capabilities should be assumed to achieve the same VMT as diesel.

Entities should have options to claim more emission reductions and WAIRE points based on operations

The ISR Rule should include provisions that allow entities to claim more emission reduction and WAIRE points than the default based on operations. As an example, VMT is the metric that drives emissions and emission reductions. Trucks in longer range operations inherently achieve more emission reductions when being done by cleaner technologies. Operations that travel more miles than the default EMFAC VMT should have a mechanism to demonstrate that they are achieving more mileage and therefore more emission reductions. Achieving more emission reductions should then result in more WAIRE points.

Thank you again for the opportunity to comment and we look forward to working with you on this rule.

Sincerely,



Kevin Maggay
Environmental Affairs
SoCalGas

CC: Sarah Rees (SCAQMD)
Priscilla Hamilton (SoCalGas)
Dan McGivney (SoCalGas)

TESLA Summary of Comments on Draft Proposed Rule 2305

Page: 1

PROPOSED RULE 2305 WAREHOUSE INDIRECT SOURCE RULE – WAREHOUSE ACTIONS AND INVESTMENTS TO REDUCE EMISSIONS (WAIRE) PROGRAM

(a) Purpose

The purpose of this rule is to reduce local and regional emissions of nitrogen oxides and particulate matter, and to facilitate local and regional emission reductions associated with warehouses and the mobile sources attracted to warehouses in order to assist in meeting state and federal air quality standards for ozone and fine particulate matter.

(b) Applicability

This rule applies to ¹ owner and operators of warehouses located in the South Coast Air Quality Management District (South Coast AQMD) jurisdiction with greater than equal to 100,000 sq ar feet of indoor floor space in a single building dedicated to that may be used for warehousing activities by one or more warehouse operators.

Number: 1 Author: nderrickson Subject: Sticky Note Date: 12/16/2020 11:11:48 AM

One key issue we see here is if a warehouse owner/operator leases or contracts for (but doesn't own) an all-electric fleet and uses off-site charging, there would not qualify for earning points. Could the owner/operator be in compliance if they demonstrate use of electric vehicles and charging without owning them on site?

Relatedly, since points can't be earned for activities required by CARB, would warehouse owners/operators already required to electrify their fleets and charging have to go above the CARB requirement for locating charging stations and vehicles at specific locations?

Number: 2 Author: nderrickson Subject: Highlight Date: 12/4/2020 5:27:39 PM

tractor is parked at a warehouse.

¶ 1 **ELECTRIC CHARGER** means an electric charging station for vehicles. Each unique plug that can charge an individual vehicle at any time, regardless of whether other electric chargers/plugs are operating, counts as one electric charger. This equipment is also referred to as Electric Vehicle Supply Equipment (EVSE).

¶ **FUEL TYPE** means the fuel used to power a vehicle, such as electricity, hydrogen, natural gas, gasoline, or diesel fuel.

(12)(16) 2 **LEVEL 2 CHARGER** means electric vehicle supply equipment (EVSE) that can deliver an electric charge up to a rate of 19.2 kilowatts (kW). 3

(13)(17) **LEVEL 3 CHARGER** means EVSE that can deliver an electric charge between 19.2 and 50 kW

(14)(18) **LEVEL 4 CHARGER** means an EVSE that can deliver an electric charge between 51 and 150kW

(15)(19) **LEVEL 5 CHARGER** means an EVSE that can deliver an electric charge above greater than 151 kW.

(16)(20) **NEAR-ZERO EMISSIONS (NZE) TRUCKS** means trucks or tractors with engines that meeting the California Air Resources Board's

PR2305 - 2

(Version 10/6/2020)

Number: 1 Author: nderrickson Subject: Highlight Date: 12/16/2020 10:58:12 AM

This definition is confusing around unique plug. Some charging station stalls have two plugs, CCS and Chademo, and only one of the plugs can be used at a time to charge an EV.

We recommend using the definition outlined in the California Energy Code or something more similar to:

"Electric Vehicle Charging Station" or "Electric Vehicle Supply Equipment" means any level of equipment outlined in Article 625 of the California Electrical Code for the purpose of delivering electricity from a source outside an electric vehicle into a plug-in electric vehicle."

Number: 2 Author: nderrickson Subject: Highlight Date: 12/4/2020 6:05:51 PM

Number: 3 Author: nderrickson Subject: Sticky Note Date: 12/16/2020 11:00:42 AM

There are already legally established EV charging levels. These levels should be consistent with them.

LEVEL 1 CHARGER means EVSE that can deliver an electric charge at a rate up to 120-volts. Typically 1kW - 1.4 kW rating.

LEVEL 2 CHARGER means EVSE that can deliver an electric charge at a rate up to 240-volts. Typically 4.8kW to 17.3kW rating.

LEVEL 3 CHARGER or DIRECT CURRENT FAST CHARGER means EVSE that can deliver an electric charge at a rate up to above 480-volts. Typically up to 120+kW.

There may be a desire to also include a higher level charger that serves the Class 7/8 trucks which need charging beyond ~300kW. We should discuss this more given that the industry is working collaboratively on a universal high powered charger.

(d) Requirements

(1) **Warehouse Points Compliance Obligation**

Beginning with the Initial Reporting Date in Table 21, a warehouse operator shall earn the applicable **3 WAIRE Points**, for the prior 12-month period from July 1 through June 30, in the amount identified in Table 1-2 as specified in subparagraph (d)(1)(A). WAIRE Points shall be earned for actions and investments completed during the compliance period while the warehouse operator occupied the warehouse, except as specified in paragraph (d)(36). Subdivision (d) only applies to Only warehouse operators in buildings with greater than or equal to 100,000 square feet of floor area dedicated to warehousing that may be used for warehousing activities and who operate

PR2305 - 4

(Version 10/6/2020)

1 Number: 1 Author: nderrickson Subject: Highlight Date: 12/16/2020 11:08:20 AM

One conceptual issue is that the program seems to capture all trips to and from a warehouse, but doesn't distinguish between trucks that are or aren't actually domiciled at that warehouse. If, for example, a long-haul truck brings goods to a warehouse from 600 miles away, that would count as one trip even though there's currently no cost-effective way to electrify that trip (it would require a public charging network, which is outside of the scope of the operator). Similarly, if you're going back and forth between two warehouses in their jurisdiction, would that count as 2 trips for each warehouse, 4 trips total?

1 Number: 2 Author: nderrickson Subject: Highlight Date: 12/4/2020 6:08:59 PM

It might be helpful to spell out what WAIRE stands for in the definition section. Does WAIRE mean Warehouse Compliance Obligation Points?

Proposed Rule 2305

- (B) The Weighted Annual Truck Trips (WATTs) at a warehouse include all actual truck trips that occurred at a warehouse while the warehouse operator was responsible for operations during the 12-month compliance period. If a warehouse is occupied by more than one warehouse operator, the WATTs are calculated only for truck trips to or from that operator. Actual truck trip data to a warehouse shall be collected by the warehouse operator and WATTs shall be calculated according to the following equation and as specified in the WAIRE Program Implementation Guidelines.

$$WATTs = [Class 4-2b to 7 truck trips] + [2.5 \times Class 8 truck trips]$$

Where:

Class 4-2b to 7 truck trips = All trucks or tractors that entered or exited a warehouse truck gate(s) or driveway(s) that are truck class 2b, 3, 4, 5, 6, or 7. If truck class


Number: 1 Author: nderrickson Subject: Highlight Date: 12/4/2020 6:13:44 PM

Does this mean all truck trip that occurred to and from the warehouse? Only from vehicles that are engaged in warehouse commercial operation? All trucks that leave or arrive at the warehouse? There could be some loop holes depending on how you write this.

Perhaps add in what is outlined below: "trucks are all straight trucks that entered or exited a warehouse truck gate(s) or driveway(s)."

Number: 2 Author: nderrickson Subject: Highlight Date: 12/4/2020 6:12:58 PM

Is 2.5 based off of something particular? Or just a general approximation of emissions differences between lower classes and class 8?

- (C) If a warehouse operator does not have information about the number of truck trips at a warehouse due to a force majeure event such as a destruction of records from a fire, the WATTs shall be calculated according to the following equation. 

$$WATTs = Days\ per\ Year \times Warehouse\ Size \times WTTR$$

Where:

Days per Year = The number of days that the warehouse operator has operational control of the warehouse during the 12-month compliance period

Warehouse Size = Warehouse size in thousand square feet (tsf), as defined in subdivision (c)


WTTR = Weighted Truck Trip Rate, where:

Warehouses $\geq 200,000$ = 0.95 trips/tsf/day

Warehouses $\geq 100,000$ = 0.67 trips/tsf/day

Cold Storage Warehouses = 2.17 trips/tsf/day

(2) Earning WAIRE Points

WAIRE Points shall only be earned through completing actions in the WAIRE Menu in Table 3 and as described in (d)(3), r by completing actions in an approved Custom WAIRE Plan as described in (d)(4), or by choosing to pay a mitigation fee as described in (d)(5) in lieu of completing actions in the WAIRE Menu or in an approved Custom WAIRE Plan.

- (A) A description how the proposed actions will achieve quantifiable, verifiable, and real NOx and DPM emission reductions as quickly as feasible, but later than three years after plan approval; and
 - (B) A quantification of expected NOx and/or DPM emission reductions from the proposed project within the South Coast AQMD and within three miles of the warehouse; and
 - (C) A description of the method to be used to verify that the proposed project will achieve NOx and/or DPM emission reductions; and
 - (D) A schedule of key milestones showing the increments of progress to complete the proposed project; and
 - (E) A description of the location and a map of where the proposed project will occur; and
 - (F) Any expected permits or approvals required by other private parties, or South Coast AQMD, or other federal, state, or local government agencies to implement the proposed plan.
- (iv) Any proposed plan that relies on VMT reduction must demonstrate that these reductions are surplus to what is included in the most recent approved Regional Transportation Plan (RTP) and Air Quality Management Plan (AQMP).
- (B) Review of Custom Option Plan Applications
- (i) A Custom WAIRE Plan application must be submitted at least 9 months before an Annual WAIRE Report is due for the year in which the Plan will earn Points.
 - (ii) Within 30 days of receipt of the Custom Option Plan, the Executive Officer will conduct an initial review of the Custom Option Plan and confirm receipt.
 - (iii) The Executive Officer shall approve or reject the Custom Option Plan within 3 months of submittal. If no formal approval or rejection is received by the applicant, the application is presumed rejected unless otherwise provided

That is quite a long time before. I wonder if there will be push back on this timing from business interests.

(4)(5) Mitigation Fee

In lieu of earning the required number of WAIRE Points in paragraph (d)(3) or (d)(4) If a warehouse operator does not earn a sufficient number of WAIRE Points to may choose to satisfy all or any remaining part of their WAIRE Points Compliance Obligation in (d)(1), they shall pay through payment of a mitigation fee to make up the difference according to the schedule below. The mitigation fee rate shall be equal to in the amount of 2)1,000XX for each WAIRE Point.

(A) ~~In any one compliance year, if a warehouse operator does not complete at least 50% of their WAIRE Points Compliance Obligation through the earning of WAIRE points from Table 3, the following year the mitigation fee rate shall be ten percent more than the dollar value per WAIRE Point that the warehouse operator paid in the previous year.~~

(5)(6) Transferring WAIRE Points

WAIRE Points are not transferable, except as specified below.

(A) Transferring WAIRE Points to a Different Warehouse

3) a warehouse operator conducts warehousing activities at more than one warehouse, then WAIRE Points earned for one warehouse may be used at the other warehouse(s) under the operational control of that am warehouse operator. Only those points that are earned

1 Number: 1 Author: nderrickson Subject: Highlight Date: 12/4/2020 6:21:11 PM
and/or owner?

1 Number: 2 Author: nderrickson Subject: Highlight Date: 12/4/2020 6:30:29 PM
Where do the mitigation fee funds go?

1 Number: 3 Author: nderrickson Subject: Highlight Date: 12/4/2020 6:31:02 PM
This flexibility is good and important to include.

- (D) 1 the warehouse has an alternative fueling station(s) or electric charging station(s) located onsite, the Initial Site Information Report shall include
- (i) Number of electric chargers/alternative fueling stations installed. The report must include the level for each electric charging station. For alternative-fueling stations, the report must include the fuel type, maximum fuel dispensing rate, the maximum amount of fuel that can be dispensed daily, and the pressure of the fueling system, if applicable.
 - (ii) Types of vehicles served;
 - (iii) Total fuel dispensed and/or charging provided in the previous 12-month period.
- (E) If the warehouse operator has yard trucks that are based-used at that site-warehouse facility, the Initial Site Information Report shall include:
- (i) Number of yard trucks, and indicate which of these are registered as motor vehicles under Vehicle Code section 4000, et seq. by onroad and offroad classification;
 - (ii) Fuel type and engine size; and
 - (iii) Total annual hours of operation of all yard trucks.
- (F) If the warehouse has onsite alternative energy generation equipment and/or onsite energy storage equipment, the Initial Site Information Report shall include:
- (i) The type and rated capacity of the alternative energy generation system in kilowatts and kilowatt-hours per year, and/or rated capacity of the energy storage system in kilowatt-hours, as applicable.
 - (ii) The total energy generation and/or usage of the energy storage system in kilowatt hours expected during the next applicable 12-month compliance period in subdivision (d).

Table 1-2 – Annual Variable

WAIRE Report Year*	Annual Variable
First Year	<input checked="" type="checkbox"/> X
Subsequent Years	XX
Etc.	XX
	XX
	XX

* This is the year that a warehouse submitted its Annual WAIRE Report.


