



**VIA ELECTRONIC MAIL ONLY**

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**Re: Proposed Rule 2304- Marine Port Indirect Source Rule- Working Group Meeting- Preliminary Draft Rule Concept**

Dear Mr. MacMillan:

The undersigned organizations write to provide preliminary comments on the Draft Rule Concepts for Proposed Rule 2304- Marine Port Indirect Source Rule (“Port ISR”). We start by thanking staff for their work on this rule so far. We are encouraged by the staff’s commitment to a facility-wide emissions cap that provides a diverse menu of options for emissions reductions, and we remain confident that with some additional improvements, the ISR can serve as a model for reducing a major source of pollution.

It is imperative that Rule 2304 set a target of reducing port-related emissions as quickly as possible. Considering the impact of port pollution on surrounding communities and the fast-approaching state and federal attainment deadlines, Rule 2304 must be finalized and passed no later than **December 8, 2023**. We urge staff to resist industry pressure to narrow the rule’s scope—or worse yet, suspend rule development to entertain failed strategies, such as negotiating contracts with known polluters for voluntary measures. This agency’s mandate to clamp down on pollution and protect community health and safety should never be bargained away. We encourage staff to stay the course and complete the ISR by the December 2023 target date.

In this letter, we offer some suggestions for improving the rule concept and setting strong emissions reduction targets early.

**I. A strong Port ISR is urgently needed to address the growing levels of air pollution impacting our region.**

We have known for some time that diesel-powered equipment used for goods movement is responsible for about half of the air pollution in the South Coast Air Basin.<sup>1</sup> Despite reductions in the early 2000s, the San Pedro Bay Ports (“Ports”) continue to be among the largest fixed sources of pollution in the region. In 2021, NOx pollution from the two ports comprised 15.2% of NOx emissions from all South Coast Air Basin sources<sup>2</sup>, and diesel particulate matter pollution from the two ports comprised 18.1% of emissions in the basin.<sup>3</sup> In addition to these health-harming emissions, greenhouse gas emissions at the Ports have steadily risen for decades. At the Port of Long Beach, greenhouse gas emissions have increased 22% since 2005,<sup>4</sup> and at the Port of Los Angeles, they have increased 23% since 2005—57% higher than 1990 levels.<sup>5</sup> While not directly responsible for greenhouse gases, this agency should concern itself with the negative impact that climate change is having on the District’s ability to improve air quality overall.

Therefore, developing a comprehensive strategy for lowering emissions from all indirect sources through this rule is imperative to meet the region’s air quality goals. The Port ISR should set a facility-wide emission reduction target and offer a clear and aggressive timeline for making the San Pedro Bay Ports reduce emissions commensurate with what is necessary to meet clean air standards.

Past strategies, including the Ports’ own Clean Air Action Plan (“CAAP”), have not gone far enough to deliver the near-term emissions reductions the region needs. This rule must deliver enforceable measures that encourage coordination among the various stakeholders to deploy the strongest possible health-protective zero-emissions strategies available.

**A. Delayed progress on the Ports’ own Clean Air Action Plan goals has harmed community health and safety—shortening life expectancy in the South Coast.**

In 2017, the Mayors of LA and Long Beach released an executive directive establishing goals to transition the Ports to 100 percent zero-emission cargo handling equipment by 2030, and 100 percent zero-emission trucks by 2035. The Ports then released an updated Clean Air Action Plan

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<sup>1</sup> South Coast Air Quality Management District, WSCC ISR Community Workshop Presentation (April 11, 2023), slide 7; available at: [https://www.aqmd.gov/docs/default-source/planning/fbmsm-docs/pres\\_isr\\_community-workshop\\_final\\_april11-12.pdf?sfvrsn=4](https://www.aqmd.gov/docs/default-source/planning/fbmsm-docs/pres_isr_community-workshop_final_april11-12.pdf?sfvrsn=4).

<sup>2</sup> POLB 2021 Emissions inventory at 44 (7.2%); POLA 2021 emissions inventory powerpoint (8.1%).

<sup>3</sup> POLB 2021 Emissions inventory at 44 (8.1%); POLA 2021 emissions inventory powerpoint (10%).

<sup>4</sup> POLB 2021 emissions inventory, p. ES-4.

