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Designated Federal Officer
EPA Science Advisory Board Office
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue
NW Washington, DC 20460

Re: Control of Air Pollution from New Motor Vehicles: Heavy-Duty Engine Standards Docket
No. EPA-HQ-OAR-2019-0055

To whom it may concern:

Introduction

The Moving Forward Network (MFN) is a national network of over 50 organizations that center grassroots, frontline knowledge, expertise, and engagement with the communities across the United States that bear the negative impacts from the global freight transportation system. In collaboration with allies and partners, MFN identifies local solutions that call for community, industry, labor, government, and political action that advances equity, environmental justice, and a zero-emissions focused just transition.

MFN's vision is for negatively impacted communities to become healthy, sustainable spaces where individuals, families, students, and workers can thrive, free of the negative impacts of the freight transportation system. Core to MFN's values is our organizations' deep commitment to advancing environmental justice, equity, economic justice, and a just transition.

On May 16, 2022, the Moving Forward Network submitted comments on the proposed rule for the Control of Air Pollution from New Motor Vehicles: Heavy-Duty Engine and Vehicle Standard. These comments detailed why the proposed criteria pollution standards (Options 1 and 2) alone will not relieve the daily burdens caused by the freight transportation system felt by environmental justice communities, and that the proposal requires significant strengthening. To meet the needs of environmental justice communities, EPA must enact the most protective and stringent emission standards that puts us solidly on a path toward 100% of these highly polluting, heavy-duty vehicles being zero emissions.

Additionally, since the docket closed on this rule, there have been new analyses on the public health impacts from heavy-duty truck emissions and on the impact, or lack thereof, previous emission standards had on demand and employment. We highlight these reports and their findings in these comments. We also strongly urge the Science Advisory Board ("the Board") to review these analyses and take their findings into account in your final recommendation to Administrator Regan on this rule and its criteria pollutant stringency levels.

Public Health Impacts of NOx Rule

EPA must address the cumulative burdens across the entire freight sector. This will require a whole-of-government approach and one that makes use of intentional efforts to address the deadly pollution and public health threats impacting environmental justice communities every day. Getting the toughest criteria pollutant stringency levels in this rule is a key part of this and is an opportunity that should not be missed. We are including in the written submission the letter from MFN that was sent to EPA 1 year ago with a list of demands and recommendations to address the deadly pollution caused by the freight sector.

Effect of Heavy-Duty Vehicles on Local Air Pollution & Associated Health Care Costs

The effect of heavy-duty vehicles on local air pollution will be informative for this rule, especially since the freight transportation system imposes unacceptable levels of cumulative impacts on environmental justice communities, as the Board has already noted in its September 27, 2022, draft report to Administrator Regan.

Trucks represent a small fraction of total on-road vehicles but generate the greatest share of harmful air pollutants. In 2020, heavy-duty vehicles represented approximately 6% of the on-road fleet but generated 59% of ozone- and particle-forming NOx emissions and 55% of the particle pollution (including brake and tire particles). Countless studies have also shown that diesel-powered vehicles emit fine particulate matter (PM2.5) and nitrogen oxides (NOx), which lead to numerous adverse health outcomes and even premature death.

Further in support of this is a report released earlier this month by the American Lung Association (ALA), “Delivering Clean Air: Health Benefits of Zero-Emission Trucks and Electricity,” which illustrates the potential health benefits of transitioning all medium- and heavy-duty vehicles to zero emissions by 2040. Among many things, this report found that the move to zero-emission trucks could result in \$735 billion in cumulative public health benefits over the next 30 years and a more equitable future. It also found that in U.S. counties with major trucking routes, that this transition would result in up 66,800 avoided deaths, 1.75 million avoided asthma attacks, and 8.5 million avoided lost workdays.¹

These findings alone are another clear example for why EPA must make use of zero-emissions vehicles as the incredibly effective pollution reduction technology they are.

Equity Concerns Across Different Communities

There are significant concerns for equity across different communities, especially when it comes to air pollution.

People who live near freight hubs or “diesel death zones”—including ports, highways, warehouses, and rail and intermodal yards—are disproportionately exposed to high concentrations of pollution from the combined activity of diesel-fueled heavy-duty trucks, equipment, rail, and vessels.

Additionally, a person’s zip code remains the most significant predictor of health and wellbeing. In fact, low-income neighborhoods and communities of color breathe an average of 28 percent

¹ American Lung Association (2022). *Delivering Clean Air: Health Benefits of Zero-Emission Trucks and Electricity*. <https://www.lung.org/media/press-releases/new-report-transition-to-zero-emission-trucks-cou>

more NOx pollution than higher-income and majority white neighborhoods.² For residents of environmental justice communities, this means that their lives can be 10-20 years shorter because of environmental pollution, compared to residents in wealthy white communities.³ We appreciate that the Board has recognized many of these equity concerns in their draft recommendations. However, we have some concerns on the process for development and implementation that require greater detail and coordination with the frontline communities for whom the recommendations are being drafted to protect.

Best Methods to Consider the EJ Impacts of this Rule

An important question posed by the Board in their draft recommendations is “how could the EPA consider the environmental justice impacts of this rule” given known data and methodological limitations.

To start, EPA should adopt more regular communication with environmental justice groups as the agency works to finalize this rule and any of the rules which address freight pollution. This means intentional meetings during the drafting, development, and implementation of this and subsequent policies. Doing this will ensure that all “EJ considerations” won’t be recommendations that are merely considered, but will also be incorporated into draft language and eventually finalized in regulations. EPA should also make use of the comments (or letters or other calls to action) the agency has received from environmental justice groups for this rule (and on other rules), and appropriately evaluate the concerns raised by these groups and the requested solutions.

Additionally, the Board cites concerns around aggregation and how it could impair the agency’s ability to analyze the rule’s local impacts, “a key EJ consideration.” So much of this “more localized” data is already out there for EPA to consider and is also in the comment docket for this rule. Even the ALA’s recent report (highlighted in the previous section) specifically homes in on heavy-trucking corridors and routes, and issues projected health benefits at the county-level. Additionally, as the Board highlights, there is other existing data from the California Air Resources Board (CARB) that should be carefully considered, including all final data associated with CARB’s Heavy-Duty Low NOx Omnibus rule.

The Board notes that “Analyses that would address EJ need to further consider the populations exposed, reflecting cumulative risk and EPA’s plan to incorporate cumulative risk into its EJ framework.” It is critical that EPA’s analysis reflect the compounding impacts of multiple sources of harm facing many communities. The science behind cumulative impacts is substantial and growing.⁴ In fact, MFN and its members have long pressed the federal government to acknowledge the multiple and thus cumulative environmental threats environmental justice communities face and their heightened vulnerability to those threats. Specifically, these cumulative impact analyses recognize not only that some individuals and communities face more pollution than others, but also that the same amount of pollution can result in more harm to people facing additional and compounded stressors than to people who do not face such

² Mary Angelique G. Demetillo et al., *Space-Based Observational Constraints on NO2 Air Pollution Inequality from Diesel Traffic in Major US Cities*, *Geophys. Research Letters*, Vol. 48 No. 17 (Aug. 25, 2021) <https://doi.org/10.1029/2021GL094333>

³ Reed, Genna, Beto Lugo-Martinez, and Casey Kalman. 2021. *Environmental Racism in the Heartland: Fighting for Equity and Health in Kansas City*. Cambridge, MA: Union of Concerned Scientists. <https://doi.org/10.47923/2021.14322>;

⁴ Yukyan Lam, Kim Wasserman, Juliana Pino, Olga Bautista, Peggy Salazar and Maria Lopez-Nunez, “Seeing the Whole: Using Cumulative Impacts to Advance Environmental Justice,” February 2022, at 9-16 (discussing extrinsic and intrinsic factors).

stressors. It also recognizes that these multiple stressors are too often interrelated in their origins. The results are clear—people of color and people with low incomes face some of the highest levels of pollution and are least equipped to ward off the consequences of this pollution.