 Number: 1 Author: nderrickson Subject: Highlight Date: 12/4/2020 6:40:17 PM
Is there any more information on what the annual variable might be, how it is calculated, and the strategy around it?

Table 3 WAIRE Menu

Action/Investment	Action/Investment Details	Reporting Metric	Annualized Metric	WAIRE Points per Annualized Metric	Discounted WAIRE Points Subparagraph (d)(6)(A)	
Acquire ZE/NZE Trucks in Warehouse Operator Fleet	ZE Class 8	Number of trucks	One truck acquired	126	126	
	ZE Class 4-7			68	68	
	ZE Class 2b-3			14	14	
	NZE Class 8			55	55	
	NZE Class 4-7			26	26	
ZE/NZE Truck Visits	ZE Class 8	Number of visits	365 truck visits	51	33	
	ZE Class 4-7			12	9	
	ZE Class 2b-3			9	6	
	NZE Class 8			42	24	
	NZE Class 4-7			12	9	
Acquire ZE Yard Truck		Number of yard trucks	One yard truck acquired	177	177	
Use ZE Yard Truck		Hours of use	1,000 hours	291	51	
Install Onsite ZE Charging or Fueling Infrastructure	Level 5 EVSE Purchase	Number of EVSE purchased	One EVSE purchased	118	118	
	Level 4 EVSE Purchase			51	51	
	Level 3 EVSE Purchase			26	26	
	Level 2 EVSE Purchase			5	5	
	TRU Plug EVSE Purchase			1	1	
	Begin construction on Level 3, 4, or 5 charger project	First day of construction	One construction project	9	9	
	Begin construction on Level 2 charger project			9	9	
	Begin construction on TRU Plug project			5	5	
	Finalize Level 3, 4, or 5 charger project			The latter of final permit sign off or charger energization	59	59
	Finalize Level 2 charger project			9	9	
Finalize TRU Plug project	7	7				
Hydrogen (H ₂) Station	3	daily capacity of station in kilograms (kg)	One 700 kg/day station construction project	1,680	1,680	
Use Onsite ZE Charging or Fueling Infrastructure	Vehicle Charging	Kilowatt-hours (kWh) of dispensed electricity	165,000 kWh	42	24	
	TRU Charging		10,658 kWh	10	3	
	H ₂ Station Usage		6,152 kg	43	25	
Install Onsite Solar Panels	Rooftop	Size of system in kW	100 kW system	23	23	
	Canopy		27	27		
Use Onsite Solar Panels		Energy production in kWh	165,000 kWh	2	2	
Install High-Efficiency Filters or Filter Systems in Residences, Schools, Daycares, Hospitals, or Community Centers	Install Stand-Alone System	Number of systems installed	25 systems	55	55	
	Install Filters	Number of filters installed	200 filters	51	51	

T Number: 1 Author: nderrickson Subject: Highlight Date: 12/16/2020 11:04:37 AM
 This should be updated to the levels of charging based off of the aforementioned already established charging levels 1- 120V, 2 - 240V, 3 or DCFC - 480+V and perhaps adding a high powered charger as well for Class 7/8 trucks.

The way points are calculated may be best and fairly determined through a scaled \$/kWh charge rate for the different levels of charging and also a scaled cost for the different construction costs for different levels of charging. For example, the point calculation should not disincentivize higher powered, more expensive charging stations.

T Number: 2 Author: nderrickson Subject: Highlight Date: 12/16/2020 11:12:50 AM
 Can you explain what a "TRU Plug EVSE Purchase" is?

T Number: 3 Author: nderrickson Subject: Highlight Date: 12/16/2020 11:21:57 AM
 The hydrogen fueling station is worth much more than points for an EV charging station. Usage points should be scaled so they are equivalent between vehicle miles traveled.

**CENTER FOR COMMUNITY ACTION & ENVIRONMENTAL JUSTICE
 EARTHJUSTICE
 EAST YARD COMMUNITIES FOR ENVIRONMENTAL JUSTICE
 LONG BEACH ALLIANCE FOR CHILDREN WITH ASTHMA
 NATURAL RESOURCES DEFENSE COUNCIL
 PARTNERSHIP FOR WORKING FAMILIES
 SAN PEDRO & PENINSULA HOMEOWNERS COALITION
 SIERRA CLUB
 THE LOS ANGELES COUNTY ELECTRIC TRUCK & BUS COALITION
 WAREHOUSE WORKER RESOURCE CENTER
 WEST LONG BEACH ASSOCIATION**

February 5, 2021

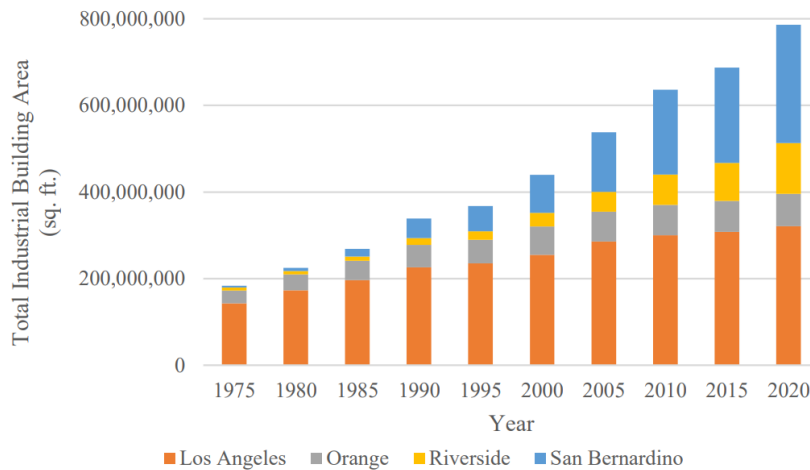
Ian MacMillan
 Planning and Rules Manager
 South Coast Air Quality Management District
 21865 Copley Drive
 Diamond Bar, CA 91765

Re: Comments on the Warehouse Indirect Source Rule (Proposed Rule 2305)

Dear Mr. MacMillan,

On behalf of the undersigned coalition of organizations, we submit these comments on Proposed Rule 2305. We appreciate staff’s continued work on the warehouse indirect source rule, but we remain concerned that the current proposal will not meaningfully regulate an industry that has polluted communities for years. As demonstrated in the figure below, the warehouse industry has grown steadily in the South Coast Air Basin in the past two decades,¹ and nearby communities continue to be disproportionately impacted by the polluting trucks visiting these facilities.

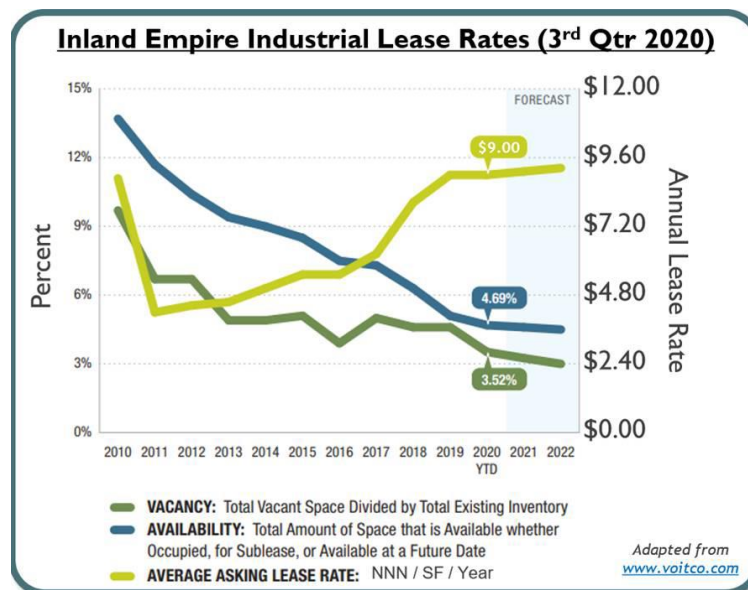
Figure 10: Industrial Building Growth by County



¹ SCAQMD, Preliminary Draft Staff Report, 45.

The ongoing covid-19 pandemic has exacerbated the unacceptable health risks that these frontline communities face every day. Last year, this public health crisis coincided with one of the worst smog seasons in the South Coast Air Basin in decades – with a total of 157 days of ozone pollution levels exceeding state and federal air quality standards.²

Meanwhile, the warehouse industry has reported record-breaking profits during the pandemic as consumers increasingly rely on e-commerce. Last year, the San Pedro Bay Ports hit record freight volumes for several months. At the Port of Long Beach, December 2020 was the Port’s busiest month in its 110-year history, and 2020 was the Port’s “all-time busiest year.”³ This increased port activity has only accelerated the expansion of an already booming warehouse industry, further compounding the health burdens on nearby communities.⁴ In the Inland Empire, warehouse vacancy rates have reached their lowest in a decade while lease rates have increased.



A strong warehouse indirect source rule will address these growing disproportionate pollution burdens, provide basic health protections to our communities, and put the South Coast on track to attain federal and state ambient air quality standards. But the Air District must prioritize public health and take into account community needs in the development of this rule.

I. The Air District must increase the proposed stringency in order to meaningfully address public health concerns.

We oppose the current proposed stringency value of 0.0025 WAIRE points/WATT and urge the Air District to evaluate and consider higher stringency values for the final rule. The undersigned

² Tony Barboza, *L.A. began 2020 with a clean-air streak but ended with its worst smog in decades*, Los Angeles Times (Dec. 6, 2020), <https://www.latimes.com/california/story/2020-12-06/2020-la-air-quality-southern-california-pollution-analysis>.

³ Port of Long Beach, *Port Moves a Record 8.1 Million TEUs in 2020*, Jan. 15, 2021, <https://www.polb.com/port-info/news-and-press/port-moves-a-record-8-1-million-teus-in-2020-01-15-2021/>.

⁴ See Justin Ho, *As imports boom, warehouses fill up, and businesses face a storage shortage*, Marketplace (Oct. 1, 2020), <https://www.marketplace.org/2020/10/01/imports-boom-warehouses-fill-up-businesses-face-storage-shortage-online-shopping-covid19/>.

organizations have repeatedly asked for a rule that starts with sufficient stringency to provide relief to communities sooner.

The Air District has identified several factors that were taken into consideration in determining the stringency.⁵ We disagree with the agency's approach of "balancing all factors." Public health concerns are unequivocally of greater importance than the financial impact to an industry that profits at the expense of our communities' health. As the Air District has acknowledged, the warehouse industry is experiencing record profits and all-time low vacancies. Despite increasing rents and cargo diversion, the industry continues to grow in the region and facilities are not choosing to leave the area.⁶ The industry can, and must, shoulder these regulatory costs. A transformation of the warehouse industry is long overdue, and public health must be the single most important factor in guiding the stringency of this rule.

The current range of stringency values, if implemented, is far too low to bring about meaningful change to warehouse operations.⁷ The lowest stringency value studied by the Air District (0.0001) would only reduce, at a maximum, 1.5 tons per day of nitrogen oxide emissions and 0.01 tons per day of diesel particulate matter emissions.⁸ Due to the annual variable and phase-in schedule, the full stringency would not even apply to many warehouses for years.⁹ These emissions reductions will not be sufficient to bring relief to communities living adjacent to warehouse facilities in the near future. We request that the agency analyze a stringency value of 0.0075 WAIRE points per WATT at a minimum. The Air District's analysis shows that a stronger rule would not result in warehouses leaving the region, and a higher stringency value is necessary to bring about a transformation of this industry.

While we appreciate that staff has provided the scenario analysis tool and WAIRE calculator for public use, these tools are inaccessible to community members. The calculator, scenario analyses, and draft staff report do not clarify the specific factors used to calculate the stringency value and, ultimately, a regulated facility's points obligation. It is unclear whether the agency's analysis accounts for demographics in affected communities, data that is critical to identifying environmental justice communities and sensitive receptors located near facilities. We have repeatedly emphasized that facilities located in environmental justice communities and neighboring sensitive receptors must receive a higher points obligation or attain zero-emissions operations on an accelerated timeline. The draft proposed rule does not account for this, and we request that the Air District include a demographic variable in the points obligation calculation.

II. A strong warehouse ISR must prioritize zero-emissions technology.

As noted in our previous comment letters, a strong warehouse indirect source rule must prioritize zero-emissions technology and infrastructure, the only solution that will effectively address the air quality and health impacts caused by this industry. Yet, the Air District's scenario analysis continues to overestimate the emissions reductions for near-zero technologies. For example, facilities earn the same amount of points for NZE class 4-7 truck visits and ZE class 4-7 truck visits.¹⁰ This obscures the real costs of near-zero technologies – further investment in natural gas and oil infrastructure that will

⁵ Preliminary Draft Staff Report, 6.

⁶ *Id.* at 58.

⁷ SCAQMD, *Warehouse ISR Working Group Presentation* (Dec. 17, 2020), slides 21-22.

⁸ *Id.* at slide 22.

⁹ Preliminary Draft Staff Report, 29.

¹⁰ *Id.* at 97.