<sup>5</sup> POLA 2021 Emissions Inventory Powerpoint at p. 6.

committing to reaching these targets and cleaning up all sources of port pollution.<sup>6</sup> Since then, the Ports have not made adequate progress on electrifying their operations. Six years after the adoption of the 2017 Clean Air Action Plan Update, the Ports still have not installed the charging infrastructure necessary to support widescale zero-emission trucks, cargo handling equipment, and electrification of other vehicles. Meanwhile, pollution has increased.<sup>7</sup> The Ports must invest in equitably sited widescale infrastructure immediately to accelerate much-needed efforts to reduce worsening pollution and negative climate impacts concentrated in frontline communities.

**B. A coordinated approach to reducing emissions from indirect sources will better protect the health and safety of port-adjacent communities.**

The goal of the Port ISR should be to create coordination for a facility-wide reduction of emissions to meet the caps being set for port facilities and terminals. We agree with staff that to get to the emissions cap, the Ports have many options to reduce emissions.<sup>8</sup> With multiple opportunities to support a swift transition to zero-emissions solutions sooner, the time is ripe for a rule that requires infrastructure planning and an expedited timeline for deploying those solutions.

A significant reduction in emissions is feasible given the advances in technology and the unprecedented level of funding awarded to the Ports at the state and federal levels. The Ports have received over 400 million in grant funds to support ZE demonstration and deployment projects, while the State budget includes over six billion dollars for zero-emission vehicle funding, including future year recommendations for Port-specific funds. In addition, an unprecedented amount of federal funding from the Bipartisan Infrastructure Law and the Inflation Reduction Act each will continue to fund major emissions reduction grant programs and projects, including the EPA Clean Ports Funding Program, Reduction of Truck Emissions at Port Facilities (FHWA), and Diesel Emission Reduction Act of 2023.

With growing opportunities for the Ports to deploy aggressive emissions reduction, the Port ISR can help these efforts by ensuring that a comprehensive approach is taken to addressing indirect sources for the entire port complex. While the Ports may already be in line to receive financial support and partake in pilot projects, PR 2304 must set accountability and strict timelines to ensure that these initiatives result in the elimination of pollution from indirect sources and regional air quality improvements.

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<sup>6</sup> San Pedro Bay Ports.; Clean Air Action Plan 2017 (July 2017); available at: [https://kentico.portoflosangeles.org/getmedia/9d371f7b-9812-4c75-bcfd-23e83a191435/CAAP\\_2017\\_Draft\\_Document-Final](https://kentico.portoflosangeles.org/getmedia/9d371f7b-9812-4c75-bcfd-23e83a191435/CAAP_2017_Draft_Document-Final).

<sup>7</sup> California Air Resources Board, Emissions Impact of Ships Anchored at Ports of Los Angeles and Long Beach (Nov. 2021), [https://ww2.arb.ca.gov/sites/default/files/2021-11/SPBP\\_Congestion\\_Anchorage\\_Emissions\\_Final.pdf](https://ww2.arb.ca.gov/sites/default/files/2021-11/SPBP_Congestion_Anchorage_Emissions_Final.pdf).

<sup>8</sup> This list is in addition to the action items identified by staff for the rule concept.

## **II. Facility-based cap must directly address the ongoing impact of port-related air pollution on public health.**

Despite some progress over prior decades, port-related pollution continues to plague adjacent communities and the region, and the South Coast Air Basin is far from meeting state and federal air quality standards anytime soon. The Los Angeles-Long Beach area continues to hold the dubious distinction of being the most polluted metropolitan area in the country when it comes to ozone<sup>9</sup> and has received a failing grade for attaining ozone and other criteria pollutants for all but one of the last 24 years.<sup>10</sup> The San Pedro Bay Ports have the highest container throughput in the nation, and according to the 2022 AQMP, "mobile sources traveling to and from the Ports collectively make up the single largest fixed source of air pollution in Southern California."<sup>11</sup>

The Ozone exposure that this pollution contributes to is associated with increased susceptibility to respiratory infections, medication use, doctor visits, emergency department visits, and hospital admissions for individuals with lung disease. Ozone exposure also increases the risk of premature death from heart or lung disease. Children are at increased risk from exposure to ozone because they are more likely to be active outdoors, which increases their vulnerability.<sup>12</sup>

Our organizations have long called for the Air District to prioritize improving public health by regulating port-related air pollution. With the growth in the goods movement sector expected to increase,<sup>13</sup> it is essential that the ISR establishes a comprehensive approach to port emissions that aims to address pollution-derived health disparities. To accomplish the district's goals, the targets need to be stronger—with emissions caps encompassing NO<sub>x</sub>, PM 2.5, and VOCs.