A recent study on the health impacts from ports makes clear the need for EPA to consider the cumulative toll of all pollution sources in assessing the need to mitigate any one of those sources.⁵ The study examined the link between port-related traffic and hospital visits for respiratory, heart-related, and psychiatric issues, concluding that people of color are more vulnerable to health impacts as a result of increased goods movement operations. Adding just one vessel or increasing overall vessel tonnage in a nearby port leads to more than 3 additional hospital visits per year per thousand Black residents, compared to about 1 visit per thousand for white residents in the same area. Relatedly, the study also found that reducing fossil fuel use in ports would significantly reduce air pollution concentration and have an acute and positive benefit to local Black residents.

MFN and its members have and continue to emphasize that a cumulative impact framing is so critical because it demonstrates the need to move away from fragmented, limited approaches as “solutions”, and towards a more holistic, big-picture approach that will actually be able to address the real-world harms environmental justice communities face. This is made even more important with the recent COVID-19 pandemic, which has escalated the negative consequences from living in a “diesel death zone” or region with poor air quality. Numerous studies now show that long-term exposure to air pollution makes people more vulnerable to complications and death from COVID-19.⁶

As Dr. Sacoby Wilson says, “Context matters. Place matters.”⁷ For EJ communities, place matters, and EPA should only be proposing regulations that guarantee health benefits and emission reductions for overburdened communities, especially as we now have the increased threat from COVID-19.

These findings should be taken under consideration by the agency as it finalizes the criterial pollutant stringency levels in the rule and evaluates the benefits associated with different finalized stringency levels.

Labor Considerations

Labor and those working in the freight sector (including truckers, equipment operators, warehouse and logistics workers, and others) are essential constituents in the quest for a just transition to a cleaner energy economy, air quality improvements, zero emissions, and climate mitigations. Many workers not only work in industries (such as trucking) that expose them to toxins and impact their health, but they also live in communities disproportionately bearing the burdens of pollution.

⁵ Kenneth Gillingham and Pei Huang, Racial Disparities in the Health Effects from Air Pollution: Evidence from Ports (Mar. 15, 2022), available at <https://resources.environment.yale.edu/gillingham/RacialDisparitiesAirPollution.pdf>.

⁶ Xiao Wu et al., Air pollution and COVID-19 mortality in the United States: Strengths and limitations of an ecological regression analysis, 6 Science Advances 45 (2020), <https://projects.iq.harvard.edu/covid-pm>.

⁷ <https://e360.yale.edu/features/connecting-the-dots-between-environmental-injustice-and-the-coronavirus>

Regulations to strengthen emission standards as well as further zero emission trucks need to account for more than just the effects of the policy on job growth. Standards should include an economic analysis of the proposed regulation and alternatives, as well as include provisions to ensure that these increases in jobs are coupled with labor standards, so that workers are benefiting by more than just access to jobs but also in the quality of jobs. Possible methods for doing this is something the agency should explore. We ask that you read in detail the recommendations that were made in our written comments to EPA on labor as well as extensive labor comments on NECAUM's Action Plan.

Dispelling the “Pre-Buy/No-Buy (Low-Buy) Myth”

Unfortunately, those fighting adoption of a strong criteria pollutant standard for heavy-duty vehicles (HDVs) frequently claim that complying with new standards causes a “pre-buy/low-buy” situation and point to previous HDV regulations, most notably the 2007 standard, as having caused this phenomenon that led to manufacturing employment losses.

Critics claim that pre-buy/low-buy occurs when HDV consumers expect a new truck engine regulation to increase vehicle purchase price and stock up on pre-regulation Class 4 to 8 HDVs, increasing the number of sales ahead of the regulation and depressing sales once the regulation goes into effect. This argument extrapolates further to say that HDV environmental regulations are detrimental to employment because vehicle manufacturers hire then lay off workers in response to the added volatility of vehicle demand due to the regulation, pointing to the 2007 and 2010 HDV standards as historical examples.

But these “pre-buy/low-buy” claims have been repeatedly questioned and have invited more rigorous economic approaches and literature reviews, including analysis commissioned by two Moving Forward Network Members (the Natural Resources Defense Council and the Union of Concerned Scientists) in partnership with the Sierra Club. This analysis focused on evaluating the connection between the historical implementation of heavy-duty engine emission regulations and changes in HDV manufacturing's employment, production, and sales.

The findings are summarized in this section and the full analysis is also attached as an addendum to this comment letter. We urge the Science Advisory Board to take this analysis and its findings into account when you offer your final recommendations to Administrator Regan on the adequacy of the scientific and technical basis of the heavy-duty regulation.

Summary of Findings from the NRDC, UCS and Sierra Club Pre-Buy/Low-Buy Study

The study focused on HDV Classes 4 through 8 and began with the hypothesis that a “pre-buy/low-buy” caused by a regulation would show significantly higher sales in the period prior to a regulation going into effect, and then significantly lower sales in the period after the regulation goes into effect.

The pre-buy/low-buy hypothesis necessitates that both purchasing behaviors occur, because the regulation is not materially creating nor destroying vehicle demand; it is simply shifting that demand from one period to another to reflect that HDV purchases are being made earlier than

they would be without the regulation. Additionally, this study's analysis looks for evidence of pre-buy/low-buy in the production and sales data, since pre-buy/low-buy employment effects cannot occur without a shift in demand that first affects sales, then production.

Methodology

The study used a Difference-in-Difference (DiD) modeling approach to provide a parsimonious method to control for the impact of conditions that could affect the reliability of the model but were unrelated to the topic being studied (i.e., the impact of regulations on economic activity). Under this DiD approach, impacts across two groups were compared:

- The potentially affected group that may be impacted by an event (heavy-duty trucks), and
- A control group that is similar to the potentially affected group but is not affected by the event (light-duty trucks and automobiles).

The DiD model assessed whether there was a difference in the potentially affected group at the time of the event and whether that difference was significantly different from changes in the control group. This approach was used because evaluating both differences (i.e., Pre vs. Post and potentially affected vs. control groups) provides for a more reliable assessment of the event's impact.

The study first analyzes the regulation that began with model year (MY) 2007 vehicles. The 2007 regulation is cited most frequently by other studies (and by manufacturers) because substantial changes to the vehicles were required to accomplish the required emission reductions. The study also investigates the 2004, 2010, and 2014 regulations for evidence of potential pre-buy/low-buy effects.

Results

There is no evidence of a pre-buy/low-buy impact on HDV manufacturing employment around the 2004, 2007, 2010, and 2014 engine emission standard regulations. Even when the length of the pre-buy/low-buy periods and the effective date of the regulation were changed for 2007, there was no evidence of employment impacts from the regulation.

For production and sales, the main model results indicated significantly higher than expected sales and production in 2006, but there was no corresponding period of significantly lower sales and production in 2007 that would indicate a pre-buy/low-buy effect. Thus, the higher sales and production in 2006 was likely caused by other factors than the 2007 regulation.

There is no material impact of the 2004, 2010, 2007, and 2014 HDV emission regulations on industry employment. A review of the pre-buy/low-buy literature shows that other studies that find pre-buy/low-buy effects have results that are inconsistent across studies in terms of the timing, duration, and magnitude of the effects, despite studying the same regulations, often with the same data.

Moreover, these new results and the lack of consistent results from prior studies indicate there is no firm basis for concluding that there is a material pre-buy/low-buy impact on sales or production as a result of HDV engine regulations.

Conclusion

For decades, communities across the country have been fighting for the right to breathe clean air, and a major ask of our communities has been for EPA to urgently address the devastating freight pollution.