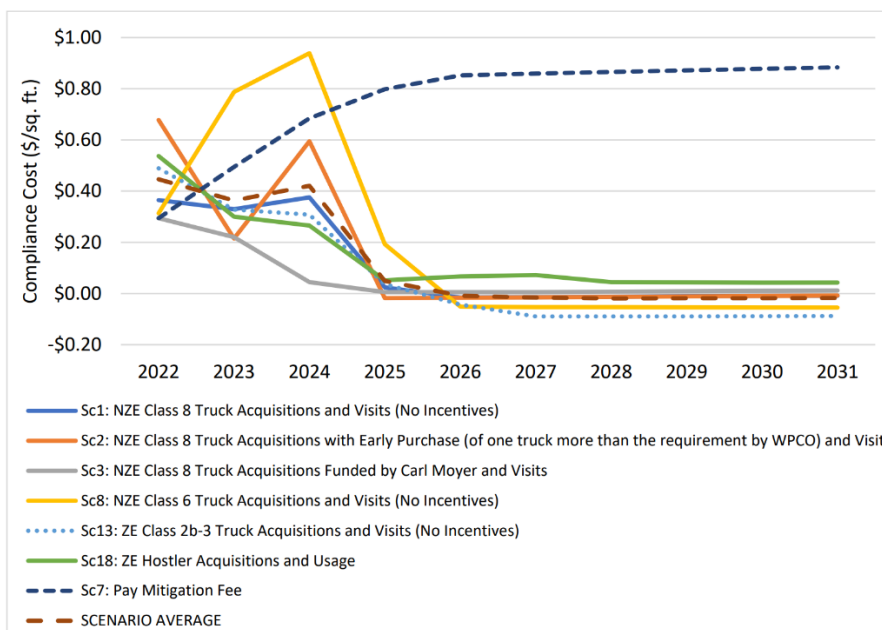
perpetuate harm in frontline communities. We request that the Air District update the WAIRE menu to incentivize investment in zero-emissions technology and infrastructure.

A rule that incentivizes zero-emissions technology will protect the health of our communities and create quality jobs. The transition towards zero-emissions will require the installation of charging infrastructure, on-site solar panels, and the manufacturing of electric vehicles – all of which will lead to meaningful job opportunities in the implementation of cleaner technologies at warehouses. The manufacturing of zero-emission buses and solar panel installation on larger commercial buildings have created and broadened access to unionized jobs with quality wages and benefits for workers. The warehouse indirect source rule can facilitate a similar transformation that will further increase demand for quality jobs in the greening energy, transportation, and manufacturing sectors. The Air District should not waste an opportunity to develop a rule that will lead to significant emissions reductions and create access to good jobs.

III. The rule must not allow for a “pay-to-pollute” compliance option.

We remain concerned about the mitigation fee option as it allows regulated facilities to pay their way into compliance, rather than invest in on-site WAIRE menu items to clean up operations. Although the scenario cost analysis estimates that the mitigation fee will be a more costly option and not frequently used, the agency’s projections show that the \$1000/point fee remains a cheaper compliance pathway in the initial phases of the rule.¹¹

Figure 14: Potential Bounding Analysis Costs from Truck Acquisition and Subsequent Usage Scenarios



In order to incentivize investment in the WAIRE menu items, we ask that staff consider a higher mitigation fee. In the event that warehouses opt to pay their way into compliance, the Air District should require that these funds are spent in the communities surrounding those facilities.

IV. The Air District should release data on warehouse facilities that is relevant to compliance.

¹¹ *Id.* at 66.

In order to ensure proper public engagement, the Air District must make certain information relevant to compliance available to the public. Specifically, we request that the agency release the following data: the number of truck trips to each regulated facility; the number of trucks and tractors serving a warehouse, by truck class and fuel type; the trucking companies servicing the regulated facilities; and the truck routes to and from each facility.

This information is critical to understanding the impacts of warehouses in nearby communities. There is no legal rationale to withhold this information from the public. Such data does not constitute confidential business information and will be essential for proper enforcement of the rule.

V. We cannot afford further delays of the warehouse indirect source rule.

Finally, the Air District must adopt the warehouse indirect source rule as expeditiously as possible, and no later than April. We appreciate staff's continued work on this critical regulation, but the rule has experienced numerous delays while the freight industry continues to pollute communities living near warehouses. The Air District has the opportunity to adopt a strong and equitable warehouse indirect source rule that will provide significant health benefits to frontline communities. We ask that staff continue to engage with community members so that community needs and concerns can be addressed in the development of this rule.

We appreciate your consideration of these comments and the staff's work on this important rule. We look forward to continuing to work with the Air District to develop a regulation that prioritizes public health.

Sincerely,

Regina Hsu
Michelle Ghafar
Adrian Martinez
Earthjustice

Ivette Torres
Center for Community Action & Environmental Justice

Taylor Thomas
East Yard Communities for Environmental Justice

Sylvia Betancourt
Long Beach Alliance for Children with Asthma

Heather Kryczka
Natural Resources Defense Council

Kathy Hoang
Partnership for Working Families

Peter M. Warren
San Pedro & Peninsula Homeowners Coalition

Carlo De La Cruz
Sierra Club

Yasmine Agelidis
The Los Angeles County Electric Truck & Bus Coalition

Andrea Vidaurre
Warehouse Worker Resource Center

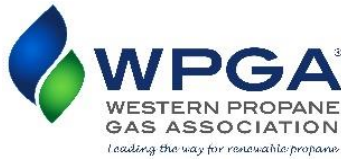
Theral Golden
West Long Beach Association

cc:

Wayne Natri
Executive Officer
South Coast Air Quality Management District

Sarah Rees
Assistant Deputy Executive Officer
Planning, Rule Development & Area Sources

Victor Juan
Program Supervisor
South Coast Air Quality Management District



Westport



February 16, 2021

South Coast AQMD Board Members, Mobile Source Committee

- The Honorable William A. Burke, Ed.D., Chair
- The Honorable Sheila Kuehl, Los Angeles County Representative, Vice Chair
- The Honorable Lisa Bartlett, Orange County Representative
- The Honorable Larry McCallon, Cities of San Bernardino County Representative
- The Honorable Manuel Perez, Riverside County Representative
- The Honorable Carlos Rodriguez, Cities of Orange County Representative

cc: Matt Miyasato, Ph.D., Deputy Executive Officer
 Ian MacMillan, Planning and Rules Manager
(Submitted electronically)

RE: Inclusion of Near-Zero Emission Terminal Tractors Under Proposed Rule 2305 (WAIRE)

Dear Chairman Burke and Members of the South Coast AQMD Board’s Mobile Source Committee:

The signatories to this letter represent a broad coalition employing many hundreds of people who live and work throughout Southern California. Our companies and organizations manufacture, sell, service, support, operate and/or provide renewable and traditional fuels for heavy-duty vehicles (HDVs) powered by state-of-the-art, ultra-low-emission engines. These commercially available on- and off-road HDVs – which are certified to CARB’s lowest-tier “Optional Low-NOx-Standards” (OLNS) – are fueled by propane or natural gas. As you know, such engines are commonly referred to at the South Coast AQMD as being “Near-Zero Emission” (NZE). All NZE engine types can routinely use renewable low-carbon fuels as “drop-in” replacements for their fossil-fuel versions. The result is that NZE HDVs deliver 90+ percent NOx reductions relative to current heavy-duty engine standards, along with deep greenhouse gas (GHG) reductions when renewably fueled.

We appreciate the opportunity to comment on South Coast AQMD’s Proposed Rule (PR) 2305. It appears likely that staff will propose this Indirect Source Rule (ISR) for Board adoption at your April 2021 meeting.

Our coalition of companies and organizations does not oppose the spirit and intent of PR 2305. In fact, we strongly support your efforts to dramatically reduce NOx emissions from HDVs (both on- and off-road) serving large warehouse and distribution centers in the South Coast Air Basin. Our coalition members have made – and will continue to make – major contributions to reducing HDV NOx emissions in the SCAB.

We are writing to urge you to make a simple, logical, and important modification to the currently defined rule. Specifically, for all the compelling reasons described below, we ask that you direct staff to add NZE terminal tractors (aka yard hostlers, yard tractors, etc.) as a compliance pathway under PR 2305.

NZE Terminal Tractors Will Provide Highly Cost-Effective NOx Reductions at Warehouse Facilities

We note and appreciate that your staff has embraced NZE on-road trucks as a compliance pathway in drafting PR 2305. Staff has acknowledged that NZE HDVs (regardless of fuel or technology) provide the most cost-effective and expedient means to dramatically reduce (90+ percent) HDV NOx emissions in the SCAB. Most importantly, staff has recognized that the same cost-effective NOx-reduction benefits are achievable from NZE off-road terminal tractors. Unfortunately, PR 2305's draft language does not currently allow NZE terminal tractors as a compliance pathway within the "WAIRE" point system.

In effect, staff appears set on pursuing a specified technology mandate for off-road HDVs under PR 2305. *This diverges from the South Coast AQMD's longstanding practice of, and support for, promulgating emissions-performance requirements to reduce HDV emissions, without unfairly favoring any particular type of HDV fuel/technology.* As has been recognized by Board members and executive management at the District, natural gas and propane fueled HDVs (on- and off-road) are now achieving NOx emission levels as low as the grid-generated emissions that result from charging comparable battery-electric HDVs. Yet, the draft rule's current composition disallows compliance with terminal tractors powered by these two types of commercially available NZE engines.

Simply stated, this policy is contrary to the District's urgent mission to restore healthful air quality in the SCAB, and expeditiously achieve ozone attainment. Additionally, it will unnecessarily impose hardship on the entities regulated under the rule. Specifically, if PR 2305 allows only ZE off-road HDVs, it will impose higher infrastructure costs on terminal tractor fleets. This is because the draft rule provides only two compliance options for terminal tractors, as follows:

- 1) Battery-electric terminal tractors are important early-commercial platforms that will work well in many warehouse and distribution center applications. Heavy-duty battery-electric vehicles are very promising for off-road use (including terminal tractors), but adopting facilities will need to overcome significant challenges involving charging infrastructure, site upgrades and permitting.
- 2) Hydrogen fuel cell tractors are also very promising, although they are several years behind battery electric tractors for commercial maturity. Essentially, they are pre-commercial products in the late stages of R&D. Similar to the case of battery-electric HDVs, facilities seeking to deploy fuel cell HDVs will need to overcome significant challenges associated with fuel and fueling infrastructure. In particular, hydrogen fuel is not yet readily available for use in the transportation sector, especially in HDV applications.

Expanding PR 2305 to allow NZE terminal tractors (regardless of fuel type) will provide additional lower-cost compliance options, for both capital costs and fueling infrastructure. NZE propane and natural gas terminal tractors entail relatively modest incremental capital costs over their baseline terminal tractor counterparts. They are likely to provide lower total cost of ownership (TCO) than either type of ZE platform noted above (Staff's analysis for on-road NZE trucks in Table 9 of the PR 2305 Technical Report acknowledges this). Many warehouses and distribution facilities already have access to propane or natural gas fuel. Propane-fueled NZE terminal tractors can use innovative "pony tank" systems that enable quick tank swaps, with no new infrastructure required.

Board Action is Needed to Support Staff in Modifying PR 2305 for this Simple Change

Unless your Board intervenes to redirect staff, PR 2305 will prevent fleets and facility operators from choosing the most expeditious, lowest total-cost-of-ownership pathway to dramatically reduce NOx (and carcinogenic diesel particulate emissions) from terminal tractors serving large warehouse and distribution centers. PR 2305 will unnecessarily restrict compliance pathways and prescribe a rigid, uneconomic approach that fails to capitalize on

cost-effective NOx benefits that are readily obtainable from NZE tractors. And as noted, when fueled with drop-in renewable fuels (natural gas or propane), NZE terminal tractors will provide exceptionally low GHG emissions.

Staff clearly needs help from your Board to rectify this situation and improve PR 2305 as a means to rapidly obtain HDV NOx reductions. For many months, our coalition members have engaged with Staff to describe the cost-effective clean-air benefits that can be realized with use of NZE terminal tractors. We have suggested specific (yet modest) changes to PR 2305. To their credit, Staff members have listened to our concerns. We believe Staff genuinely seeks a more diverse, performance-oriented final Rule 2305 that will achieve fast, cost-effective NOx reductions, as strongly needed for timely ozone attainment. Unfortunately, they indicate that any decision to modify PR 2305 language to include NZE terminal tractors must come at the direction of Board members. This is apparently due to intense, sustained pressure on Staff exerted by certain factions demanding the rule contain an exclusionary, “ZE-only” compliance pathway for terminal tractors regardless of the emission and cost-effectiveness advantages provided by NZE terminal tractor platforms.

Respectfully, we request that you direct Staff to modestly revise PR 2305 to include NZE terminal tractors as compliance pathways. To reiterate, our coalition members support the **non-exclusive** use of ZE terminal tractor platforms as ISR compliance pathways. In fact, some of our coalition members are also developing and/or supporting battery-electric and/or hydrogen fuel cell terminal tractor products and technology. Nonetheless, we believe that – for all the important and compelling reasons further discussed herein – the Board should immediately intervene to allow both ZE and NZE terminal tractors. As noted, Staff has already adopted this exact rationale in allowing NZE on-road trucks as compliance pathways under PR 2305.

NZE Off-Road HDVs Are Fully Consistent with Past and Emerging AQMP Control Measures

Below are additional compelling reasons to permit use of NZE terminal tractors for compliance under PR 2305; all are based on the South Coast AQMD’s long-standing policies and world-leading technology advancement efforts.

1. For the emerging 2022 Air Quality Management Plan, the District has initiated development of new mobile source strategies that will help achieve SCAB attainment of the 2015 8-hour ozone standard (70 ppb). To support development of these critical 2022 AQMP strategies, the District established “Mobile Source Working Groups” in conjunction with CARB. Notably, draft MOU Elements for the 2022 AQMP emphasize the need to “accelerate Zero Emission (ZE) and Near Zero Emission (NZE) cargo handling equipment (CHE).”¹
2. South Coast AQMD’s Resolution No. 17-2,² used for adopting the 2016 AQMP and submitted into the California SIP, includes the following critical statements (emphasis added):

“WHEREAS, an accelerated deployment of current and emerging near-zero emission natural gas engine technologies will provide significant, cost-effective and near-term benefits to regional and local air quality, energy supply security, and public health;” (Page 4, amended 3/3/17)

“BE IT FURTHER RESOLVED, that the mobile source incentive program for heavy-duty vehicles outlined in the 2016 AQMP place priority on the most cost-effective technologies to reach short-term air quality goals such as current and emerging near-zero emission natural gas engine technologies.” (Page 10, amended 3/3/17)

3. The 2016 (most-current) AQMP³ includes nearly 70 individual references to NZE vehicles and equipment. It repeatedly emphasizes the high importance assigned by Staff for rapid, near-term deployment of NZE HDVs to meet ozone attainment goals. Specific examples of such passages in the AQMP include the following (emphasis added):

¹ South Coast Air Quality Management District and California Air Resources Board, “An Overview of CARB’s Mobile Source Strategies: 2022 AQMP Mobile Source Working Group, staff presentation, December 16, 2020, <http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2022-air-quality-management-plan/presentation-2022-aqmp-mobile-sources-wg-final.pdf?sfvrsn=12>.