### **A. To better protect public health and ensure attainment, the rule compliance dates should be advanced.**

The initial rule concept pegs port-wide mass emissions caps for specific attainment years in 2031 and 2037. These deadlines may be too late. The 2031 date, for example, would miss a crucial 2030 attainment date for the annual P.M. 2.5 standard. If the Port ISR is to deliver public health protections, it must aggressively set emissions reduction targets well before statutory attainment deadlines arrive.

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<sup>9</sup> American Lung Association, *2023 Report Cards*, <https://www.lung.org/research/sota/city-rankings/most-polluted-cities>; last visited July 19, 2023.

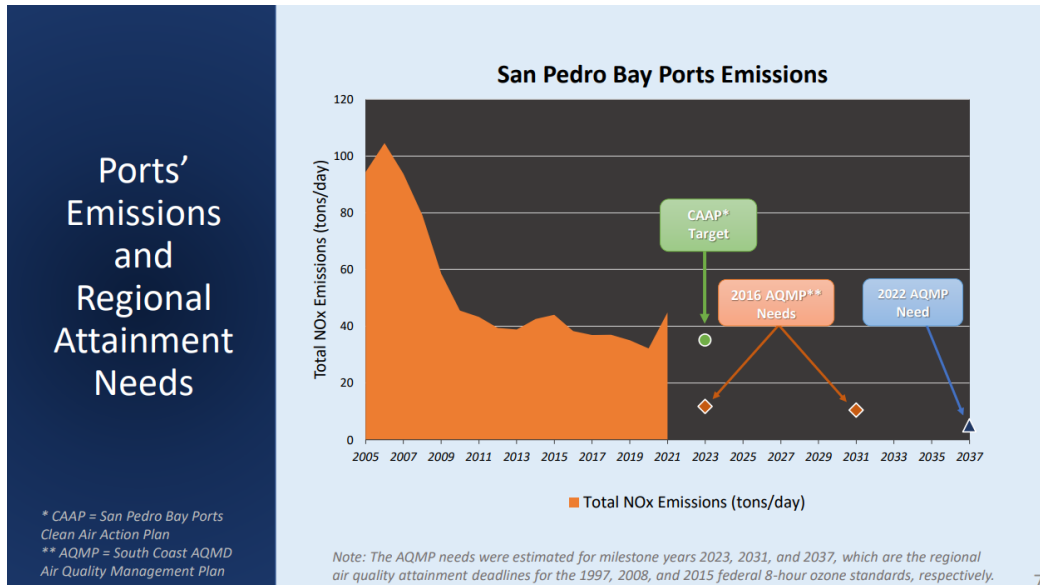
<sup>10</sup> Tony Briscoe, *LA Gets Failing Grade for Air Quality Once Again*. Los Angeles Times, April 19, 2023; available at: <https://www.latimes.com/environment/story/2023-04-19/l-a-gets-failing-grade-for-air-quality-once-again>

<sup>11</sup> South Coast Air Quality Management District 2022 Air Quality Management Plan, Appendix-1v-a, p. IV-A-210; available: <http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2022-air-quality-management-plan/final-2022-aqmp/appendix-iv-a.pdf?sfvrsn=18>.

<sup>12</sup> See "Fact Sheet, Proposal To Revise the National Ambient Air Quality Standards for Ozone," January 6, 2010 and 75 FR 2938 (January 19, 2010).

<sup>13</sup> South Coast Air Quality Management District, 2016 Air Quality Management Plan, P. 4-27.

While the Ports point to reductions in NOx since 2005, their true emissions reductions have remained flat for the past decade. As the staff’s recent presentation illustrates, the two most recent updates to the Port’s Clean Air Action Plan <sup>14</sup> failed to deliver significant additional emissions reductions. Moreover, despite what seems like progress in reducing emissions based on the Port’s own emissions inventories, the Port’s own goals fall short of meeting Federal Air Quality Standards, and emission reduction will likely remain flat unless more aggressive mandates trigger stronger action by key players.



SCAQMD Presentation, Proposed Rule 2304 Indirect Source Rule for Commercial Marine Ports, Working Group Meeting #1- February 25, 2022, slide 5.

While it may be true that NOx emissions are significantly lower at the Ports as compared to 2005, those figures are largely irrelevant today as the base year set for the 2022 AQMP was 2018. Still, rather than continuing to drop in recent years, emissions levels remained largely flat and even spiked in recent years due to increased volume and congestion—this is despite cleaner technology now being made available. Without clear direction from the Air District, the Ports are likelier to do the bare minimum rather than aggressively implement the most health-protective zero emissions strategies throughout the port complex.