The agency's "Control of Air Pollution from New Motor Vehicles: Heavy-Duty Engine and Vehicle Standards" rule offers an important and unique opportunity for EPA to respond to these environmental justice community calls in a way that is incredibly impactful and offers relief to the daily burdens felt by environmental justice communities as a result of the freight transportation system. However, to do so takes intentional coordination and collaboration, which to date has been falling short.

We are committed to working with regulators on the strongest and most protective Standard(s) possible. The lives of our communities are at stake, so we cannot wait for future rules or proposals to address these impacts. We need every rule, program, incentive that comes from EPA to be impactful and to prioritize addressing environmental racism and injustice. Unfortunately, the proposed rule EPA put forth missed the mark by being weaker than existing state action to regulate these health-harming pollutants from heavy-duty trucks and by failing to advance the deployment of zero-emission trucks at the pace needed to address the urgent public health crisis caused by tailpipe exhaust.

As the Science Advisory Board discusses its final recommendations for Administrator Regan on the adequacy of the scientific and technical basis of the heavy-duty rule, we ask that you keep these points in mind, in addition to the new analyses we highlighted in this comment letter on the public-health benefits to a strong rule and refuting industry claims that strong environmental regulations are detrimental to employment.

Ultimately, we ask that the Board recommend to Administrator Regan that he and the EPA have a strong enough technical record to enact the most protective and stringent engine emission standards that at the very least align with state action underway, and that puts us solidly on a path toward 100% of these polluting big-rigs, trucks and buses being zero emissions.

Thank you for the opportunity to provide additional input on this important rulemaking. If there are any follow-up questions, please contact Molly Greenberg, MFN Campaign Manager, at greenberm@oxy.edu.

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Moving Forward Network



October 26, 2021

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Matthew Tejada, Director, Office of Environmental Justice

Dear Mr. Regan:

The Moving Forward Network (MFN)¹ writes the following to the U.S. Environmental Protection Agency (EPA) to present the need for EPA to prioritize environmental justice in freight impacted communities by aggressively advancing zero-emission technology and solutions across the freight sector. We appreciate the EPA's commitment to meet with EJ and grassroot organizations and communities. However, this letter highlights the critical need for immediate actions to be taken in conjunction with these meetings. With people's health and environment on the line, the EPA must move a Zero Emissions agenda, which crosses the freight sector and prioritizes environmental justice. The global freight transportation system is one of the largest sources of pollution across the country. Freight transportation relies on thousands of diesel trucks, locomotives, cargo handling equipment, and ships, aimed at moving huge volumes of goods from places of manufacturing to distribution e.g. warehouses, to places of consumption, i.e. the market, small business, etc. Presently this system contributes to significant amounts of localized pollution in areas that

¹ The Moving Forward Network (MFN) is a national network of organizations that center grassroots, frontline knowledge, expertise, and engagement with the communities across the US that bear negative impacts of the global freight transportation system. In collaboration with allies and partners, MFN identifies local solutions that call for community, industry, labor, government, and political action that advances equity, environmental justice, and a zero-emissions focused just transition. MFN's vision is to see that negatively burdened communities become healthy, sustainable places by reducing and ultimately eliminating the negative impacts of that system. MFN is deeply committed to advancing environmental justice, equity, economic justice, and a just transition.

are already overburdened by other sources of pollution. All of which generates a significant amount of pollution that contributes to an ongoing health crisis in environmental justice communities and the climate crisis across the globe.

Introduction

Over a decade ago, EPA recognized that more than 13 million people (3.5 million of whom are children) live near major marine and inland ports or rail yards, and that these individuals are disproportionately low-income communities of color and susceptible to increased health risks from air pollution.² These figures do not include the approximately 45 million individuals who live within 300 feet of a highway³ or close to large distribution centers where diesel emission sources congregate. These problems persist today with a rapidly growing freight system, an expanding network of warehouses and last-mile logistics centers, and constantly increasing throughput volumes at our ports and railyards. The result is that, even as technology has allowed for reducing emissions from trucks and other freight-moving equipment, increases in activity have outpaced the gains achieved by EPA rules that have not been amended in over a decade.

President Biden's January 27, 2021 Executive Order on Tackling Climate Change at Home and Abroad directs agencies to "make achieving environmental justice part of their missions by developing programs, policies, and activities to address the disproportionately high and adverse human health, environmental, climate-related and other cumulative impacts on disadvantaged communities, as well as the accompanying economic challenges of such impacts." To fulfill that mission, EPA must include reducing freight-related air pollution as a top priority for the Agency.

This letter outlines specific actions EPA must advance to finally provide relief to freight-impacted communities. These policies, rules, programs, outlined below must include guaranteed emission reductions in environmental justice communities. In addition, the Moving Forward Network looks forward to working with EPA to facilitate collaboration with community partners as a key part of this effort. EPA should foster action oriented, regular meetings in each region with environmental justice communities adversely affected by freight-related air pollution, and identify short- and long-term goals/policies/programs that address the unique needs of each community while aiming to clean-up the freight system as a whole.

I. Federal Rules

EPA must prioritize using its rulemaking authority under the Clean Air Act to address freight-related sources of pollution. Rules send the necessary signal to the market that a transition to zero-emissions must occur. Yet many of these sources are protected from state and local controls by federal preemption. EPA regulations are thus critical in advancing technology and protecting overburdened communities. Moreover, many of EPA's rules on the freight sector have not been amended for decades, and the most

² Office of Transportation and Air Quality (OTAQ), U.S. Environmental Protection Agency (EPA), *Regulatory Impact Analysis: Control of Emissions of Air Pollution from Locomotive Engines and Marine Compression Ignition Engines Less than 30 Liters Per Cylinder*, EPA420, pp. 2-57 (March 2008). Available at: <http://www.regulations.gov/#!documentDetail:D=EPAHQ-OAR-2003-0190-0938>.

³ See Office of Transportation and Air Quality (OTAQ), EPA, *Near Roadway Air Pollution and Health* (May 22, 2015). Available at: <http://www.epa.gov/otaq/nearroadway.htm>.

stringent standards imposed by those rules no longer require the emission reductions that could be achieved using modern technologies. EPA must quickly move forward with new federal rules for all of the following, and at every regulatory opportunity, EPA must include mandates that rapidly advance zero-emission solutions.

A. Heavy-Duty Truck Standards

Advancements in zero-emission truck technology are enabling more dramatic progress to tackle pollution. We understand that EPA has traditionally considered zero-emission technologies as part of the solution for reducing greenhouse gas emissions, but EPA must also incorporate these feasible controls in strategies for reducing all emissions, including criteria pollutants like nitrogen oxides and particulate matter. The rapid development of zero-emission technologies warrants a fresh approach to overhauling the fossil-fueled freight system. It is no longer adequate to focus solely on incrementally cleaning combustion vehicles. Thanks to improving zero-emission technology, pollution from trucks can not only be lowered but eliminated. Zero-emission trucks are commercially available,⁴ economically compelling,⁵ and the single most effective solution for reducing freight emissions.⁶ Advances in this technology are outpacing even the best estimates from just a few years ago—cost and technology assessments of battery-electric trucks from 2018 are already becoming obsolete.⁷ The barriers that once relegated zero-emission trucks to be considered a niche solution are shrinking, allowing zero-emission trucks to become the centerpiece in our battle against air and climate pollution. At every regulatory opportunity, EPA must include policies that rapidly advance zero-emissions not just in certain market segments but for the entire truck sector.