² South Coast AQMD, “Attachment A, Resolution No. 17-2,” adopted by the Board, March 3, 2017, [aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2016-air-quality-management-plan/final-2016-aqmp/resolution.pdf?sfvrsn=6](http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2016-air-quality-management-plan/final-2016-aqmp/resolution.pdf?sfvrsn=6).

³ South Coast AQMD, “Final 2016 Air Quality Management Plan,” March 2017, <http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2016-air-quality-management-plan/final-2016-aqmp/final2016aqmp.pdf?sfvrsn=15>

- “More stringent mobile source emission standards are desperately needed to spur further development and production of zero- and near-zero emission technologies.” (Preface)
- “Given the fast-approaching deadlines – as early as 2022 and 2023, and given that the majority of the zero and near zero technologies needed for attainment have already or will soon be commercially available, it is now possible to specify the technologies and the implementation pathways to attainment” (Page ES-4)
- “The 2016 AQMP control strategy strongly relies on a transition to zero and near-zero emission technologies in the mobile source sector, including automobiles, transit buses, medium- and heavy-duty trucks, and off-road applications. The plan focuses on existing commercialized technologies and energy sources including their supporting infrastructure, along with newer technologies that are nearing commercialization based on recent demonstration programs and limited test markets. Prioritizing and expanding funding in Environmental Justice (EJ) areas will be sought.” (Page ES-5).
- “Additional demonstration and commercialization projects will be crucial to help deploy and reduce costs for zero and near-zero emission technologies. A key element of Plan implementation will be private and public funding to help further the development and deployment of these advanced technologies. Many of the same technologies will address both air quality and climate goals, such as increased energy efficiency and reduced fuel usage.” (Page 4-1)
- “The SCAQMD will continue to support technology demonstration projects for both mobile and stationary sources and will work to create new or expanded funding opportunities for earlier deployment of cleaner technologies, thus contributing to a smooth transition to zero and near-zero emission technologies in the mobile and stationary source sectors. The SCAQMD will prioritize distribution of incentive funding in environmental justice (EJ) areas and seek opportunities to expand funding to benefit the most disadvantaged communities.” (Page 4-3)
- “Mobile sources such as trucks, locomotives, and cargo handling equipment have technological potential to achieve zero- and near-zero emission levels.” (Page 4-8)
- “All technologies and fuels should be able to compete on an equal footing to meet environmental needs. This policy is consistent with the current priority on maximizing emission reductions utilizing zero emission technologies in all applications that are shown to be cost-effective and feasible. In other applications, near-zero technologies remain essential to meet all attainment goals.” (Page 4-9)
- “In the longer-term, there is a need to significantly increase the penetration and deployment of near-zero and zero-emission vehicles, greater use of cleaner, renewable fuels (either alternative fuels or new formulations of gasoline and diesel fuels), and additional emission reductions from federal and international sources such as locomotives, ocean-going vessels, and aircraft.” (Page 4-23)
- “Lastly, one measure seeks to recognize the criteria pollutant emission reduction benefits of existing incentives programs such as the Carl Moyer Memorial Air Quality Standards Attainment Program and Proposition 1B – Goods Movement Emission Reduction Program. The measures call for greater emission reductions through accelerated turnover of older vehicles to the cleanest vehicles and equipment currently available and increased penetration of commercially-available near-zero and zero-emission technologies through incentives programs in the near-term.” (Page 4-24)
- “However, additional research and demonstration are needed to commercialize zero- and near-zero emission technologies for the heavier heavy-duty vehicles (with gross vehicle weight ratings greater than 26,000 pounds).” (Page 4-24)
- “MOB-13 – OFF-ROAD MOBILE SOURCE EMISSION REDUCTION CREDIT GENERATION PROGRAM: This measure seeks to accelerate the early deployment of near-zero and zero-emission off-road equipment through the generation of MSERCs that can be used for purposes of recognizing mobile source emission reductions at facilities affected by proposed AQMP measures MOB-01 through MOB-04 and EGM-01.” (Page 4-33)
- “FURTHER DEPLOYMENT OF CLEANER TECHNOLOGIES: OFF-ROAD EQUIPMENT: This measure is designed to achieve further emission reductions for the Basin’s attainment needs through a suite of additional actions,

including greater penetration of near-zero and zero-emission technologies through incentive programs, and emission benefits associated with the potential for worksite integration and efficiency, as well as connected and autonomous vehicle technologies. These emission reductions will be achieved through a combination of actions to be undertaken by both CARB and the SCAQMD.” (Page 4-41)

- “Given the significant NOx emission reductions needed to attain the federal ozone air quality standards by 2023 and 2031, a combination of public funding incentives along with regulatory actions are needed. In the near-term, there is a need to commercialize zero and near-zero on-road trucks and off-road equipment as early as possible.” (Page 4-64)
- “Actions to promote ZEVs in these heavy-duty applications are underway and are important to further reduce regional and near-source toxics exposure, especially as it relates to reducing risk from DPM. In the off-road sector, the 2016 AQMP mobile source control strategies stress the need to reflect this same type of transformation to a mix of zero and near-zero technologies operating on renewable fuels.” (Page 9-11)
- TABLE 9-3 (2016 AQMP CARB Mobile Source Control Measures and Concurrent Key Toxic Air Contaminants Reduced) includes “Cleaner engine technology transfer from on-road to off-road applications” and “Incentive funding to achieve further deployment of cleanest engine technologies” (Page 9-12)

South Coast AQMD is the Leading U.S. Supporter of / Champion for NZE HDVs

For more than three decades, the South Coast AQMD’s Technology Advancement / Clean Fuels Program has led the nation (and the world) in providing essential cost-sharing and/or general support to advance progressively lower-emitting HDV technology. In fact, it is largely due to the District’s support over the last decade that natural gas and propane engines (manufactured by our coalition members) are certified by CARB today at NZE levels. Similarly, the District’s financial and technical support has been instrumental in bringing diesel engine technology to the brink of achieving NZE certification. We thank the South Coast AQMD Board and Staff; without such support, it may not have been possible for our coalition members to achieve these very important milestones.

As documented above, wide-scale deployment of NZE HDV technologies and fuels is critical to the District’s overall AQMP control strategy and ability to achieve its air quality goals. If the District now finalizes PR 2305 to exclude NZE terminal tractors, it will be contrary to – and a major blow against – all these successful efforts to develop and deploy NZE HDVs in the SCAB, as strongly needed for ozone attainment. The attached appendix contains specific recent quotes and statements from the District’s Clean Fuels program and related technical documents⁴ that corroborate strong synergy between developing NZE HDV platforms so they can be subsequently deployed in the SCAB, via regulatory mechanisms and/or incentive programs.

Conclusions and Requested Actions by the Board

Our coalition of companies and organizations respectfully asks the Board to urgently intervene on PR 2305, by directing staff to allow NZE terminal tractors as compliance pathways. This simple modification – which Staff is ready to implement at your direction – will significantly improve PR 2305’s ability to expeditiously achieve its intended NOx reductions. It will provide the regulated community with additional compliance options that are very cost effective for reducing NOx, while also delivering low total cost of ownership. Our recommended action is in full accord with your Board’s longstanding fuel-neutral policies to rapidly deploy emerging clean HDV platforms. It will perpetuate and strengthen the decades-long synergy between the District’s world-class HDV technology advancement program and your efforts to rapidly deploy the cleanest-available HDV fuel-technology platforms, as they emerge into the marketplace.

⁴ South Coast Air Quality Management District, Board Agenda No. 28, “Approve and Adopt Technology Advancement Office Clean Fuels Program 2019 Annual Report & 2020 Plan Update,” March 2020.

If you have any questions about the content of our letter, or if you would like to discuss this important issue with our coalition, please contact Ben Granholm at ben@westernpga.org or Jon Leonard at jon.leonard@gladstein.org.

Sincerely,

Joy Alafia, President and CEO, Western Propane Gas Association

Tom Swenson, P.E., Business Development Manager, Cummins Inc. – Natural Gas Group

Ashley Remillard, Vice President, Legal, Agility Fuel Solutions

Thomas Lawson, President, California Natural Gas Vehicle Coalition

Todd Campbell, Vice President of Public Policy, Clean Energy

Julie Johnson, President, Ted Johnson Propane

Scott Graham, General Manager, Expo Propane

Mike Caldarera, P.E., Sr. Vice President, Regulatory and Technical Affairs, National Propane Gas Association

APPENDIX

- “The South Coast AQMD Clean Fuels Program cost-shares projects to develop and demonstrate zero, near-zero and low emissions clean fuels and advanced technologies to push the state-of-the-technology and promote commercialization and deployment of promising or proven technologies not only for the Basin but Southern California and the nation as well. As noted, these projects are conducted through public-private partnerships with industry, technology developers, academic and research institutes and local, state and federal agencies.”
- “The South Coast AQMD continually seeks to support the deployment of lower-emitting technologies. The Clean Fuels Program is shaped by two basic factors: 1) Zero, near-zero and low emission technologies needed to achieve clean air standards in the Basin; and 2) Available funding to support technology development within the constraints imposed by that funding.”
- “One function of the Clean Fuels Program is to help expedite the deployment and commercialization of zero, near-zero and low emission technologies and fuels needed to meet the requirements of the AQMP control measures. In many cases, new technologies, although considered “commercially available,” require assistance to fully demonstrate the technical viability to end-users and decision-makers.”
- “More than ever before, the Clean Fuels Program must both foster and accelerate advancement of transformative transportation, and off-road technologies where possible, with an emphasis on zero and near-zero emissions vehicle and fuel technologies. This is especially true given the region’s economic dependence on thriving goods movement, along with the corresponding impact of that industry on environmental justice communities.”
- “It is important to note here that South Coast AQMD’s Technology Advancement Office (TAO) administers not only the Clean Fuels Program but also the Carl Moyer Program (and other significant incentive programs, such as Proposition 1B-Goods Movement and the Community Air Protection Program). These two programs produce a unique synergy, with the Carl Moyer Program providing the necessary incentives to push market penetration and commercialization of zero and near-zero emission technologies developed and demonstrated by the Clean Fuels Program. This synergy enables the South Coast AQMD to act as a leader in both technology development and commercialization efforts targeting reduction of criteria pollutants and GHG reduction co-benefits.”
- District policies “will help both regulatory agencies and OEMs to expedite introduction of zero and near-zero emission vehicles in the Basin, which is a high priority of the AQMP.”
- “Although no near-zero emission diesel technology is commercially available today, South Coast AQMD has been working closely with CARB and others on defining technology pathways via several projects . . . (that) show near-zero emission diesel technologies are feasible via advanced engine and aftertreatment or optimized engine design and calibration. The (Clean Fuels) Plan Update continues to incorporate pursuit of cleaner engines for the heavy-duty sector. Future projects will support the development, demonstration and certification of engines that can achieve these massive emission reductions using an optimized systems approach.”
- “Currently, on-road heavy-duty natural gas engines are increasingly being certified to CARB’s optional low-NOx standards which are significantly lower in NOx than the current on-road heavy-duty standard. This technology category seeks to support the expansion of OEMs producing engines or systems certified to the lowest optional NOx standard or near-zero emissions and useable in a wide variety of medium- and heavy-duty applications, such as Class 6 vehicles used in school buses and in passenger and goods delivery vans, Class 7 vehicles such as transit buses, waste haulers, street sweepers, sewer-vector trucks, dump trucks, concrete mixers, commercial box trucks, and Class 8 tractors used in goods movement and drayage operations and off-road equipment such as construction vehicles and yard hostlers.”
- “The deployment of near-zero emission vehicles would significantly further emission reductions relative to the state’s current regulatory requirements.”