Importantly, the District will fail to attain the 1997 standards required this year. The Port ISR needs to provide a regulatory framework that will require executable plans and hold operators and the Ports accountable for the promises made in those plans. Given the urgent health crisis port pollution continues to perpetuate, the region needs PR 2304 to do more at the start of implementation than merely requiring paper plans that claim a path to attainment. We simply cannot afford to take a “wait-and-see” approach and hope that plans end up working by the

<sup>14</sup> *Id.*, Slide 5.

attainment dates already set by law. We need the rule to require interim caps sooner, with ambitious targets in the outer years.

At a minimum, the initial cap set by the rule should be low enough to reach those targets set by the 2016 and 2022 Air Quality Management Plans (AQMP). For NO<sub>x</sub> alone, this would mean drastically reducing emissions annually, starting in 2024, to get well below the 19 tpd NO<sub>x</sub> target set out as the Ports' "fair share" of reductions described in the 2016 AQMP<sup>15</sup> and making the 2030 cap milestone much lower to chart course towards achieving the committed reductions described in the 2037 State SIP targets.

**B. The Ports ISR emissions cap must be strong enough to reverse the public health impact of port-induced air pollution.**

In setting a baseline and emissions cap, the ISR should consider the fact that several current and forthcoming obligations will be in effect, such as CARB's at-berth regulation, harbor craft regulation, Advanced Clean Fleets rule, In-Use Locomotive regulation, and other existing freight regulations. Rather than crediting individual actions that will already be taken to comply with these measures, the Ports ISR should set the facility-wide cap low enough and sooner to account for additional actions that can be taken to meet stronger reduction targets.

NO<sub>x</sub> and other emissions from ports contribute to the region's ozone pollution, posing a host of health problems for the public.<sup>16</sup> Combined with elevated particulate matter (PM) pollution, activities associated with port and freight activities increase these harmful conditions. Elevated ozone and PM are known to lead to increased emergency room visits and hospitalizations stemming from heart attacks, aggravated asthma, decreased lung function, restricted airways, and even premature death.<sup>17</sup>

Given the health imperative for this rule, its success should be measured not only by a transition in technology and incremental emissions reductions but also through reportable public health improvements as outcomes. Tracking "monetized health impacts" is useful for demonstrating inherent cost savings, such as reduced hospital visits and medical emergencies associated with reduced emissions from zero-emission freight equipment and vehicles being deployed. The cap must, therefore, be coupled with straightforward metrics and accelerated milestones that the public can help enforce across the port complex. Only by setting stronger targets can the region start fixing the damage port-related air pollution has already done.

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<sup>15</sup> See 2022 AQMP, Appendix iv, p. IV-A-211 (describing 2016 AQMP "fair share" goals pegged to port emissions).

<sup>16</sup> SCAQMD Proposed Rule 2304 Indirect Source Rule for Commercial Marine Port, Working Group meeting #2 presentation (June 14, 2022).

<sup>17</sup> SCAQMD PR 2304 Working Group #2 presentation, slide 8; See also United States Environmental Protection Agency, *Particulate matter (PM) Basics*, webpage; available at <https://www.epa.gov/pm-pollution/particulate-matter-pm-basics> (last visited July 24, 2023).

In addition to emissions caps for NO<sub>x</sub> reductions, SCAQMD should also establish near-term emissions caps for PM<sub>2.5</sub> pollution and volatile organic compounds (VOCs) in order to achieve attainment of National Ambient Air Quality Standards and address the urgent public health impacts associated with this pollution. The 2022 AQMP states that PR 2304 “seeks to reduce NO<sub>x</sub>, VOC, and PM emissions related to on-road heavy-duty vehicles, ocean going vessels, cargo handling equipment, locomotives, and harbor craft that go to and from the Ports of Los Angeles and Long Beach.”<sup>18</sup> Especially given the acute impacts of exposure to fine particulate matter on human health, and South Coast’s ongoing non-attainment of PM<sub>2.5</sub> standards, stringent PM<sub>2.5</sub> emissions caps should be developed for every year of the program until the overall facility cap is met.

From an attainment standpoint, more aggressive measures will be needed to chart a clearer path towards attainment. With data showing the public health cost related to this type of pollution and overall port-related emissions reductions remaining flat over the past decade, public health data should be used to set the stronger targets needed to make up for lost time and account for health cost burdens already placed on the public from port pollution. Markers of a port emissions-reduction plan success should include reduced ER visits for acute respiratory distress, reduced asthma attacks or related respiratory conditions, lower rates of childhood asthma diagnoses over time, fewer people being diagnosed with COPD and emphysema, etc.