EPA's forthcoming NOx standards for heavy-duty trucks starting in MY2027 is the first unmissable opportunity to drive this transition. As part of that upcoming rulemaking, President Biden's August 5, 2021 Executive Order on Strengthening American Leadership in Clean Cars and Trucks directs EPA to "consider[] the role that zero-emission heavy-duty vehicles might have in reducing emissions from certain market segments."⁸ Now is the time to hasten the transition to zero-emission trucks and buses, and EPA has one of the best opportunities to do so by setting stringent emissions standards that include both limits on NOx emissions and escalating zero-emission sales mandates that provide a clear signal for manufacturers to chart a path toward zero-emissions. At a minimum, the federal government should require that all new trucks must have zero emissions beginning in 2035, with intermediate targets before

⁴ See MJ Bradley & Associates, Medium- & Heavy-Duty Vehicles (July 2021)

<http://blogs.edf.org/climate411/files/2021/08/EDFMHDVEVFeasibilityReport22jul21.pdf>.

⁵ See Amol Phadke et al, Why Regional and Long-Haul Trucks are Primed for Electrification Now (Mar. 2021)

https://eta-publications.lbl.gov/sites/default/files/updated_5_final_ehdv_report_033121.pdf.

⁶ OECD, International Transport Forum, Transport Outlook - 2019, at 157

https://doi.org/10.1787/transp_outlook-en-2019-en stating "[s]caling up decarbonisation measures for road freight transport that have already been tested and are comparatively easy to introduce is one of the most immediate actions required."

⁷ See, e.g. estimates from the ICCT, which have already been surpassed several years ahead of schedule

https://theicct.org/sites/default/files/publications/Zero-emission-freight-trucks_ICCT-white-paper_26092017_vF.pdf

⁸

<https://www.whitehouse.gov/briefing-room/presidential-actions/2021/08/05/executive-order-on-strengthening-american-leadership-in-clean-cars-and-trucks/>

then. EPA needs to ensure that the new NO_x standard is implemented across the country and that the rule ramps up zero-emission technology requirements for all types of trucks and buses.

First and foremost we cannot afford to delay. EPA must complete the NO_x and GHG rules in 2022. Further, EPA's medium- and heavy-duty vehicle emission standards must be additive to and not preempt state policies. Additional policies should be adopted as soon as possible to accelerate the retirement of all combustion trucks on or before 2045, and to quickly build out the infrastructure and operational environment to facilitate this transition without impacting drivers in environmental justice communities. Many of these policies fall under EPA's purview, however some, like prioritizing the conversion of the oldest trucks on the road, which are often operated by misclassified drivers, may require exercise of President Biden's whole of government/interagency approach.

In setting these standards across the freight sector, EPA must consider environmental justice impacts and priorities "from source to tailpipe to grave."⁹ This means thinking through the unintended consequences of regulatory design. For example, regulations must avoid promoting false solutions, (e.g., carbon trading and/or "greenwashed" energy that comes from non-renewable and heavy-polluting sources such as natural gas, biomass, etc.), that will only lead to further burdening our environmental justice communities. Standards that focus solely on reducing or eliminating carbon, rather than eliminating all combustion emissions, can allow these false solutions to continue through offsets and other accounting games that concentrate emissions in the most impacted communities. At the same time, transportation electrification must be accompanied by standards and regulations around renewable electricity generation, i.e. wind and solar,¹⁰ that will not further burden environmental justice communities. Decisions on siting the new electricity infrastructure must be coordinated with environmental justice leaders, address cumulative impacts and support mandatory emissions reductions.

B. Locomotives and Railyards

EPA also needs to take immediate action to clean up the nation's incredibly polluting freight rail industry. Children, families, and workers live near railyards and freight rail routes where some of the dirtiest switcher and line-haul locomotives belch diesel particulate matter each day, sometimes just feet from homes, schools, and workplaces. Communities have had to pay for the rail industry's pollution with their health for decades, and continue to suffer devastating short- and long-term health consequences from exposure to diesel pollution.

We ask that EPA adopt a much-needed rulemaking by the end of 2022 to address the public health dirty air crisis caused by locomotive pollution. EPA should include a Tier 5 zero-emission locomotive standard for all new freight locomotives that requires 100% of all new switchers be zero-emission by 2025, and 100% of all new line-hauls be zero-emission by 2030. We also ask that EPA set significantly more stringent emission standards for all remanufactured locomotives and locomotive engines, so that 100% of

⁹ "To grave" means that how and where waste from the ZE technology as well as the diesel vehicles that will no longer be in use must consider the waste stream in the planning and implementation of ZE policies and programs.

¹⁰Renewable energy may have many definitions based on the source of energy. MFN considers solar and wind to be renewable energy. However, there are important EJ and equity implications that come from these "cleaner" energy sources (i.e siting, manufacturing, shipping, etc). All of these must be considered with EJ leadership before endorsing specific renewable energy recommendations.

all remanufactured switchers meet the Tier 4 standard by 2025, and 100% of all line-haul locomotives meet the Tier 4 standard by 2027. EPA should require the forced retirement of any locomotives or locomotive engines that do not meet a zero-emission Tier 5 standard by 2045. In addition, EPA should work with our organizations to create a strategy to eliminate pollution burdens from concentrated railyard operations that pose significant health and safety risks, including but not limited to pollution and impacts from the operation of locomotive maintenance facilities, locomotive parking/idling and supporting warehouses, throughout EJ communities and railyard maintenance facilities.

C. Marine Vessels

Marine vessels are one of the largest contributors of cancer-causing pollutants around seaports and inland waterways. Ships and boats that operate along our coastlines and in our lakes still operate on dirty diesel engines and are responsible for a significant amount of diesel particulate matter exposure in portside communities. To address the health risks associated with marine vessels, we recommend that EPA adopt a rulemaking by the end of 2022 that will maximize zero-emission requirements for marine engines.

Specifically, EPA should include a Tier 5 zero-emission standard that will require 100% of new marine engines to be zero-emission by 2035. EPA should also require all remanufactured marine diesel engines to meet the Tier 4 standard by 2025 and the retirement of any marine engines that do not meet the zero-emission standard by no later than 2045.

To support the shift towards zero-emission vessel operations, EPA should continue to provide grants for the installation of shore power infrastructure and ship emission capture systems to reduce at-berth emissions. In fact, EPA should direct all Regional Administrators to work with local state and port officials to incorporate shoreside power and ship emission capture standards into their State Implementation Plans. We also encourage EPA to require all ships at-berth in U.S. ports emit zero emissions under the United States' port state control authority. Finally, because EPA's domestic regulations only apply to U.S. vessels, we urge EPA to push its federal colleagues at the U.S. Coast Guard, National Oceanic and Atmospheric Administration, and the Department of State to push for strong international standards and other strategies to clean up toxic hotspots near seaports at the International Maritime Organization.

D. Cargo Handling Equipment

Cargo handling equipment (e.g. forklifts, loaders, gantry cranes, tractor trucks, and yard hostlers) is an ineffectively regulated major source of pollution in port-adjacent communities. These pieces of equipment are regulated under EPA's nonroad engine rule, which has not been amended since 2004 and has failed to adequately reduce their pollution. Like freight trucks, this equipment is ripe for electrification--it does not travel beyond the port, rail yard or warehouse, and can be recharged on site or operated with a permanent electrical connection. Ports around the globe have already demonstrated many examples of this zero-emission equipment.¹¹ The Clean Air Act directs EPA, from time to time, to revise the standards for

¹¹ Electric yard cranes have entered service at the Port of Long Beach, a fleet of electric forklifts runs on on-site renewable energy at the Port of Hull in the United Kingdom, and rubber tire gantry cranes are in operation at the Port of Montevideo in Uruguay.

nonroad engines and vehicles to achieve the greatest degree of emission reductions achievable. It is beyond time for EPA to revise these standards and include zero-emission mandates for cargo handling equipment. By 2023, EPA should adopt new nonroad standards for port, warehouse, and railyard cargo handling equipment that achieves 100 percent zero-emission equipment by no later than 2026,¹² which is the date that the largest port complex in the U.S. also plans to achieve zero-emissions.¹³¹⁴¹⁵

E. Indirect Source Review Rules

The rapid and unchecked growth in warehousing has created toxic hotspots around the country well beyond the traditional ports and railyards that have been the focus of freight regulations. EPA must use its authority to address this growing problem. In addition to directly regulating mobile sources with new federal standards, EPA should also support the electrification of freight operations by exercising its authority to adopt regulations on freight facilities that “indirectly” contribute to pollution hotspots by concentrating mobile source emissions. Indirect source¹⁶ requirements can support transportation electrification by encouraging zero-emission operational strategies for moving freight, and ensuring magnet sources have the infrastructure necessary to support zero-emission trucks and equipment.¹⁷ Because of the expansive nature of warehouses across the country and lack of regulations protecting the health and safety of frontline communities, the timeline for EPA to move an indirect source rule and review process for warehouses needs to be aggressive with targeted goals and accountability structures that begin immediately.