- “The South Coast AQMD relies on a significant increase in the penetration of zero and near-zero emission vehicles in the South Coast Basin to attain federal clean air standards by 2023 and 2032. This project would help develop a number of renewable transportation fuel production and distribution facilities to improve local production and use of renewable fuels to help reduce transportation costs and losses that can reduce total operating costs of zero and near-zero emission vehicles to be competitive with comparable diesel fueled vehicles. Such advances in production and use are expected to lead to greater infrastructure development. Additionally, this project could support the state’s goal of redirecting biomass waste for local fuel production and reduce greenhouse gases associated with these waste biomass feedstocks.”
- “Nonetheless, while the state and federal governments have continued to turn a great deal of their attention to climate change, South Coast AQMD has remained committed to developing, demonstrating and commercializing zero and near-zero emission technologies. Fortunately, many, if not the majority, of technology sectors that address our need for NOx reductions also garner greenhouse gas (GHG) reductions. Due to these “co-benefits,” the South Coast AQMD has been successful in partnering with the state and federal government. Even with the leveraged funds, the challenge for the South Coast AQMD remains the need to identify project or technology opportunities in which its available funding can make a difference in achieving progressively cleaner air in the Basin.”
- “Although both announcements (separate initiatives on clean HDVs by EPA and CARB) are welcome news, the timing is too late to help the South Coast AQMD meet its 2023 federal attainment deadline. So, despite progress, commercialization and deployment of near-zero engines are still needed.
- “Because of Assembly Bill (AB) 6171, which requires reduced exposure to communities most impacted by air pollution, TAO conducted additional outreach to AB 617 communities regarding available zero and near-zero emission technologies, as well as the incentives to accelerate those cleaner technologies into their communities.
- SCAQMD’s Clean Fuels Plan 2020 Update includes projects to develop, demonstrate and commercialize a variety of technologies to meet emission control needs identified in the 2016 AQMP. Emphasis is on getting significant near-term reductions “using near-zero and zero emission technologies,” including “for high horsepower applications.”
- “More than ever before, the Clean Fuels Program must both foster and accelerate advancement of transformative transportation, and off-road technologies where possible, with an emphasis on zero and near-zero emissions vehicle and fuel technologies. This is especially true given the region’s economic dependence on thriving goods movement, along with the corresponding impact of that industry on environmental justice communities.”
- “The Clean Fuels Program and the Carl Moyer Program provide a unique synergy, with the Carl Moyer Program providing the necessary incentives to push market penetration of the technologies developed and demonstrated by the Clean Fuels Program. This synergy enables the South Coast AQMD to act as a leader in both technology development and commercialization efforts targeting reduction of criteria pollutants.”



February 8, 2021

South Coast AQMD Board Members, Mobile Source Committee

The Honorable William A. Burke, Ed.D., Chair

The Honorable Lisa Bartlett, Orange County Representative

The Honorable Larry McCallon, Cities of San Bernardino County Representative

The Honorable Manuel Perez, Riverside County Representative

The Honorable Carlos Rodriguez, Cities of Orange County Representative

(Submitted electronically)

RE: Inclusion of Near-Zero Emission Terminal Tractors Under Proposed Rule 2305 (WAIRE)

Dear Chairman Burke and Members of the South Coast AQMD Board's Mobile Source Committee:

The signatories to this letter represent a broad coalition employing many hundreds of people who live and work throughout Southern California. Our companies and organizations manufacture, sell, service, support, operate and/or provide renewable and traditional fuels for heavy-duty vehicles (HDVs) powered by state-of-the-art, ultra-low-emission engines. These commercially available on- and off-road HDVs – which are certified to CARB's lowest-tier "Optional Low-NOx-Standards" (OLNS) – are fueled by propane or natural gas. As you know, such engines are commonly referred to at the South Coast AQMD as being "Near-Zero Emission" (NZE). It appears that NZE diesel engines may also be on the cusp of commercialization. All three NZE engine types can routinely use renewable low-carbon fuels as "drop-in" replacements for their fossil-fuel versions. The result is that NZE HDVs deliver 90+ percent NOx reductions relative to current heavy-duty engine standards, along with deep greenhouse gas (GHG) reductions when renewably fueled.

We appreciate the opportunity to comment on South Coast AQMD's Proposed Rule (PR) 2305. It appears likely that staff will propose this Indirect Source Rule (ISR) for Board adoption at your April 2021 meeting. Subsequent to that, staff will initially introduce PR 2305 to the Board at its Mobile Source Committee meeting (expected to be no later than March 2021).

Our coalition of companies and organizations does not oppose the spirit and intent of PR 2305. In fact, we strongly support your efforts to dramatically reduce NOx emissions from HDVs (both on- and off-road) serving large warehouse and distribution centers in the South Coast Air Basin. Our coalition members have made – and will continue to make – major contributions to reducing HDV NOx emissions in the SCAB.

We are writing to urge you to make a simple, logical and important modification to the currently defined rule. Specifically, for all the compelling reasons described below, we ask that you direct staff to add NZE terminal tractors (aka yard hostlers, yard tractors, etc.) as a compliance pathway under PR 2305.

NZE Terminal Tractors Will Provide Highly Cost-Effective NOx Reductions at Warehouse Facilities

We note and appreciate that your staff has embraced NZE on-road trucks as a compliance pathway in drafting PR 2305. Staff has acknowledged that NZE HDVs (regardless of fuel or technology) provide the most cost-effective and expedient means to dramatically reduce (90+ percent) HDV NOx emissions in the SCAB. Most importantly, staff has recognized that the same cost-effective NOx-reduction benefits are achievable from NZE off-road terminal tractors. Unfortunately, PR 2305's draft language does not currently allow NZE terminal tractors as a compliance pathway within the "WAIRE" point system.

In effect, staff appears set on pursuing a specified technology mandate for off-road HDVs under PR 2305. *This diverges from the South Coast AQMD's longstanding practice of, and support for, promulgating emissions-performance requirements to reduce HDV emissions, without unfairly favoring any particular type of HDV fuel/technology.* As has been recognized by Board members and executive management at the District, natural gas and propane fueled HDVs (on- and off-road) are now achieving NOx emission levels as low as the grid-generated emissions that result from charging comparable battery-electric HDVs. Yet, the draft rule's current composition disallows compliance with terminal tractors powered by these two types of commercially available NZE engines. Additionally, PR 2305 as currently drafted will disallow potential use of NZE diesel terminal tractors, when and if they are commercialized.

Simply stated, this policy is contrary to the District's urgent mission to restore healthful air quality in the SCAB, and expeditiously achieve ozone attainment. Additionally, it will unnecessarily impose hardship on the entities regulated under the rule. Specifically, if PR 2305 allows only ZE off-road HDVs, it will impose higher infrastructure costs on terminal tractor fleets. This is because the draft rule provides only two compliance options for terminal tractors, as follows:

- 1) Battery-electric terminal tractors are important early-commercial platforms that will work well in many warehouse and distribution center applications. Heavy-duty battery-electric vehicles are very promising for off-road use (including terminal tractors), but adopting facilities will need to overcome significant challenges involving charging infrastructure, site upgrades and permitting.
- 2) Hydrogen fuel cell tractors are also very promising, although they are several years behind battery electric tractors for commercial maturity. Essentially, they are pre-commercial products in the late stages of R&D. Similar to the case of battery-electric HDVs, facilities seeking to deploy fuel cell HDVs will need to overcome significant challenges associated with fuel and fueling infrastructure. In particular, hydrogen fuel is not yet readily available for use in the transportation sector, especially in HDV applications.

Expanding PR 2305 to allow NZE terminal tractors (regardless of fuel type) will provide additional lower-cost compliance options, for both capital costs and fueling infrastructure. NZE propane and natural gas terminal tractors entail relatively modest incremental capital costs over their baseline terminal tractor counterparts. They are likely to provide lower total cost of ownership (TCO) than either type of ZE platform noted above (Staff's analysis of on-road NZE trucks for PR 2305 acknowledges this). Many warehouses and distribution facilities already have access to propane or natural gas fuel. Propane-fueled NZE terminal tractors can use innovative "pony tank" systems that enable quick tank swaps, with no new infrastructure required.

Board Action is Needed to Support Staff in Modifying PR 2305 for this Simple Change

Unless your Board intervenes to redirect staff, PR 2305 will prevent fleets and facility operators from choosing the most expeditious, lowest total-cost-of-ownership pathway to dramatically reduce NOx (and carcinogenic diesel particulate emissions) from terminal tractors serving large warehouse and distribution centers. PR 2305 will unnecessarily restrict compliance pathways and prescribe a rigid,

uneconomic approach that fails to capitalize on cost-effective NOx benefits that are readily obtainable from NZE tractors. And as noted, when fueled with drop-in renewable fuels (natural gas, propane or diesel), NZE terminal tractors will provide exceptionally low GHG emissions.

Staff clearly needs help from your Board to rectify this situation, and improve PR 2305 as a means to rapidly obtain HDV NOx reductions. For many months, our coalition members have engaged with Staff to describe the cost-effective clean-air benefits that can be realized with use of NZE terminal tractors. We have suggested specific (yet modest) changes to PR 2305. To their credit, Staff members have listened to our concerns. We believe Staff genuinely seeks a more diverse, performance-oriented final Rule 2305 that will achieve fast, cost-effective NOx reductions, as strongly needed for timely ozone attainment. Unfortunately, they indicate that any decision to modify PR 2305 language to include NZE terminal tractors must come at the direction of Board members. This is apparently due to intense, sustained pressure on Staff exerted by certain factions demanding the rule contain an exclusionary, “ZE-only” compliance pathway for terminal tractors regardless of the emission and cost-effectiveness advantages provided by NZE terminal tractor platforms.

Respectfully, we request that you direct Staff to modestly revise PR 2305 to include NZE terminal tractors as compliance pathways. To reiterate, our coalition members support the *non-exclusive* use of ZE terminal tractor platforms as ISR compliance pathways. In fact, some of our coalition members are also developing and/or supporting battery-electric and/or hydrogen fuel cell terminal tractor products and technology. Nonetheless, we believe that – for all the important and compelling reasons further discussed herein – the Board should immediately intervene to allow both ZE and NZE terminal tractors. As noted, Staff has already adopted this exact rationale in allowing NZE on-road trucks as compliance pathways under PR 2305.

NZE Off-Road HDVs Are Fully Consistent with Past and Emerging AQMP Control Measures

Below are additional compelling reasons to permit use of NZE terminal tractors for compliance under PR 2305; all are based on the South Coast AQMD’s long-standing policies and world-leading technology advancement efforts.

1. For the emerging 2022 Air Quality Management Plan, the District has initiated development of new mobile source strategies that will help achieve SCAB attainment of the 2015 8-hour ozone standard (70 ppb). To support development of these critical 2022 AQMP strategies, the District established “Mobile Source Working Groups” in conjunction with CARB. Notably, draft MOU Elements for the 2022 AQMP emphasize the need to “accelerate Zero Emission (ZE) and Near Zero Emission (NZE) cargo handling equipment (CHE).”¹
2. South Coast AQMD’s Resolution No. 17-2,² used for adopting the 2016 AQMP and submitted into the California SIP, includes the following critical statements (emphasis added):

“WHEREAS, an accelerated deployment of current and emerging near-zero emission natural gas engine technologies will provide significant, cost-effective and near-term benefits to regional and local air quality, energy supply security, and public health;” (Page 4, amended 3/3/17)

“BE IT FURTHER RESOLVED, that the mobile source incentive program for heavy-duty vehicles outlined in the 2016 AQMP place priority on the most cost-effective technologies to reach short-term air quality goals such as current and emerging near-zero emission natural gas engine technologies.” (Page 10, amended 3/3/17)

¹ South Coast Air Quality Management District and California Air Resources Board, “An Overview of CARB’s Mobile Source Strategies: 2022 AQMP Mobile Source Working Group, staff presentation, December 16, 2020, <http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2022-air-quality-management-plan/presentation-2022-aqmp-mobile-sources-wg-final.pdf?sfvrsn=12>.

² South Coast AQMD, “Attachment A, Resolution No. 17-2,” adopted by the Board, March 3, 2017, [aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2016-air-quality-management-plan/final-2016-aqmp/resolution.pdf?sfvrsn=6](http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2016-air-quality-management-plan/final-2016-aqmp/resolution.pdf?sfvrsn=6).

3. The 2016 (most-current) AQMP³ includes nearly 70 individual references to NZE vehicles and equipment. It repeatedly emphasizes the high importance assigned by Staff for rapid, near-term deployment of NZE HDVs to meet ozone attainment goals. Specific examples of such passages in the AQMP include the following (emphasis added):

- “More stringent mobile source emission standards are desperately needed to spur further development and production of zero- and near-zero emission technologies.” (Preface)
- “Given the fast-approaching deadlines – as early as 2022 and 2023, and given that the majority of the zero and near zero technologies needed for attainment have already or will soon be commercially available, it is now possible to specify the technologies and the implementation pathways to attainment” (Page ES-4)
- “The 2016 AQMP control strategy strongly relies on a transition to zero and near-zero emission technologies in the mobile source sector, including automobiles, transit buses, medium- and heavy-duty trucks, and off-road applications. The plan focuses on existing commercialized technologies and energy sources including their supporting infrastructure, along with newer technologies that are nearing commercialization based on recent demonstration programs and limited test markets. Prioritizing and expanding funding in Environmental Justice (EJ) areas will be sought.” (Page ES-5).
- “Additional demonstration and commercialization projects will be crucial to help deploy and reduce costs for zero and near-zero emission technologies. A key element of Plan implementation will be private and public funding to help further the development and deployment of these advanced technologies. Many of the same technologies will address both air quality and climate goals, such as increased energy efficiency and reduced fuel usage.” (Page 4-1)
- “The SCAQMD will continue to support technology demonstration projects for both mobile and stationary sources and will work to create new or expanded funding opportunities for earlier deployment of cleaner technologies, thus contributing to a smooth transition to zero and near-zero emission technologies in the mobile and stationary source sectors. The SCAQMD will prioritize distribution of incentive funding in environmental justice (EJ) areas and seek opportunities to expand funding to benefit the most disadvantaged communities.” (Page 4-3)
- “Mobile sources such as trucks, locomotives, and cargo handling equipment have technological potential to achieve zero- and near-zero emission levels.” (Page 4-8)
- “All technologies and fuels should be able to compete on an equal footing to meet environmental needs. This policy is consistent with the current priority on maximizing emission reductions utilizing zero emission technologies in all applications that are shown to be cost-effective and feasible. In other applications, near-zero technologies remain essential to meet all attainment goals.” (Page 4-9)
- “In the longer-term, there is a need to significantly increase the penetration and deployment of near-zero and zero-emission vehicles, greater use of cleaner, renewable fuels (either alternative fuels or new formulations of gasoline and diesel fuels), and additional emission reductions from federal and international sources such as locomotives, ocean-going vessels, and aircraft.” (Page 4-23)