Should emissions reduction strategies fail to deliver improved public health outcomes, then accelerated emission reduction targets should be triggered, and the overall “cap” adjusted downward sooner. The District should employ the advice of public health experts in setting these health-based benchmarks—a point that several of the undersigned organizations have made throughout this rulemaking process. Improving public health should be at the center of every aspect of this rulemaking process—including the way in which caps and milestones are set. So far, the rule concept does not reflect that.

Given the goal of improving air quality, the facility-wide cap must also be informed by analysis of the social cost of public health harm from port air pollution. Such an inquiry is not without precedent. The District most recently had experience incorporating the potential monetized health benefits of reducing pollution in rulemaking when it revamped the cost-effectiveness thresholds as part of the 2022 AQMP.

Therefore, in setting the initial facility-wide cap, the rule should also integrate the economic impacts of pollution by evaluating the damage it causes. There are numerous studies that can

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<sup>18</sup> 2022 Air Quality Management Plan, at p. 4-25, *available at* <http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2022-air-quality-management-plan/final-2022-aqmp/final-2022-aqmp.pdf?sfvrsn=16>.

serve as examples of how to measure this impact on communities.<sup>19</sup> The District need not reinvent the wheel but can draw on these prior examples and use existing public health data to determine a baseline and track progress on emissions reduction over time.

### **III. Rule 2304 must address unrealized emissions reductions that taking a “container-terminal-first” approach will leave behind.**

The current proposal to stagger rulemaking sets the Air District up for attainment failure unless more is done to cap overall emissions. As currently conceptualized, the rule would allow non-container terminals to continue polluting the South Coast Air Basin. By allowing these terminals to release current levels of pollutants unabated, SCAQMD fails to meet its State-issued directives and its duties as an air district in non-attainment.

A year ago, several of the undersigned organizations asked the staff to consider the harm that delaying a comprehensive rule might cause to emissions reduction. We called on staff to provide an analysis showing how a staggered approach would provide better emissions reductions as opposed to pursuing a more comprehensive industry-wide rule to tackle indirect sources. To date, the District has not offered data showing that a staggered approach might be superior from an emissions-reduction standpoint.

We understand that container terminals are more complicated and involve more equipment and activity that leads to air pollution. There are, however, 13 container terminals and 36 non-container terminals across both Ports. The air basin cannot afford to leave 36 facilities unregulated for the foreseeable future. If the District insists on starting with container terminals only, then other terminal types should be placed on an expedited timeline for rule development within 2024, with the goal of completing them within six months.

Staff have conveyed that PR 2304 will apply to both terminal operators and the port authorities—albeit in different ways. We support this concept as it may add a layer of specific accountability from the various responsible decision-makers. While the port authorities can reduce emissions of indirect sources from the multiple operations under their control, require particular actions by tenants, and help design and deploy infrastructure plans, they can also ensure that timely and thorough reporting happens and that emissions reduction plans by terminal operators are being carried out. We hope this added layering of accountability will also bring added transparency through reporting and an opportunity for public review.

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<sup>19</sup> Nicholas Z. Muller, et al., *Environmental Accounting for Pollution in the United States Economy*, *American Economic Review* 101 (August 2011): 1649-1675, p.1650; available at: <http://www.aeaweb.org/articles.php?doi=10.1257/aer.101.5.1649>



#### **IV. Air monitoring and reporting must be improved.**

Community advocates have repeatedly raised concerns about the accuracy of monitoring at the Ports. Community testimony brought to light the unilateral decisions by the Ports to discontinue monitoring for certain pollutants, removing monitoring stations without justification, and inaction when monitors are in disrepair. In July 2021, for example, the Port of Los Angeles chose to suspend the source-dominated monitoring station at the center of operations during record-breaking cargo volume and ship calls.<sup>20</sup> Even more disturbing, for most of that record-breaking year for port traffic, two of the four monitors were inoperative, and data from those sections was never made available.<sup>21</sup>

These disturbing patterns of behavior by the Ports call into question the accuracy and reliability of their own emissions inventory and their ability to track spikes in emissions as they occur in real-time. They also highlight the need for stronger regulation and stricter enforcement to ensure that accurate data inform decisions on emissions reduction targets.

Commenters have repeatedly raised these issues at public meetings. In January 2023, for example, residents alerted the Air District that 14 monitors were not working and that the source-dominated station was 40% non-functional. There have also been repeated calls for District transparency when air monitors are inoperable and what backup systems are available.