EPA has authority to regulate “major federally assisted” indirect sources as part of a federal implementation plan.¹⁸ EPA has used federal implementation plans to address regional NOx pollution from power plants, and should include federal indirect source rules as part of future federal NOx plans. These federal rules can serve as a model for states wishing to address these NOx sources, or provide a backstop for those states unable or unwilling to regulate these sources.

II. Support State and Local Freight Controls

In addition to adopting the federal regulatory measures outlined above, EPA must also support state and local actions to address freight pollution in areas that violate the national ambient air quality standards, create toxic “hot spots,” and/or increase inequities in pollution burdens. The following are

¹² California Air Resources Board, Cargo Handling Equipment Regulation to Transition to Zero-Emissions (Description of Approach),

<https://ww2.arb.ca.gov/resources/documents/cargo-handling-equipment-regulation-transition-zero-emissions>

¹³ <https://ww2.arb.ca.gov/ou.r-work/programs/cargo-handling-equipment>

¹⁴ CARB, Cargo Handling Equipment: 2011 Regulatory Amendments, <https://ww2.arb.ca.gov/sites/default/files/2020-07/chefactsheet121813.pdf>

¹⁵ <https://ww2.arb.ca.gov/resources/documents/cargo-handling-equipment-regulation-transition-zero-emissions>

¹⁶ See 42 U.S.C. § 7410(a)(5)(C) (defining “indirect source”)

¹⁷ The South Coast Air Quality Management District recently adopted a warehouse indirect source rule that promises to cut pollution from the trucks traveling to and from warehouses, electrify warehouses, and create local clean energy jobs. Allyn Stern et al, “South Coast AQMD Adopts Warehouse Indirect Source Rule, First Reporting Months Away,” *National Law Review* (May 18, 2021)

¹⁸ 42 U.S.C. § 7410(a)(5)(B)

recommendations on steps EPA should take to bring necessary attention and resources to the environmental justice priorities around freight facilities.

A. Direct States to Quantify the Problem

First and foremost the EPA needs to be applying its authority to ensure that all states are submitting state implementations plans and meeting air quality standards. The Clean Air Act includes very specific deadlines for the adoption of plans and rules, for demonstrating progress in reducing emissions and achieving attainment,¹⁹ but EPA often must be sued by community groups to enforce these deadlines. EPA must commit to fulfilling its mandatory duties to make the air planning process meaningful. By the end of 2021, EPA should make a publicly available list of those states and air quality control regions with upcoming and outstanding SIP obligations. This list should include the timeline for when states are responsible for submitting plan requirements and when EPA must act on those submittals. For those states that are out of compliance, EPA should be imposing sanctions and adopting federal plans as required by the Clean Air Act to ensure compliance.²⁰ As the 2009 NEJAC recommendations highlighted, there is a basic need to identify facilities of concern and engage the communities around those facilities in formulating solutions. Unfortunately, the current approach to state implementation planning does not facilitate that sort of facility-based assessment because emissions inventories typically quantify the emissions from various categories of sources including heavy-duty trucks and locomotives without providing information on how those emissions are aggregated at freight hubs. EPA has authority to revise how inventories are prepared in order “to assure the [nonattainment plan] requirements . . . are met.”²¹ EPA should require States to report the emissions from freight facilities in order to allow communities to understand the pollution and health risks created by freight operations, and devise and advocate for control measures and solutions to address the problem.

B. Provide Guidance on Control Options Available to State and Local Authorities

To date, EPA has provided little to no guidance on current options for mobile source measures that could be adopted by state and local agencies responsible for addressing air pollution, even though the failure to consider these types of measures has been found to be a violation of the Clean Air Act.²² Too often, state and local air districts assume that because the sources of emissions at freight facilities are mobile sources subject to federal preemption protections, state or local agencies have no authority at all to regulate these sources.²³ The reality is that state and local agencies have a number of tools available to them to control pollution from freight sources, and EPA should issue guidance to assist states in their evaluation of

¹⁹ See, e.g., 42 U.S.C. §§ 7410, 75027505a, 7509, 7511a, 7513, and 7513a.

²⁰ See, e.g., 42 U.S.C. §§ 7410(c), (k), (m), and 7509.

²¹ 42 U.S.C. § 7502(c)(3)

²² See *Sierra Club v. EPA*, 294 F.3d 155, 162-63 (D.C. Cir. 2002) (vacating EPA approval of plan for D.C. area based on failure to consider measures such as retrofitting trucks and buses and controlling airport ground support equipment); see also Memorandum from Roger Strelow, Asst. Admin Air and Waste Mgmt., EPA to EPA Regional Administrator (Dec. 9, 1976) (explaining that fulfilling the Act’s reasonably available control measure requirement requires consideration of area and mobile sources controls as well controls on stationary sources); 80 Fed. Reg. 15340, 15371 (Mar. 23, 2015) (proposed PM2.5 implementation rule).

²³ See, e.g., 42 U.S.C. § 7543(a) and (e).

available options including: regulations on the use of existing engines and vehicles²⁴ indirect source review requirements on facilities that attract mobile sources,²⁵ and public fleet purchase requirements.²⁶ Finally, while states are generally precluded from adopting standards for new engines and vehicles that are more stringent than federal standards, California is not, and states with nonattainment plans are free to adopt standards that are identical to the California standards.²⁷ As part of EPA's guidance, EPA should encourage states where freight sources are important contributors to violations of the national standards to adopt mobile source measures that California, and EPA (through its preemption waiver approval), have deemed feasible.

C. Develop Incentive Funding Strategies to Target Freight Sources

EPA must develop a more targeted strategy for awarding federal funds to promote zero-emission technologies in freight operations. Funding should only support zero-emission projects and be targeted to applicants that meet strict criteria, including for example, ports with facility-specific emissions inventories that are publicly available and meet meaningful health risk and emission reduction goals, mandate community and environmental justice participation. Finally, funding programs must be coupled with regulatory requirements to provide clear market signals.

Enforce Civil Rights Obligations on Entities Receiving Federal Funds

EPA should also ensure that federal funding recipients are complying with civil rights obligations and are not approving or otherwise enabling freight projects that create disproportionate impacts on communities of color. It can do so by, for example, weighing-in on local decision-making processes to emphasize the importance of EJ assessments for freight facilities that evaluate impacts to air quality in the immediate community compared to air quality impacts in other parts of the city/municipality, along with more comprehensive evaluation of cumulative environmental burdens and disparities consistent with a "cumulative impacts" framework. Coordination with the U.S. Department of Transportation and other federal agencies with freight responsibilities to these ends is also necessary and called for by President Biden's government-wide commitment to achieve environmental justice.²⁸

III. Conclusion

Environmental justice communities are disproportionately impacted by the pollution and effects of climate change that comes from the freight sector. The effects of climate change nationally can already be seen in an increase in extreme weather events, rising sea level, higher temperatures, and prolonged heatwaves. The window within which society as a whole can take action to avoid the worst effects of climate change is rapidly closing. Preventing the consequences of climate change will require drastic changes in energy production, use, and consumption. To effectively implement the necessary considerations there needs to be collaboration between the EPA, other regulatory departments,

²⁴ see *id.*

²⁵ *id.* § 7410(a)(5)

²⁶ See *Engine Mfrs. Ass'n v. South Coast Air Quality Management Dist.*, 498 F.3d 1031, 1045-49 (2007)

²⁷ 42 U.S.C. §§ 7507 and 7543(e)(2)(B)

²⁸ https://legacy-assets.eenews.net/open_files/assets/2021/02/02/document_gw_03.pdf

environmental justice communities and frontline workers. The concerns and recommendations shared in this letter are not meant to be an exhaustive list but to illustrate the breadth to which the freight sector should be addressed. EJ communities are bearing the public health and environmental burdens from this ever expanding freight sector. MFN is calling upon the EPA to be a leader in prioritizing and implementing actionable policies and programs that center equity and justice while moving Zero Emission solutions now.