³ South Coast AQMD, “Final 2016 Air Quality Management Plan,” March 2017, <http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2016-air-quality-management-plan/final-2016-aqmp/final2016aqmp.pdf?sfvrsn=15>

- “Lastly, one measure seeks to recognize the criteria pollutant emission reduction benefits of existing incentives programs such as the Carl Moyer Memorial Air Quality Standards Attainment Program and Proposition 1B – Goods Movement Emission Reduction Program. The measures call for greater emission reductions through accelerated turnover of older vehicles to the cleanest vehicles and equipment currently available and increased penetration of commercially-available near-zero and zero-emission technologies through incentives programs in the near-term.” (Page 4-24)
- “However, additional research and demonstration are needed to commercialize zero- and near-zero emission technologies for the heavier heavy-duty vehicles (with gross vehicle weight ratings greater than 26,000 pounds).” (Page 4-24)
- “MOB-13 – OFF-ROAD MOBILE SOURCE EMISSION REDUCTION CREDIT GENERATION PROGRAM: This measure seeks to accelerate the early deployment of near-zero and zero-emission off-road equipment through the generation of MSERCs that can be used for purposes of recognizing mobile source emission reductions at facilities affected by proposed AQMP measures MOB-01 through MOB-04 and EGM-01.” (Page 4-33)
- “FURTHER DEPLOYMENT OF CLEANER TECHNOLOGIES: OFF-ROAD EQUIPMENT: This measure is designed to achieve further emission reductions for the Basin’s attainment needs through a suite of additional actions, including greater penetration of near-zero and zero-emission technologies through incentive programs, and emission benefits associated with the potential for worksite integration and efficiency, as well as connected and autonomous vehicle technologies. These emission reductions will be achieved through a combination of actions to be undertaken by both CARB and the SCAQMD.” (Page 4-41)
- “Given the significant NOx emission reductions needed to attain the federal ozone air quality standards by 2023 and 2031, a combination of public funding incentives along with regulatory actions are needed. In the near-term, there is a need to commercialize zero and near-zero on-road trucks and off-road equipment as early as possible.” (Page 4-64)
- “Actions to promote ZEVs in these heavy-duty applications are underway and are important to further reduce regional and near-source toxics exposure, especially as it relates to reducing risk from DPM. In the off-road sector, the 2016 AQMP mobile source control strategies stress the need to reflect this same type of transformation to a mix of zero and near-zero technologies operating on renewable fuels.” (Page 9-11)
- TABLE 9-3 (2016 AQMP CARB Mobile Source Control Measures and Concurrent Key Toxic Air Contaminants Reduced) includes “Cleaner engine technology transfer from on-road to off-road applications” and “Incentive funding to achieve further deployment of cleanest engine technologies” (Page 9-12)

South Coast AQMD is the Leading U.S. Supporter of / Champion for NZE HDVs

For more than three decades, the South Coast AQMD’s Technology Advancement / Clean Fuels Program has led the nation (and the world) in providing essential cost-sharing and/or general support to advance progressively lower-emitting HDV technology. In fact, it is largely due to the District’s support over the last decade that natural gas and propane engines (manufactured by our coalition members) are certified by CARB today at NZE levels. Similarly, the District’s financial and technical support has been instrumental in bringing diesel engine technology to the brink of achieving NZE certification. We thank

the South Coast AQMD Board and Staff; without such support, it may not have been possible for our coalition members to achieve these very important milestones.

As documented above, wide-scale deployment of NZE HDV technologies and fuels is critical to the District's overall AQMP control strategy and ability to achieve its air quality goals. If the District now finalizes PR 2305 to exclude NZE terminal tractors, it will be contrary to – and a major blow against – all these successful efforts to develop and deploy NZE HDVs in the SCAB, as strongly needed for ozone attainment. The following are specific recent quotes and statements from the District's Clean Fuels program and related technical documents⁴ that corroborate strong synergy between developing NZE HDV platforms so they can be subsequently deployed in the SCAB, via regulatory mechanisms and/or incentive programs.

- “The South Coast AQMD Clean Fuels Program cost-shares projects to develop and demonstrate zero, near-zero and low emissions clean fuels and advanced technologies to push the state-of-the-technology and promote commercialization and deployment of promising or proven technologies not only for the Basin but Southern California and the nation as well. As noted, these projects are conducted through public-private partnerships with industry, technology developers, academic and research institutes and local, state and federal agencies.”
- “The South Coast AQMD continually seeks to support the deployment of lower-emitting technologies. The Clean Fuels Program is shaped by two basic factors: 1) Zero, near-zero and low emission technologies needed to achieve clean air standards in the Basin; and 2) Available funding to support technology development within the constraints imposed by that funding.”
- “One function of the Clean Fuels Program is to help expedite the deployment and commercialization of zero, near-zero and low emission technologies and fuels needed to meet the requirements of the AQMP control measures. In many cases, new technologies, although considered “commercially available,” require assistance to fully demonstrate the technical viability to end-users and decision-makers.”
- “More than ever before, the Clean Fuels Program must both foster and accelerate advancement of transformative transportation, and off-road technologies where possible, with an emphasis on zero and near-zero emissions vehicle and fuel technologies. This is especially true given the region's economic dependence on thriving goods movement, along with the corresponding impact of that industry on environmental justice communities.”
- “It is important to note here that South Coast AQMD's Technology Advancement Office (TAO) administers not only the Clean Fuels Program but also the Carl Moyer Program (and other significant incentive programs, such as Proposition 1B-Goods Movement and the Community Air Protection Program). These two programs produce a unique synergy, with the Carl Moyer Program providing the necessary incentives to push market penetration and commercialization of zero and near-zero emission technologies developed and demonstrated by the Clean Fuels Program. This synergy enables the South Coast AQMD to act as a leader in both technology development and commercialization efforts targeting reduction of criteria pollutants and GHG reduction co-benefits.”
- District policies “will help both regulatory agencies and OEMs to expedite introduction of zero and near-zero emission vehicles in the Basin, which is a high priority of the AQMP.”

⁴ South Coast Air Quality Management District, Board Agenda No. 28, “Approve and Adopt Technology Advancement Office Clean Fuels Program 2019 Annual Report & 2020 Plan Update,” March 2020.

- “Although no near-zero emission diesel technology is commercially available today, South Coast AQMD has been working closely with CARB and others on defining technology pathways via several projects . . . (that) show near-zero emission diesel technologies are feasible via advanced engine and aftertreatment or optimized engine design and calibration. The (Clean Fuels) Plan Update continues to incorporate pursuit of cleaner engines for the heavy-duty sector. Future projects will support the development, demonstration and certification of engines that can achieve these massive emission reductions using an optimized systems approach.”
- “Currently, on-road heavy-duty natural gas engines are increasingly being certified to CARB’s optional low-NOx standards which are significantly lower in NOx than the current on-road heavy-duty standard. This technology category seeks to support the expansion of OEMs producing engines or systems certified to the lowest optional NOx standard or near-zero emissions and useable in a wide variety of medium- and heavy-duty applications, such as Class 6 vehicles used in school buses and in passenger and goods delivery vans, Class 7 vehicles such as transit buses, waste haulers, street sweepers, sewer-vector trucks, dump trucks, concrete mixers, commercial box trucks, and Class 8 tractors used in goods movement and drayage operations and off-road equipment such as construction vehicles and yard hostlers.”
- “The deployment of near-zero emission vehicles would significantly further emission reductions relative to the state’s current regulatory requirements.”
- “The South Coast AQMD relies on a significant increase in the penetration of zero and near-zero emission vehicles in the South Coast Basin to attain federal clean air standards by 2023 and 2032. This project would help develop a number of renewable transportation fuel production and distribution facilities to improve local production and use of renewable fuels to help reduce transportation costs and losses that can reduce total operating costs of zero and near-zero emission vehicles to be competitive with comparable diesel fueled vehicles. Such advances in production and use are expected to lead to greater infrastructure development. Additionally, this project could support the state’s goal of redirecting biomass waste for local fuel production and reduce greenhouse gases associated with these waste biomass feedstocks.”
- “Nonetheless, while the state and federal governments have continued to turn a great deal of their attention to climate change, South Coast AQMD has remained committed to developing, demonstrating and commercializing zero and near-zero emission technologies. Fortunately, many, if not the majority, of technology sectors that address our need for NOx reductions also garner greenhouse gas (GHG) reductions. Due to these “co-benefits,” the South Coast AQMD has been successful in partnering with the state and federal government. Even with the leveraged funds, the challenge for the South Coast AQMD remains the need to identify project or technology opportunities in which its available funding can make a difference in achieving progressively cleaner air in the Basin.”
- “Although both announcements (separate initiatives on clean HDVs by EPA and CARB) are welcome news, the timing is too late to help the South Coast AQMD meet its 2023 federal attainment deadline. So, despite progress, commercialization and deployment of near-zero engines are still needed.
- “Because of Assembly Bill (AB) 6171, which requires reduced exposure to communities most impacted by air pollution, TAO conducted additional outreach to AB 617 communities regarding available zero and near-zero emission technologies, as well as the incentives to accelerate those cleaner technologies into their communities.

- SCAQMD’s Clean Fuels Plan 2020 Update includes projects to develop, demonstrate and commercialize a variety of technologies to meet emission control needs identified in the 2016 AQMP. Emphasis is on getting significant near-term reductions “using near-zero and zero emission technologies,” including “for high horsepower applications.”
- “More than ever before, the Clean Fuels Program must both foster and accelerate advancement of transformative transportation, and off-road technologies where possible, with an emphasis on zero and near-zero emissions vehicle and fuel technologies. This is especially true given the region’s economic dependence on thriving goods movement, along with the corresponding impact of that industry on environmental justice communities.”
- “The Clean Fuels Program and the Carl Moyer Program provide a unique synergy, with the Carl Moyer Program providing the necessary incentives to push market penetration of the technologies developed and demonstrated by the Clean Fuels Program. This synergy enables the South Coast AQMD to act as a leader in both technology development and commercialization efforts targeting reduction of criteria pollutants.”

Conclusions and Requested Actions by the Board

Our coalition of companies and organizations respectfully asks the Board to urgently intervene on PR 2305, by directing staff to allow NZE terminal tractors as compliance pathways. This simple modification – which Staff is ready to implement at your direction – will significantly improve PR 2305’s ability to expeditiously achieve its intended NOx reductions. It will provide the regulated community with additional compliance options that are very cost effective for reducing NOx, while also delivering low total cost of ownership. Our recommended action is in full accord with your Board’s longstanding fuel-neutral policies to rapidly deploy emerging clean HDV platforms. It will perpetuate and strengthen the decades-long synergy between the District’s world-class HDV technology advancement program and your efforts to rapidly deploy the cleanest-available HDV fuel-technology platforms, as they emerge into the market place.

If you have any questions about the content of our letter, or if you would like to discuss this important issue with representatives from our coalition, please contact Ben Granholm at ben@westernpga.org or Jon Leonard at jon.leonard@gladstein.org.

Sincerely,



Thomas E. Knauff
CEO

Response to Comment – 26_Public Workshop and Community Meeting 2/16/2021 & 2/17/2021

Public Workshop 02/16/2021 Public Comments

1. Can you please explain how credit is given for use of a ZE truck under a state mandate but not the purchase since the tonnage taken for such a rule is based on use? How do you avoid double counting?
 - a. Answer: Currently there is no state mandate that would apply to trucks that would be going to warehouses that would require in use, there is something that ARB is working on that is called the clean fleet rule, they are currently working on the concept and it is possible that some of the concepts that could potentially overlap with the concepts of the ISR rule but it not entirely clear at this late. Staff ere coordinating with ARB with their rule making while we are working on ISR to make sure that we understand how the overlap will work. Currently, there is not any overlap that we are anticipating with CARB rule and South Coast AQMD rule that concerns trucks.
2. Does this rule apply with warehouses without fleet trucks?
 - a. Yes, this rule would apply to any warehouses that are over 100,000 sf.
3. Do docks without doors count towards the square footage?
 - a. The rule and definition refer to the indoor square footage space inside the warehouse building and not the entire property.
4. How do you know how many WAIRE points you will need in a year?
 - a. The WAIRE points are based on your WPCO which is based on a facility's truck trip multiplied by the stringency multiplied by the annual variable. The truck trips are based on the amount of Class B 2-7 trucks that enters and exit the facility during the 12 months period plus 2.5 times the number of class 8 trucks that enter and exit your facility. The truck trips determines your WATT, which will be multiplied by the stringency and the annual variable will give you the amount of WPCO you need for the compliance period.
5. When do you envision the rule applying to warehouses under 100,000 sf?
 - a. This is not something that Staff is contemplating right now, current efforts are concentrated on PR 2305. Currently there are about 3,000 warehouses covered under PR 2305, and we are not currently concentrating on the potential 2,500 warehouses that are under 100,000 sf. However, the warehouses under 100,000 sf could be potentially included in PR 2305 in some future actions
6. Can you please explain how points are banked in PR 2305?
 - a. There are very limited amount of banking or trading of WAIRE points. There is no trading or selling of WAIRE points, however, there are 3 very limited cases. First type of transfer is if warehouse operators has operational control over applicable warehouse in our basin, they can transfer the points to the other location minus the local benefit discount. The second type of transfer is the banking of points which is transferring the points back in time, the points can only be transferred up to 3 years and they only have a 3 years life. If some of the banked points were done for early compliance, and now new

regulations applies and exists, the WAIRE compliance action is now above and beyond the new regulation (ie: ARB or South Coast AQMD rule) the WAIRE Points can no longer be rewarded for that action. If you are taking credit for earlier compliance action, that piece of equipment must be on site and in operation. Any WAIRE points earned prior to the phase in cannot be transferred. Warehouse landowner does have ability to early points for the warehouse operators and earn points on their behalf.