For a health-protective rule to work, there must be greater transparency. That means air quality monitoring and reporting must be robust to ensure that impacted residents can demand rule enforcement against truants. Real-time data on pollution levels are needed to monitor compliance and track progress in meeting the ISR cap. This rule should therefore do the following:

- Require that port operators and the Ports expand the number of monitoring stations to establish a more robust network, both inside the port and throughout, where port-related air pollution can concentrate, to track progress made towards meeting the emissions reduction caps;
- Require that plans for monitoring expansion be detailed in terminal-specific emissions reduction plans;
- Require timely repairs to monitors crediting any emissions reductions from a port ISR plan;
- Trigger stricter reduction timelines if monitoring networks are not maintained in a timely manner.

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<sup>20</sup> Paul Rosenberg, *POLA Secretively Shuts Down Air Pollution Monitoring at 'Highest Exposure' site on Pier 300*, Random Lengths News, July 22, 2021; available at: <https://www.randomlengthsnews.com/archives/2021/07/22/pola-secretively-shuts-down-air-pollution-monitoring-at-highest-exposure-site-on-pier-300/34626>

<sup>21</sup> Donna Littlejohn, *Ports of LA, Long Beach Press on as clean air deadlines loom*, Daily Breeze, February 1, 2022; available at: <https://www.dailybreeze.com/2022/02/01/ports-of-la-long-beach-press-on-as-clean-air-deadlines-loom/>

Only through a robust air quality monitoring infrastructure can the District be assured that the measures being deployed are strong enough to meet reduction targets.

**V. Zero emissions infrastructure planning will be vital to the rule's success.**

Our organizations have a vision for California's frontline communities to have access to clean energy, healthy jobs, and safe breathable air. We strongly support SCAQMD's proposal to include a Zero Emission Charging Infrastructure and "transmissions planning" requirement as part of the Ports ISR, and we urge that this be a comprehensive requirement that includes near-term deadlines, with robust community engagement provisions. The broad deployment of Zero Emissions vehicles and equipment to help the Ports meet emissions reduction targets will require advance planning to ensure success. This work cannot fall entirely on public agencies to plan and fund. This massively profitable industry has the resources to clean up its own operations, fund, and plan for advance deployment of zero-emissions charging infrastructure. The Ports, terminal operators, and shipping companies should be required to do their part.

The rule should therefore require Ports and Terminal Operators to complete Zero Emission Infrastructure Master Plans by 2025, to support electrifying all operations well in advance of milestone cap years. The ISR should help establish timelines for an infrastructure build-out that can accommodate charging for electrified cargo handling equipment, zero-emission trucks, and shore power for ocean-going-vessels (including off-shore charging stations, zero-emission rail, and zero-emission harbor craft that will support electrification in advance of the CAAP deadlines and zero emission requirements of state law. Setting these planning deadlines earlier also allows for greater coordination with local utilities and statewide authorities to ensure adequate power supply and plan for incorporating on-site renewables.

Investment in transmission and clean energy procurement must include robust community stakeholder engagement to ensure new transmission infrastructure projects do not displace residents or harm vital community resources. The transmission planning process must directly respond to those whose health and safety may be threatened by energy infrastructure development. It is essential for utilities and the District to build trust with communities directly impacted by new/expanded clean energy infrastructure. As unprecedented levels of federal funds are distributed to expedite transmission infrastructure upgrades and expansion projects, now more than ever, we urge the District to maintain strong environmental review and public engagement processes to avoid harming communities.

To address potential impacts associated with new transmission projects, including transmission upgrade and expansion projects, we urge the District to develop a long-term community outreach and engagement plan in coordination with utilities to share regular updates about proposed transmission projects, including where they would be sited, the purpose for the project, and the benefits that will be extended to local communities. We encourage the District to develop a roadmap with interim targets to ensure energy infrastructure is in place to serve the Ports as they transition to ZE operations to meet the District's proposed "2031 and 2037 milestone years", as

well as interim 2025, 2027, 2030, and 2035 targets the rule should set to ensure that the region is on the right trajectory to get as close to zero-emissions by 2037 as possible.

Early community engagement will avoid project delays, identify and avoid potential harms, and will help ensure that new transmission is developed in an equitable manner. Similarly, interim energy infrastructure targets will provide industry leaders and the Ports insight into growing grid capacity in the South Coast and will encourage these stakeholders to continue investing in battery electric equipment/vehicles.