Thank you for your consideration. We look forward to hearing from you. If you have any questions or would like to schedule a follow up meeting please contact, Angelo Logan at alogan@oxy.edu and Molly Greenberg at greenbergm@oxy.edu.

Sincerely,

The Moving Forward Network Advisory Board and Staff

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Re: Comments on Draft Multi-State Medium- and Heavy-Duty Zero-Emission Vehicle Action Plan

Dear Mr. Flynn,

The Moving Forward Network's ("MFN")¹ Zero Emission Truck Working Group; Duwamish River Community Coalition, CleanAirNow, New Jersey Environmental Justice Alliance, Harambee House, South Ward Environmental Alliance, Little Village Environmental Justice Organization, Warehouse Workers for Justice, Lowcountry Alliance for Model Communities ("LAMC"), Natural Resources Defense Council, Earthjustice, and Union of Concerned Scientists submits these comments with support and sign-on from Center for Community Action and Environmental Justice, Climate Reality Project: Chicago Metro Chapter, Green Energy Institute, GreenLatinos, GreenLatinos Colorado, Oregon Environmental Council, ReVision Energy, Sierra Club, Southern Alliance for Clean Energy, Southwest Energy Efficiency Project, and Western Resource Advocates. MFN and the signatories provide the following set of comments in response to the draft action plan that the Northeast States for Coordinated Air Use Management ("NESCAUM") released on March 10, 2022.

First and foremost, while we appreciate NESCAUM's commitment to working to ensure equity as a priority of the Action Plan, we outline the following recommendations to reinforce the original intent in our participation and ensure the Action Plan appropriately: discusses the barriers and opportunities associated with electrifying medium- and heavy-duty vehicles ("MHDV"), including large trucks, vans, and buses; **"underscores the importance of an equitable transition to MHD ZEVs; and prioritizes deployment of these vehicles in frontline and overburdened communities disproportionately impacted by air pollution and climate change."**

Suggestions to Further Strengthen the Action Plan

I. Incorporate all Frontline Community Recommendations

In September 2021, MFN submitted recommendations to NESCAUM regarding the Draft Multi-State MHD zero-emission vehicle ("ZEV") Action Plan.² At NESCAUM's behest, MFN had a follow-up meeting with the association and subsequently provided follow-up recommendations.³ During the course of these communications, MFN specifically requested that its recommendations be incorporated in their

¹ The Moving Forward Network (MFN) is a national network of organizations that center grassroots, frontline knowledge, expertise, and engagement with the communities across the US that bear negative impacts of the global freight transportation system. In collaboration with allies and partners, MFN identifies local solutions that call for community, industry, labor, government, and political action that advances equity, environmental justice, and a zero-emissions focused just transition. MFN's vision is to see that negatively burdened communities become healthy, sustainable places by reducing and ultimately eliminating the negative impacts of that system. MFN is deeply committed to advancing environmental justice, equity, economic justice, and a just transition. Specifically, the Zero Emission Truck Working Group made up of several of our grassroots and environmental members working specifically on heavy duty truck policy and programs such as the Advance Clean Truck Rule and Omnibus Rule. The goal of the group is to ensure that equity and environmental justice are at the center of any regulation that is being considered at the municipal, state, and federal level. Because of this goal and MFN's commitment that there is strength in working collectively the work group provided EJ guidance and recommendations for the draft Action Plan.

² Moving Forward Network, *Multi-State Advanced Clean Truck Rule Action Plan Equity and Environmental Justice Recommendations* (Sept. 2021), https://www.nescaum.org/files/mhdzev-attachments/NESCAUM_%20Multi-State%20Advance%20Clean%20Truck%20Rule%20Equity%20and%20Environmental%20Justice%20Recommendations.pdf (attached herein as Attachment B).

³ *NESCAUM Follow Up – Next Steps*, Moving Forward Network (attached herein as Attachment ____).

entirety, and that NESCAUM not choose which to include and which to exclude. But NESCAUM still omitted several salient recommendations, such as recommendations pertaining to labor protections, mandating that reporting data be made publicly available, and explaining that policy making must consist of rules, mandates, and requirements that are enforceable and traceable with timelines, interim targets, and metrics to ensure that goals are met to improve health outcomes and assure community benefits, to name a few.⁴ NESCAUM failed to include significant proposals from MFN, a national network of organizations that advocate on behalf of the very communities NESCAUM encourages states and regulated entities to engage with and listen to throughout the Action Plan.

If NESCAUM truly wishes to engage with community groups and uphold the principles of environmental justice (“EJ”), it is crucial that the association incorporate all the recommendations from these frontline communities and their representatives. MFN once again requests that NESCAUM incorporate all of the recommendations in their entirety as referenced in Attachment A and Attachment B, the response to questions from the Network’s⁵ presentation to NESCAUM.

If NESCAUM is not willing to include the Network’s recommendations in their entirety, then, we would like to see a note at the beginning of the Action Plan that states:

“The Moving Forward Network drafted the MFN Recommendation Attachment. NESCAUM has chosen to incorporate some of these recommendations into the Action Plan. MFN intends for them to be seen in their entirety and wants to direct readers to the Attachment. We offer the recommendations in the Attachment as a supportive document but not something that replaces direct outreach and coordination with local community and environmental justice leaders and organizations for any state joining the MOU and adopting the suite of heavy-duty related vehicle policies including but not limited to the Advanced Clean Trucks [“ACT”], Heavy-Duty Omnibus [“HDO”], and Advanced Clean Fleets [“ACF”] rules.”

II. Prioritize Air Monitoring

The regulatory air monitoring system used across the U.S. to measure compliance with federal ambient air quality standards is not designed for monitoring at the community level. Due to their size, complexity, and cost, regulatory air monitors are often augmented with lower cost sensors to assess community-scale air quality. Because air quality can vary significantly depending on proximity to sources, topography, and other local environmental factors, an accurate assessment of community air quality requires several monitors placed throughout study areas. (Multi-State MHD ZEV Action Plan, Draft for Public Comment, (PG 42).

Community air monitoring must begin with a well-maintained **regulatory** air monitoring system informed by environmental justice and community stakeholders on the siting of monitors and public access to the collected data. While there are benefits to low-cost sensors and MFN members across the country are incorporating them into local data collection, the reason for doing so is lost in the current draft of the Action Plan.⁶

Residents in our communities have to deal with the cumulative impacts from numerous stationary sources of pollution as well as increasing impacts from a growing freight sector. The majority of communities have few to no regulatory air monitors and for the few communities that do have monitors, the monitors are not near the sources they are intended to monitor. Moreover, regulatory air monitors are poorly maintained and often fail to adequately capture pollution releases and exceedances as well as transportation emissions or fugitive emissions that threaten public health. It is important to note that air

⁴ See *MFN Recommendations as compared to NESCAUM’s MHD ZEV Action Plan*, Moving Forward Network (May 10, 2022) (attached herein as Attachment A).