7. Will custom plan approvals be appealable to the Hearing Board? Is there any public review process for these custom plans?
 - a. All custom WAIRE Plans will fall under South Coast AQMD Rule 216 and Rule 221.
8. Has South Coast AQMD performed any survey on warehouses to find out how heavily warehouse will use payment of mitigation fees rather than to using ZE trucks.
 - a. South Coast A has not done this type of survey, but discussions with various warehouses show that facilities will try to find the most cost-effective methods for compliance. In the analysis in the Draft Staff Report, the mitigation fees very often will be more expensive than other options. While it is available for facilities to use, it is anticipated that the facilities will choose other more cost-effective actions on the WAIRE menu in lieu of the mitigation fees.
9. If warehouse more than 100,000 sf changes use, will the warehouse no longer be required be required to earn WAIRE Points?
 - a. For the portion of the compliance period of which the facility is used as a warehouse, they will be required to earn WAIRE points for that portion of the compliance period.
10. What is the proposed marketing approach of PR 2305 and are businesses aware of these changes?
 - a. South Coast AQMD has sent out mailers to every facility that could be potentially affected by PR 2305. We have also performed outreach to various trade associations, chamber of commerce, public workshops and community meetings. If PR 2305 is adopted, we anticipate a robust outreach process of training and continued outreach with facilities to go through all the details of the rule and compliance requirements.
11. Will near zero emission trucks be allowed to mitigate fees until 2050, state mandate to go all electric?
 - a. Currently, there is no proposed sunset on PR 2305 or any of the options within the rule, the Governor's executive order directed state agencies to look at that transition to all electric by 2035. But there are no actual mandates, no actual regulations in place or developed yet. As the requirements come along, PR 2305 will be evaluated at that time.
12. What cost estimates or modeling have been made for an average warehouse of 100,000 sf to comply with PR 2305?
 - a. We have a lot of details in our preliminary draft staff report that goes through the analysis and cost estimates. It was made available in previous working group meetings and please refer to the preliminary draft staff reports for a high-level summary of those analysis.
13. Would a warehouse owner, land owner, contracted operator both needs to meet WAIRE points requirements for the same location?

- a. Requirements for a warehouse owner/landowner are typically different than for an operator, most of the compliance requirements of the rule falls on the contracted operator. There is limited reporting requirements for owners, warehouse owner can also comply and earn WAIRE points on behalf of the operators if they chose to but is not required by the owners.
14. Is there a reason why electric charging station counts towards the WAIRE Points menu but not a natural gas fueling station?
 - a. There is currently a lot of policy direction from the state and many community members, policy stake holders have expressed a real desire to go towards zero emission operations. There is a need to build that charging and fueling infrastructure for zero emission and PR 2305 is a potential mechanism to assist in that effort. The natural gas industry also commented that fueling infrastructure is not something that need to be incentivized, and we have also heard from various stakeholders to push for more zero emissions charging and fueling infrastructures.
15. What if a facility resides in a shared location? What if 2 companies reside in a single building will the facility be subjected to a single facilities' square footage or the entire square footage?
 - a. Applicability of the rule applies to any warehouse over 100,000 sf, if there are more than one tenant at the building, if any of the tenants conduct warehousing facilities of more than 50,000 sf, they will be subjected to the points requirement of the rule. If not, the facility will be just subjected to the reporting part of the requirements.
16. Trucks at airports may travel to many warehouses before departure, how will those truck trips be calculated?
 - a. Each individual warehouse will count truck trips on their own, independent of the business next to them.
17. Tonight's meeting is a public workshop and tomorrow night's meeting is a community meeting, will the content be different?
 - a. The slides are posted on South Coast AQMD's website and there is a slight difference in contents of the meeting. The public workshop is a more detailed walked through of the rules, the community meeting is a high-level summary of the rule with a community focus.
18. What is the policy or reasoning for excluding near zero emission yard trucks from earning points on the WAIRE Menu?
 - a. There is push from different stakeholders and policy standpoint from the state towards zero emission. Near zero emission yard trucks are currently commercially available. PR 2305 can facilitate the push facility to introduce the zero-emission charging/ fueling and technology to their facility.
19. Can you earn WAIRE points for zero emission forklifts currently operating at the warehouse?
 - a. Currently the rule does not allow points for the zero emission forklifts, the industry itself tends to be rather large and overwhelmingly amount of the forklifts are used indoors. There is already a widely adopted number of zero emission forklifts being used in the industry.

20. Is there consideration of greater than 12 months period if electrical infrastructure is needed to be installed by electrical companies in order to earn points?
- Yes, the WAIRE Menu, for charging infrastructure there are multiple milestones that can earn points because we recognized for some of the installation of the charging infrastructure can take more than 1 single year and there is 3 built in milestones included in the WAIRE Menu. The 3 milestones are as follow: purchase of the electric supply equipment, begin construction of project, with most of the points earned for final permit signoff and energization of the infrastructure.
21. Can warehouse earn WAIRE points for actions already taken?
- WAIRE menu is set up to earn points from either purchase of ZE trucks or through usage of that equipment. If chargers were already installed and used prior to rule adoption, they will not be able to earn points for their purchase, but they are able to earn WAIRE points through the usage of the chargers.
22. Is it possible for WAIRE operator to meet the WPCO exclusively through non truck related measures? If not, how does South Coast AQMD envision operators that do not own or operate their trucks in achieving compliance?
- Yes, it is possible, there are ways to earn points without owning the trucks. We recognize a lot of operators do not own their own fleet, but there are options available that do not require operators to do anything with their own fleet. However, there are business relationships that can be explored by the operators to try to identify ways for clean trucks to visit the facilities.
23. Can a warehouse operator avoid most reporting requirements by having only zero emission equipment and only allow zero emission trucks to visit the warehouse?
- Currently, PR 2305 does not have any exemptions for reporting requirements if a facility zero emissions. All facilities will still be required to comply with the same reporting requirements as required by other warehouses.
24. Would nature base NOx solutions be able to be used to earn points? For example, trees, vegetations, etc. planted at a facility?
- It is true that some vegetations can absorb NOx, however, there is a net benefit when it comes to regional pollutions it is not always clear when it comes to vegetation. Currently, there is nothing on the WAIRE menu that will utilize vegetations as a way to reduce NOx emission.
25. Where are the slides posted on the South Coast AQMD websites?
- The slides are available at <http://www.aqmd.gov/fbmsm>.
26. Can you repeat slowly what are the cost per year to the warehouse?
- There isn't an average warehouse, but we gave an example of a 250,000-sf warehouse that is about the mid-size range for the sizes covered by PR 2305. Assuming the warehouse have an average number of truck trips going to their facility, the range of cost could be \$12,500 per year to \$195,000 per year to earn the points they need to comply with the rule.

27. Are there reporting fees per warehouse address?
- a. D
28. Please briefly explain the legal authority for the ISR rule?
- a. There is a write up on the Preliminary draft staff report that discusses the indirect source authority for South Coast AQMD. The writeup is located on page 17 of Preliminary draft staff report.
29. Please discuss the equipment subsidy via the incentive fund work for someone wishing to purchase new equipment.
- a. Incentive programs have their own limitations on how they can be used within regulatory settings. There is nothing that South Coast AQMD is aware of within indirect source authority that regulates how incentive funds can be used. Incentives for the mitigation funds that would come out of PR 2305 have not been explicitly defined; the purchasing of the equipment via the incentive funds will not be able to earn points, but the using of the equipment will allow a facility to earn points.
30. When is the vote on PR 2305 schedule? If passed, when is the rule expected to be implemented?
- a. Staff is expected to be bringing the rule to the board for a vote on April 3rd, 2021. If passed, the first major compliance date will be summer of 2022. But there will be reporting requirements prior to summer 2022.
31. Please explain again how NOx reduction is calculated?
- a. The NOx reduction of each of the WAIRE Menu items were calculated relative to conventional diesel for trucks and yard trucks. Using standard emission factors from CARB to calculate the difference based on different amount of activity. There is more detailed analysis on emission reductions based on PR 2305 that is available on <http://www.aqmd.gov/fbmsm>. The PR 2305 emission reductions and analysis presented are assuming that they are above CARB's Advanced Clean Truck Rule, Low NOx Omnibus Rule, and Heavy Duty Inspection Maintenance Rule.
32. If costs prove to be higher, will PR 2305 be evaluated over time?
- a. PR 2305 will be providing regular updates to the South Coast AQMD Mobile Source Committee if the rule passes. It will most likely be an annual look back and providing information on if facilities are complying and what implication or effects it has on the facilities.
33. Do owners of multiple warehouses provide a separate report on each address of the warehouse?
- a. Yes.
34. If connective/ contiguous warehouse building has 2 or more addresses, how do you report?
- a. Currently, PR 2305 requires each building to have its own reporting requirements. Single buildings are reported individually.
35. Adoption in April would require initial notifications 2 months later in June of 2021.

- a. There are some initial reporting requirements for original warehouse owners required by June if PR 2305 is required.
36. To clarify in terms of compliance, the annual WAIRE for warehouse greater than 250,000 sf will be due August 2, 2022. But utilizing real world truck data beginning July 2, 2021.
 - a. Yes, that is correct.
37. If a truck leaves a yard at start of day and returns at end of day is that considered one trip or two? Is it a trip every time it goes through the gate or every round trip?
 - a. PR 2305 WAIRE menu counts a truck visit as every time a truck leaves a facility and every time it enters a facility. Truck visits used in the WATT is counted as one-way trips (entering and exiting the facility gates). The PR 2305 online portal for reporting will make it clear on what fees are due.
38. How are the fees be collected? Would the fees be collected as property taxes so a lien could be placed on a property?
 - a. Fees are not collected as property taxes. Fees are collected as part of a regulatory program, some of the fees will be invoiced and turned in by facilities due at the time of reporting. Some of the reports in PR 316 will have fees associated with them and those fees are paid when the report are turned in. For a custom WAIRE plan, there will be some specific fees for the time that the material is reviewed and there will be invoicing associated with that. Mitigation fees are something that will be turned in based on a facility's WAIRE points obligation and that will be something that the facility will be paid on their own. There will be reporting so that it will be clear what fees are due through the PR 2305 online portal.
39. What if a company does not comply with a payment of fees? What is the process to collect?
 - a. This would be typical for other regulatory program at South Coast AQMD, a potential Notice of Violation could be issued to the facility and goes through the South Coast AQMD compliance process. 1
40. Will the district provide a template for truck trip record keeping for warehouses to use?
 - a. There will be an online portal that facility will be required to enter the truck trip information on their facilities. Warehouse will probably not have a specific form for their daily truck trip counts as there are many ways for a facility or operator to track truck trips. There will not be any specific form imposed for record keeping, but we would like to make sure facility have continues and verifiable records that are reported back to the SOUTH Coast AQMD online portal.
41. Will this rule go to a public vote?
 - a. This rule will go to a vote with the governing board of South Coast AQMD and it is anticipated for April 2, 2021.
42. Will the slides be posted on the web after the presentation today?
 - a. The slides are available at <http://www.aqmd.gov/fbmsm>.

43. Thank you for the presentation, the warehouse industry and goods movement are responsible for significant source of pollution and disproportionately impacted communities. There is a need for a stronger stringency (at least 3 times the current proposed stringency) and prioritizing zero emission technology.
 - a. Thank you for your comments.
44. The warehouse sector contributes to LA's ozone pollution and cause immense public health burdens. The indirect source rule should focus on zero emission trucks and infrastructure. The rule is needed urgently, and urge the district to pass it quickly.
 - a. Thank you for your comments.
45. The Covid-19 pandemic has exacerbated the existing health risks faced by frontline communities, and the warehouse industry has reported record-breaking profits. AQMD must pass a strong rule that prioritizes public health and good jobs. We support a strong ISR Rule that puts the health of frontline communities and good green jobs first.
 - a. Thank you for your comments.
46. I know firsthand how bad the problem with the trucks causing increased NOx emissions and ozone, I have severe asthma and I've been hospitalized. Is it possible to taper down the proportion of points that can be achieved through just paying fees as opposed to actual use of zero-emission trucks and buying zero-emission trucks?
 - a. We have been trying to look at this mitigation fee and its relation to the other options. We will take will take your comments into consideration.
47. Limit the opportunities for paper compliance and get emission reductions in those communities. Support a stronger stringency factor, and don't want a pay-to-pollute type option for warehouses.
 - a. Great, thanks Chris.
48. Is "table 2 annual variable" for calculation of WPCO?
 - a. Table 2 is referring to Table 2 in the rule.

COMMUNITY MEETING 2/17/2021 - FORMS SUBMISSION

ID 7

What is your experience with warehouses?

Review warehouse designs and involved with warehouse construction. Provide feedback to owners during construction.

What do you most want the South Coast AQMD Board to consider with the proposed Warehouse Indirect Source Rule?

Emission reductions, near zero technologies, enforcement

ID 8

What is your experience with warehouses?

Since I live in Carson there are tons of trucks transporting back and forth to these warehouses. The tons of trucks are the main things in the streets causing traffic which is also causing the major air pollution by my house and community. It does not help that the warehouses are literally right by the neighborhoods. Its

only been brought to my attention right now that these trucks and warehouses are doing more bad to me and my community than good.

What do you most want the South Coast AQMD Board to consider with the proposed Warehouse Indirect Source Rule?

Consider the communities by these warehouses. Its one thing that these trucks slow down the daily life of someone in the nearby communities commute.

ID 9

What is your experience with warehouses?