A recently released California Energy Commission Report regarding fossil fuel consumption<sup>22</sup> makes clear that the South Coast is prime for clean energy development, with significant potential for incremental renewable power. This report sets forth that “since 2012 solar generation grew from 2,609 gigawatt-hours to 48,950 GWh; wind generation increased by 63 percent; and natural gas generation decreased 20 percent; nearly 59 percent of CA retail electricity sales came from non-fossil fuel sources in 2021.” Accordingly, the South Coast should accelerate electric infrastructure development to accommodate this inevitable shift to clean/renewable energy generation and refrain from investing in less reliable declining fuel sources like LNG.

The South Coast has many aging and weak transmission lines that can be upgraded to reduce ongoing grid constraints and reduce air pollution by transitioning away from dirty energy sources. It is important to note that preparing the region to support 100 percent zero-emission vehicles and technology will require more than increasing transmission capacity, but also requires coordinated local resource development. This is even more reason why deadlines for planning should be set earlier.

#### **VI. The Rule Should Not Endorse False Solutions, Framed as Zero-Emissions, that can bring more harm to port-adjacent communities.**

The Port ISR is an opportunity to catalyze a swift transition to zero emissions while also protecting public health. The rule can also provide the framework for repairing past harm done to port-adjacent communities. Plans by the Ports and terminal operators should provide specific details to allow district staff and the public to assess whether proposed zero emissions plans are also protective of public health. The plans should be scrutinized to ensure that they do not credit false solutions or alleged zero-emissions alternatives that expose communities to additional dangers from the production, transport, storage, and potential discharge of combustible elements and hazardous substances.

While a rule can be fuel and technology-neutral— the District should not blindly treat electrification alternatives equally without carefully vetting the dangerous climate and health harms they may also bring. As just one example, there are ongoing debates about the role

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<sup>22</sup> CEC Report (2023), <https://www.energy.ca.gov/news/2023-08/data-show-clean-power-increasing-fossil-fuel-decreasing-california>.

hydrogen should play in making the switch to zero emissions. While there are applications where 100% green hydrogen (produced using only renewable resources like wind and solar) is likely to solve some current challenges to electrification, the scarcity of true green hydrogen makes this path infeasible for now.

There are also many hydrogen applications proposed as pathways to zero emissions—but not all are equal from an air quality, community health, and climate perspective. Before the District either tacitly or explicitly endorses any proposal to meet the port emissions cap, it should consider the following:

- Safety risk of storage and transportation of Hydrogen: The handling of hydrogen at each stage of production, storage, and transportation requires extreme caution as containing hydrogen presents unique challenges given its small and light molecular size. Hydrogen is also extremely flammable, can combust even in small concentrations, and may result in explosions, leading to severe casualties and property damage.<sup>23</sup>
- Hydrogen leaks- Due to its small size, hydrogen is also much more prone to leaks when being stored, transported, and utilized. Hydrogen leakage estimates vary from 1-10% depending on its production, storage, and transportation, but real-world leakage monitoring has not yet been deployed. Hydrogen leaks have their own set of negative consequences for climate impact and air quality.<sup>24</sup> From a climate perspective, hydrogen itself has been shown to be 12 times more potent than CO<sub>2</sub> as an indirect greenhouse gas.<sup>25</sup> Leaked hydrogen extends the lifetime of methane in the atmosphere, causing its concentration and warming effect to increase over time.<sup>26</sup>
- Hydrogen Production—Virtually all commercially used hydrogen is produced by fossil fuels, and their life cycle impacts are significant. This is because many of the gas companies and oil refineries responsible for producing most domestic hydrogen do so through an energy-intensive industrial process known as steam methane reformation of fossil gas. The steam methane reformation process not only emits

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<sup>23</sup> Hao Li, et. al., *Safety of hydrogen storage and transportation: An overview on mechanisms, techniques, and challenges*, Energy Reports, Vol. 8, 2022, Pages 6258-6269, ISSN 2352-4847, available at: <https://www.sciencedirect.com/science/article/pii/S2352484722008332>.

<sup>24</sup> Sand, M., Skeie, R.B., Sandstand, M. *et al.* A Multi-model assessment of the Global Warming Potential of hydrogen. *Commun Earth Environ* 4, 203 (2023). <https://www.research.ed.ac.uk/en/publications/a-multi-model-assessment-of-the-global-warming-potential-of-hydro>.

<sup>25</sup> *Id.*; See also Sara Gerson and Sasan Sadat, *Reclaiming Hydrogen for a Renewable Future: Distinguishing Oil & Gas Industry Spin from Zero-Emissions Solutions*. *Earthjustice-Right-to-Zero Report*, (August 2021), pp.10-11; available at: [https://earthjustice.org/wp-content/uploads/hydrogen\\_earthjustice\\_2021.pdf](https://earthjustice.org/wp-content/uploads/hydrogen_earthjustice_2021.pdf).