⁵ “The Network” refers specifically to the Moving Forward Network members

⁶ <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6859650/>

monitoring recommendations should be coupled with cumulative impacts analysis and emissions reductions policies for EJ communities. The Action Plan should make it clear that the regulatory monitors have to be assessed on their locations, fixed if needed, and coordinated with EJ communities to make sure that they are placed near vulnerable receptors and sources to ensure data collection efficacy and accuracy. Also, air monitoring must be coupled with enforceable regulatory action that guarantees emissions reductions for EJ communities.⁷

For the Community Air Monitoring section of the Action Plan, states must: 1) prioritize environmental justice/community-led projects, 2) incentivize community programs and collaboration, 3) prioritize projects measuring pollution that have the greatest public health impact, and 4) ensure that funding and resources are available to support community and EJ representation throughout the process—from plan development, through data collection and assessment, to conclusion.

The Action Plan should better reflect the intention behind Community Air Monitoring. For years, EJ communities have been arming themselves with data to support what they already know about the disproportionate air pollution burdens in their communities. This can be resource intensive, including coordination with the community, the cost of the monitors themselves, the data collection, the analysis and the report back - all of which is aimed at supporting the need to reduce the impacts from air pollutants. Further, for the data collection to meet the needs/goals of the local groups, there needs to be a partnership or MOU agreement in place to hold all the stakeholders accountable.

Finally, for the Community Air monitoring sections we would like to see #6 of the Action Plan in Community Air monitoring (pg. 44) edited to reflect that the focus should be on the reduction of pollution at the source with a prioritization on environmental justice/overburdened communities. Specifically, we are asking for the following to be edited:

States should facilitate public engagement and feedback from environmental justice and overburdened communities, and target policy and program development to ensure reductions in air pollution occur first and foremost in communities that need it the most. The results from all air monitoring should be publicly accessible with resources translated into different languages.

This request would also be to delete footnote #52.

Possible emission reduction strategies include geofencing, vegetative buffers, traffic light management, and traffic calming measures. See K. Boriboonsomsin, et al., Geofencing as a Strategy to Lower Emissions in Disadvantaged Communities (Dec. 2020), https://ww2.arb.ca.gov/sites/default/files/2021-01/17RD009_0.pdf.

This recommendation should come from the discussion between the state and the local environmental justice organization(s). The challenge with the final sentence of #6 and the footnote is that there are local impacts that need to be considered. Also, it is important that the focus of the Action Plan not be about mitigation measures but the measurable reductions of pollution at the source.

III. Update MOU Targets to Reflect the Urgency of Transforming Transportation

MFN and signatories support that the draft plan encouraged states to move forward more quickly for public fleets than the 2050 timeline currently contemplated in the MOU – instead suggesting that 100 percent of sales for public fleets be zero-emission by 2040. While we agree that greater ambition is necessary, beneficial, and feasible, this recommendation should be broadened and strengthened. The draft plan should state that parties to the memorandum of understanding (“MOU”) “plan for all truck and bus

⁷ Air Monitors Alone Won’t Save Communities From Toxic Industrial Air Pollution. May 18, 2022. Pro Publica, <https://www.propublica.org/article/air-monitors-alone-wont-save-communities-from-toxic-industrial-air-pollution>

sales be zero-emission by 2035.”⁸ And, the expectation should be that a subset of states that are demonstrating headway in the electric vehicle space should commit to an earlier timeframe than what is currently in the MOU.

a. MHDVs are disproportionately harming environmental justice communities.

A 2035 100 percent zero-emission medium- and heavy-duty vehicle (“MHDV”) sales target is not only feasible, but necessary. Given that the states that have signed onto this MOU represent over 30 percent of the nation’s MHDV market—and are responsible for the resulting emissions—it is critical that a transition to ZEVs occurs as quickly as possible. The high pollution levels from diesel trucks and buses have severe health impacts. Oxides of nitrogen (“NO_x”) and particulate matter (“PM”) cause respiratory illnesses like asthma and bronchitis, exacerbate life-threatening health conditions like cancer, and increase mortality. The impacts of this pollution are not evenly felt. In the Northeast and the Mid-Atlantic region, which comprise a significant number of the MOU states, communities of color breathe on average 66 percent more fine PM pollution than white residents. The rates of PM pollution are 75 percent, 73 percent, and 61 percent higher for Latino, Asian American, and African American residents, respectively.⁹

Low-income communities and communities of color are also disproportionately impacted by the climate change and health effects from an ever aging and growing heavy duty truck sector. More than 13 million people (3.5 million of whom are children) live near major marine and inland ports or rail yards. These individuals are disproportionately low-income communities of color and susceptible to increased health risks from air pollution.¹⁰ These figures do not include the approximately 45 million individuals who live within 300 feet of a highway or close to large distribution centers where diesel emission sources congregate.¹¹

The increasing frequency and severity of natural disasters hit these communities hardest and receive lower levels of reinvestment after these events. Moreover, they are more likely to have inadequate infrastructure and insurance and are “more likely to live near industrial facilities and are therefore at a higher risk for chemical spills and toxic leaks resulting from toxic storms.”¹² In total, low-income communities and communities of color “are found to be particularly more vulnerable to heatwaves, extreme weather events, environmental degradation, and subsequent labor market dislocations.”¹³ The importance of effecting a transition as quickly as possible cannot be overstated.

Within the Action Plan recommendations, we must consider environmental justice impacts and priorities “from source to tailpipe to grave.”¹⁴ This means thinking through the unintended consequences of regulatory design. Transportation electrification must be accompanied by standards and regulations around renewable electricity generation, i.e., wind and solar, that will not further burden environmental justice communities.¹⁵ Decisions on siting new electricity infrastructure necessary to support renewable energy must be coordinated with environmental justice leaders, address cumulative impacts and support mandatory emissions reductions.

⁸ https://www.movingforwardnetwork.com/wp-content/uploads/2021/11/MFN-Zero-Emission-in-Freight-Letter-to-EPA-10_26_21.pdf

⁹ <https://www.ucsusa.org/resources/inequitable-exposure-air-pollution-vehicles>

¹⁰ Office of Transportation and Air Quality (OTAQ), U.S. Environmental Protection Agency (EPA), *Regulatory Impact Analysis: Control of Emissions of Air Pollution from Locomotive Engines and Marine Compression Ignition Engines Less than 30 Liters Per Cylinder*, EPA420, pp. 2-57 (March 2008). Available at: <http://www.regulations.gov/#!documentDetail;D=EPAHQ-OAR-2003-0190-0938>.

¹¹ See Office of Transportation and Air Quality (OTAQ), EPA, *Near Roadway Air Pollution and Health* (May 22, 2015). Available at: <http://www.epa.gov/otaq/nearroadway.htm>.

¹² <https://psci.princeton.edu/tips/2020/8/15/racial-disparities-and-climate-change>

¹³ <https://psci.princeton.edu/tips/2020/8/15/racial-disparities-and-climate-change>

¹⁴ To “grave” means that how and where waste from the ZE technology as well as the diesel vehicles that will no longer be in use must consider the waste stream in the planning and implementation of ZE policies and programs.

¹⁵ Renewable energy may have many definitions based on the source of energy. MFN considers solar and wind to be renewable energy. However, there are important EJ and equity implications that come from these “cleaner” energy sources (i.e. siting, manufacturing, shipping, etc). All of these must be considered with EJ leadership before endorsing specific renewable energy recommendations.

b. The current timeline conflicts with state objectives.

Many MHDVs have a lifespan of over 750,000 miles, or 15 years. This means that fossil-fuel powered MHDVs sold after 2035 could operate well beyond 2050 and potentially even into the 2060s. Meanwhile, several MOU states have climate commitments that seek to decarbonize their transportation sector by midcentury. For states to reach these commitments, they must transition to 100 percent zero-emission MHDV sales by 2035 – and the Action Plan should recommend that. The Action Plan should also include the importance of adopting additional policies as soon as possible to accelerate the retirement of all combustion trucks on or before 2045 where feasible, and to quickly build out the infrastructure and operational environment to facilitate a just transition without impacting drivers in environmental justice communities.¹⁶

c. All zero-emission MHDVs will be cost competitive before 2035.