I want the rule to focus not only on the monitoring and lowering of emissions from trucks but also on said trucks moving in the direction of zero-emissions. I want to see this rule implemented as soon as possible. It is imperative that this rule is vigorously executed and warehouses are no longer allowed to pollute communities like my own that are frequently the target of toxic industries that find ways to evade emission standards.

What do you most want the South Coast AQMD Board to consider with the proposed Warehouse Indirect Source Rule?

I want the rule to focus not only on the monitoring and lowering of emissions from trucks but also on said trucks moving in the direction of zero-emissions. I want to see this rule implemented as soon as possible. It is imperative that this rule is vigorously executed and warehouses are no longer allowed to pollute communities like my own that are frequently the target of toxic industries that find ways to evade emission standards.

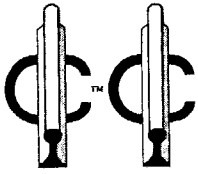
ID 10

What is your experience with warehouses?

General Motors (GM) owns and operates one warehouse in Rancho Cucamonga for smaller aftermarket auto parts and operates one warehouse in Fontana for bulk aftermarket auto parts. Both warehouses are roughly 400,000ft². These warehouses supply GM auto parts to much of the Pacific Coast region and are part of GM's Customer Care and Aftersales warehousing network. Globally, GM offers hundreds of thousands of parts, with about 8% of its annual volume flowing through California.

What do you most want the South Coast AQMD Board to consider with the proposed Warehouse Indirect Source Rule?

General Motors' vision is a world with Zero Crashes, Zero Emissions, and Zero Congestion. Our company's recent announcements show we are committed to our vision's emissions strategy by aspiring to only sell electric vehicles in our light-duty portfolio by 2035. Additionally, GM plans to achieve carbon neutrality by 2040. GM is also expanding its Zero Emissions vehicle strategy into the goods mov



**Rail Cents
Enterprises, Inc.**

P.O. Box 235
Wallingford, PA
19086

phone: 610/565-8458
fax: 610/565-3617
E-mail: tom.erickson@railcents.com

January 20, 2021

Philip M. Fine, Ph.D.
Deputy Executive Officer
South Coast Air Quality Management District
Office of Planning, Rule Development & Area Sources
21865 Copley Drive
Diamond Bar, CA 91765

Dear Dr. Fine:

California leads the nation in environmental statutes, and the South Coast AQMD leads California. Your Proposed Rule 2305, the Warehouse Indirect Source Rule, is a good example. However, it has a glaring omission. It fails to foresee the greatest potential weapon in combating damage from urban trucks—railroads. The pick-up and drop-off of large-lot shipments in urban areas by rail sidings could greatly reduce air pollution, road congestion, and road accidents, as well as cut transportation costs. The fact that the large railroads do not yet themselves realize the vast sea of revenue potential from urban sidings only adds to the imperative for regulations that monetize the environmental, economic, and aesthetic advantages of railroad rights-of-way.

In other ways the South Coast AQMD has already been a leader in reducing pollution from locomotives with its support of the Pacific Harbor Line. You are administering a grant from the Carl Moyer Program to convert the last sixteen PHL locomotives from Tier 2 to Tier 3 emissions standards. PHL has also been working with Progress Rail to lease its Tier 4 switching locomotive and its zero-emission battery locomotive. Your neighbor, the San Joaquin Valley Air Pollution Control District, is administering a \$22.6 million grant from the Near Zero-Emission Board so that BNSF can test Wabtec's zero-emission battery-powered linehaul locomotives.

The Warehouse Indirect Source Rule should encourage the use of rail sidings to service the warehouse of the future. The reliability of railroad linehaul service has been recently revolutionized by Precision Scheduled Railroading, and it would be a short step to extend a high degree of reliability to switching service at the customer's private siding. Specifically, we would propose that Table 3 to Proposed Rule 2305 be amended so that WAIRE Points are awarded for each carload shipped or received (a boxcar generally carries 120,000-to-180,000 lbs. of lading) in accordance with the locomotive emissions standard met by the serving engine—a rising scale from Tier 1 to Tier 4 to a zero-emission battery-powered switching locomotive.

Railroads can help cities not just with moving people, but also with urban freight and the integration of environmentally-friendly urban industrial and warehouse jobs and corporate taxes.

Sincerely,

Thomas F. Erickson, Jr.
Proprietor

cc: William A. Burke, Ed.D., Chair, South Coast AQMD Governing Board, c/o Marie Patrick
Mr. Ben Benoit, Vice Chair, South Coast AQMD Governing Board, Wildomar, CA
Mr. Wayne Natri, Executive Officer, South Coast AQMD, Diamond Bar, CA
Mr. Craig Pedersen, Chair Supervisor, San Joaquin Valley APCD, Hanford, CA
Mr. Samir Sheikh, Executive Director, San Joaquin Valley APCD, Fresno, CA
Mr. Otis Cliatt II, President, Pacific Harbor Line, Wilmington, CA

From: Tom Erickson [<mailto:railcents@comcast.net>]

Sent: Friday, February 19, 2021 12:03 PM

To: 'VJuan@aqmd.gov'; 'CDawson@aqmd.gov'; 'FShirmohammadi@aqmd.gov'; 'PYuen@aqmd.gov'

Cc: Michael Sussman

Subject: Warehouse Indirect Source Rule actions

Victor, Caitlin, Farimah, and Priscilla –

Thank you for your time yesterday during our Zoom call about WAIRE points that the South Coast Air Quality Management District proposes to award to warehouses that take specific actions to comply with new requirements for pollution abatement in your 4-county area. I hope to have tickled your interest in the huge potential for railroads to help reduce pollution while simultaneously relieving urban road congestion, accidents, and wear.

It is not often that our work can lead to groundbreaking improvements. The rest of the country, if not world, will be watching and learning from your efforts to monetize pollution abatement at the level of the individual warehouse. You can plant a seed with enormous positive repercussions by including the use of rail delivery and rail electrification initiatives into your incentive program.

Why do this?

- Because steel-wheel-on-steel-rail requires ¼ of the energy to do the same work as rubber-tire-on-pavement.
- Because it is only fair to reward rail electrification on the same basis as truck electrification.
- Because railroads need incentives to pursue emission reduction in locomotives.
- Because railroads need talking points to solicit warehouse business.

More specifically, we propose that lines be added to Table 3 in Proposed Rule 2305 as follows:

- Column 1—WAIRE Menu Item: “Use rail sidetrack”
- Column 2—WAIRE Menu Sub-item: “Switched by Tier 1 or 2 Locomotive” or “Switched by Tier 3 or 4 Locomotive” or “Switched by All-electric Locomotive”
- Column 3—Reporting Metric: Number of Cars (with higher points awarded for successive levels in Column 2)

I have copied Michael Sussman, Chairman & CEO of Strategic Rail Finance, since he brought your warehouse initiative to my attention and since he masterminded the 2020 update to Nevada’s State Rail Plan referenced under separate cover.

Regards, Tom Erickson, Proprietor, Rail Cents Enterprises, PA office: 610-565-8458

P.S. Would appreciate being advised of your individual titles and whether progress has been made in proposing point amounts for Columns 4, 5, and 6 of Table 3—WAIRE menu.



February 19, 2021

Chair Burke and Members of the Mobile Source Committee
South Coast Air Quality Management District
21865 Copley Drive
Diamond Bar, CA 91765

Re: Item No. 1 – Update on Proposed Rule 2305 Warehouse Indirect Source Rule

Dear Chair Burke and Members of the Mobile Source Committee:

On behalf of Earthjustice, we submit these comments on the warehouse indirect source rule. Earthjustice is working with a broad coalition that includes the communities living and working adjacent to warehouses, who continue to be disproportionately harmed by the freight industry every single day. We appreciate the Air District staff's continued work on the warehouse indirect source rule and request that the agency move expeditiously in the development and adoption of a strengthened regulation that focuses on zero-emissions.

The covid-19 pandemic has exacerbated health impacts to communities in the region just as we had one of the worst smog season in decades. Warehouses and ports have been profiting – and polluting – more due to consumers' increased reliance on e-commerce,¹ further compounding existing health risks in nearby communities. While those with ownership stakes in the freight system have profited handsomely, communities, particularly low-income communities and communities of color, have suffered the brunt of the air pollution harms.

Proposed Rule 2305 will mean significant benefits to our region in reduced smog-forming emissions and the need to put people to work to clean up warehouse pollution through retrofitting warehouses with clean transportation and clean energy resources. But, the rule remains too weak, and it should be at least tripled in strength to provide more emissions reductions. Moreover, we recommend the Air District make sure maximum credit is provided for zero-emission technologies and reject efforts by the natural gas and propane industries to use this rule to further expand their infrastructure.

¹ See Justin Ho, *As imports boom, warehouses fill up, and businesses face a storage shortage*, Marketplace (Oct. 1, 2020), <https://www.marketplace.org/2020/10/01/imports-boom-warehouses-fill-up-businesses-face-storage-shortage-online-shopping-covid19/>.

We appreciate your consideration of these comments, and the staff's hard work on this important rule. We look forward to working with the Governing Board to finally adopt this rule that has been such a vitally important one.

Sincerely,

A handwritten signature in black ink that reads "Adrian L. Martinez". The signature is written in a cursive style with a horizontal line underlining the name.

Adrian Martinez
Regina Hsu
Michelle Ghafar
Earthjustice

cc:

Wayne Nastri
Executive Officer

Sarah Rees
Deputy Executive Officer

Ian MacMillan
Planning and Rules Manager
Mobile Sources/ISR

February 17, 2021

ATTN:

Clerk of the Board, clerkofboard@aqmd.gov

Wayne Nastri, wnastri@aqmd.gov

Sarah Reese, SRees@aqmd.gov

Ian Macmillan, imacmillan@aqmd.gov

CC: Yassi Kevezade, yassi.kevezade@sierraclub.org

To the Governing Board of the South Coast Air Quality Management District and Senior Staff:

The Robert Redford Conservancy for Southern California Sustainability aims to increase socio-ecological justice and sustainability in our surrounding communities and beyond. We support projects that bolster multiple and interconnected systems (ecological, human, political, economic and cultural), and we foster collaboration and leadership for socio-ecological justice and sustainability.

We applaud the SCAQMD for its role in inviting community input regarding the impact of warehouses on life and health in Southern California. We believe that action must be taken now to combat climate change and solve the air quality issues of southern California. These environmental crises harm residents in our region every day. As we continue to contend with the ongoing COVID-19 pandemic, essential workers and their families - particularly in the logistics industry - are put at even greater risk due to unsafe work conditions and worsening air quality. Our workers deserve higher workplace standards so that they are able to breathe safely and power their business without creating harmful air pollution.

To date, the warehouse industry continues to operate without being subject to proper regulations, putting workers and communities at risk every day. We at the Robert Redford Conservancy believe that the **Warehouse Indirect Source Rule – Warehouse Actions and Investments to Reduce Emissions (WAIRE) Program Fees for Rule 2305** is an important rule that will stop this abuse in the goods movement sector.

The logistics industry is here to stay because of our coastal and inland port communities, and we must work together to clean up warehouses. The Warehouse Indirect Source Rule will be critical to holding these facilities accountable. We implore the South Coast AQMD to pass a rule that is strong enough to protect our communities' health and achieve broader climate benefits at the same time.

Warehouses have spewed toxic air pollution in nearby communities for years. A strong mandatory program, like the warehouse indirect source rule, is necessary to transform this industry. But to effectively clean up the warehouse industry, the rule must be stringent enough so that warehouses actually take the actions listed in the WAIRE menu to clean up their operations. This would require a stringency value of at least 0.0075. In addition, this rule should not simply be a "pay-to-pollute" scheme. The purpose of this rule is to reduce air pollution from

this industry and a low mitigation fee of \$1000 per point may lead to warehouses simply paying to comply.

We also believe that warehouses must move towards zero emission technology and the warehouse indirect source rule should incentivize this shift. This will provide air quality benefits and a just transition that will create access to quality jobs by increasing demand for labor as the industry begins to implement zero emission technologies. These job opportunities have been proven to provide quality wages and benefits for workers, unlike many temporary low-wage warehouse jobs.

Part of our mission at the Conservancy is to promote environmental justice in the Inland Empire. Our support of a stringent Warehouse Indirect Source Rule is an integral step toward that goal. We hope the Board will pass a strong warehouse indirect source rule that serves public health, supports a new green economy, and provides regional air quality benefits.

Sincerely,

A handwritten signature in black ink, appearing to read 'SAP', with a stylized flourish at the end.

Susan A. Phillips
Professor of Environmental Analysis



February 18, 2021

South Coast AQMD Board Members, Mobile Source Committee

RE: Inclusion of Near-Zero Emission Terminal Tractors Under Proposed Rule 2305 (WAIRE)

Dear Chairman Burke and Members of the South Coast AQMD Board's Mobile Source Committee:

Origin Engines, by means of this letter, wish to endorse and support including that both on-road and off-road vehicles be included in the warehouse indirect source rule.

It is Origin Engines understanding that "The SCAQMD warehouse indirect source rule includes on road Near Zero Emissions vehicles - Nat Gas / Propane but excludes Near Zero for off-road. The only option for off-road is electric. The SCAQMD staff understand that Near Zero Emissions (Nat Gas / Propane) are the most cost-effective alternative for getting the NO_x emissions reductions they need today. Yet the staff has not included NZE in the source rule for off-road applications.

Origin Engines has a history of developing natural gas and propane engines for use in off-road applications and look forward to the future where "Near Zero Emission Vehicles- Natural Gas / Propane" can be included for use.

Best Regards,

Shawn Sterling

Shawn Sterling
Chief Customer Officer
Origin Engines