<sup>26</sup> Sand, M., Skeie, R.B., Sandstand, M. *et al.* A Multi-model assessment of the Global Warming Potential of hydrogen. *Commun Earth Environ* 4, 203 (2023). <https://www.research.ed.ac.uk/en/publications/a-multi-model-assessment-of-the-global-warming-potential-of-hydro>.

greenhouse gases, but also results in emissions of NOx, fine particulate matter, carbon monoxide, and VOCs.<sup>27</sup>

Plans for zero-emissions operations centered on direct electrification avoid these problems. There is a clearer pathway today for electrification—especially in the transportation sector—through battery electric vehicles as well as other off-road applications like gantry cranes and other classes of cargo-handling equipment. While the Port ISR should push for innovation in developing a robust set of pathways to zero-emissions, as a public health agency, the District must consider the collateral impacts to air quality and safety of several plans proposing “zero-emissions” alternatives to direct electrification.

## **VII. Mitigation Fees should be a last resort.**

We understand that the District is contemplating incorporating a mitigation fee structure that would offer some flexibility to port operators and the Ports should the adoption of strong zero-emissions measures prove infeasible during the interim period. While different pathways to reducing emissions may be necessary depending on terminal operations, the use of mitigation fees should be done as a last resort and only upon a showing by operators that no combination of measures (e.g., deployment of zero-emissions vehicles and cargo handling equipment, etc.) can feasibly achieve the cap at a particular milestone.

The current rule concept has mitigation fees as an alternative only during the interim period between the milestone years of 2031 and 2037, but it is unclear what purpose they would serve, given that no specific cap will occur during this interim period. It is unclear how these fees will get triggered during interim phases, given the latitude offered to the Ports and container terminal operators during these periods. The likely outcome of the mitigation fee, as currently conceptualized, would be to offer a regulatory off-ramp in advance of a cap deadline year—undermining the very purpose of the rule to progressively cap overall emissions from indirect sources.

We caution staff against adopting a mitigation fee measure that might allow regulated operators or the Ports to simply pay their way out of compliance. A “pay-to-pollute” scheme would be an affront to those communities already disproportionately burdened by port-related pollution. Before the District embarks on allowing a mitigation fee option, it must carefully weigh the need for such a regulatory off-ramp against the harm caused to residents if pollution is simply allowed to continue unabated.

Should a mitigation fund be created as part of this rule, investment of those funds should be guided by a community advisory group comprised of impacted residents and environmental justice communities. Mitigation funds should be used to invest directly in the hardest hit

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<sup>27</sup> Gerson, et al, *supra*, pp.10-11.

communities first and set with fees high enough to incentivize responsible industry groups to take stronger and faster action to achieve compliance.

**VIII. Community Outreach must continue with information that is accessible.**

We strongly encourage staff to commit to robust community engagement as PR 2304 is developed, with the following specific recommendations:

- Continue engaging with residents in port-adjacent communities to better understand resident concerns regarding container terminal operations and their specific impact on neighborhood safety and public health, and gather suggestions for improving operations that reduce the impact on residential communities.
- Address resident concerns regarding the impact of automobile, breakbulk, dry bulk, liquid bulk, passenger, and multi-use terminals to better understand the unique impact on public health from each.
- Provide specific information about the rule’s goals and objectives, the methodology used to establish emissions reduction thresholds, as well as the key milestones established for the rule in a way that is accessible to stakeholders that may not have the science or legal background understand key terms and concepts without further elaboration.
- Commit to additional public health-focused listening sessions with residents and public health experts to co-design the most protective emissions caps.

**IX. Conclusion**

The District must adopt the Ports ISR as quickly as possible, no later than December 2023. We commend Air District staff’s hard work on this vital life-saving regulation and urge staff to prioritize community health and safety by avoiding any further delays in this rulemaking process. The District has the chance to demonstrate that zero-emission freight equipment and vehicles can meet state air quality targets. This rule provides a unique opportunity to develop a coordinated approach to reduce toxic emissions associated with port operations while protecting the Port’s competitive advantage, labor, and port stakeholders—and, most importantly, increasing anticipated life expectancy for frontline residents. We urge staff to continue engaging local communities throughout the development of this rule.

Thank you for considering our comments and concerns. We look forward to continued collaboration with District staff during this critical rulemaking process.

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South Coast Air Quality Management District  
September 11, 2023

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