The technology behind ZEVs is rapidly maturing. By 2027, many electric work trucks and buses will become less expensive on an upfront and total-cost-of-ownership basis than their combustion engine counterparts.¹⁷

Even conservative estimates find that based purely on economics, all MHD ZEVs will be less expensive to own than fossil fuel vehicles by 2035.¹⁸ The NREL study also found that numerous vehicle classes and uses will reach cost parity before 2030.¹⁹

d. Fleet and manufacturer commitments suggest all ZEV sales by 2040 is business as usual. And business as usual is already too dangerous and deadly for EJ communities.

Given the significant cost savings opportunity, fleets are lining up to buy ZEVs. Some key fleet commitments include:

- Amazon: net zero carbon by 2040²⁰
- FedEx: all parcel pickup and delivery vehicle purchases zero emission by 2030²¹
- Ikea: all deliveries zero-emission by 2025²²
- PepsiCo: net zero emissions by 2040²³
- Siemens: carbon neutral fleet in the US by 2030²⁴
- Titan Freight: zero-emission fleet by 2030²⁵
- Walmart: full electrification by 2040²⁶

A recent survey of major fleets operating in the US found overwhelming demand for ZEVs and large purchases expected through 2025—availability permitting.²⁷ This is just a sampling of the major private

¹⁶ In the workplace, the just transition framework centers the voices of workers whose jobs will radically transform by the promise of clean energy industries. Bearing in mind that the jobs of truckers and some warehouse workers might look quite different in an electrified world, looking to workers to provide leadership on what their needs will look like around training, affordability, and working conditions is a way to ensure a fair progression to EVs. Madison Lisle and Yana Kalmyka, Warehouse Workers for Justice, For Good Jobs & Clean Air, How a Just Transition to Zero Emission Vehicles Can Transform Warehousing.

https://www.ww4j.org/uploads/7/0/0/6/70064813/wwj_report_good_jobs_clean_air.pdf.

¹⁷ https://blogs.edf.org/climate411/files/2022/02/EDF-MDHD-Electrification-v1.6_20220209.pdf

¹⁸ <https://www.nrel.gov/docs/fy22osti/82081.pdf>

¹⁹ <https://www.nrel.gov/docs/fy22osti/82081.pdf>

²⁰ <https://www.aboutamazon.com/news/sustainability/we-are-all-in-on-the-climate-pledge-net-zero-carbon-by-2040>

²¹ <https://investors.fedex.com/news-and-events/investor-news/investor-news-details/2021/FedEx-Commits-to-Carbon-Neutral-Operations-by-2040/default.aspx>

²² <https://about.ikea.com/en/sustainability/becoming-climate-positive/zero-emissions-for-home-deliveries>

²³ <https://www.greenbiz.com/article/pepsicos-next-act-moving-beyond-electric-pilot>

²⁴ <https://new.siemens.com/us/en/company/press/siemens-stories/usa/driving-forward-siemens-usa-targets-2030-carbon-neutral-fleet.html>

²⁵ <https://titanfs.com/environmental-vision-part-2/>

²⁶ <https://corporate.walmart.com/newsroom/2020/09/21/walmarts-regenerative-approach-going-beyond-sustainability>

²⁷ <https://www.ceres.org/resources/reports/ceva-survey>

company commitments, but a host of municipal zero-emission fleet commitments also exist. However, without ambitious policy drivers to ensure sufficient ZEV supply emerges and infrastructure planning occurs, MHD ZEVs will exist only on press releases rather than roads.

Targets that accelerate the market are necessary to help accelerate the on-going transition to ZEVs. Since the MOU was signed in 2020, the market has advanced rapidly. The MOU's sales targets—30 percent ZEVs by 2030 and 100 percent ZEVs by 2050—now lag behind industry ambitions. For example, a voluntary commitment by major European truck makers including Volvo, Scania, MAN, DAF, Daimler, and Ford Trucks set a 2040 date for 100 percent ZEV sales, stating “carbon-neutrality by 2050 at the latest implies that by 2040 all new commercial vehicles sold must be fossil free. And this is a pledge that the commercial vehicle industry is making now for the first time.”²⁸ Even the Truck and Engine Manufacturers Association, despite opposing bold action, stated during California's ACT rulemaking that manufacturers could deliver 100 percent ZEV sales for certain vehicle categories by the following dates:

- 100% ZEV by 2023 for school buses and municipal fleet vans
- 100% ZEV by 2024 for public utility vehicles and yard tractors
- 100% ZEV by 2025 for step vans, airport service vehicles, and shuttle buses
- 100% ZEV by 2026 for refuse trucks²⁹

There has also been a 625 percent increase in the number of zero-emission truck models available since 2019³⁰ – proving that market availability is no longer a valid rationale for delaying this transition.

e. All new school buses should be ZEV by 2027

The draft plan includes the call for 100 percent zero-emission school bus purchases for publicly owned and contracted fleets by no later than 2040. This timeline is out of touch with the MOU state objectives and technology feasibility. For example, New York just enacted legislation that will require all new school bus purchases to be zero emission no later than 2027.

We emphasize the particular importance of fully electrifying fleets of school buses. The average useful life of a school bus is 14 years, meaning that new fossil fuel buses purchased in 2026 will still emit climate-damaging pollutants and expose children to harmful fumes in 2040. We strongly support the draft plan's recognition that school districts in communities disproportionately affected by air pollution should be prioritized for assistance with this transition. We urge the Action Plan be amended to recommend that 100 percent of priority public fleets (i.e., those serving or operating in communities disproportionately affected by air pollution, such as communities of color, limited English proficient neighborhoods, and low-income communities) and school buses (further discussed below) be zero-emissions by 2030, and 100 percent of all other public fleet operations be zero-emitting by 2035.

Having publicly owned and contracted fleets commit to 100 percent zero-emission school bus purchases by 2027 is a necessary and achievable target that should be included in the final plan. Electric school buses are not an emerging technology--they are here and in service today. There are over 1,800 electric school buses committed to or in service throughout the United States, and they are currently operating in every type of community. Expert assessments consistently rank electric school buses in the most advanced technology readiness stage and there are additional potential grid benefits they can perform.³¹ The battery range on *today's* vehicles can reach up to 200 miles, a distance sufficient to serve the vast majority of the country's school bus routes, and battery technology continues to improve with each

²⁸ <https://www.acea.auto/files/acea-pik-joint-statement-the-transition-to-zero-emission-road-freight-trans.pdf>

²⁹ <https://www.arb.ca.gov/lists/com-attach/142-act2019-WjAAY1A1AAwEbwdm.pdf>

³⁰ https://calstart.org/wp-content/uploads/2022/02/ZIO-ZETs-Report_Updated-Final-II.pdf at 8

³¹ Electric School Buses and the Grid: Unlocking the power of school transportation to build resilience and a clean energy future. <https://www.njspotlightnews.org/wp-content/uploads/sites/123/2022/05/ELECTRIC-SCHOOL-BUSES-AND-THE-GRID.pdf>

successive bus model. Over the next five years, EPA’s Clean School Bus Program will invest at least \$2.5 billion to replace diesel school buses with zero-emission school buses.³²

IV. Require Individualized State Action Plans

The draft plan contains an excellent framework, but to be actionable, that framework must be applied to each state’s unique characteristics. All signatory states should commit to developing a state-specific roadmap informed by robust stakeholder engagement. Importantly, this stakeholder feedback solicited to help draft the roadmap must enable, incorporate, and prioritize input from frontline communities. The individual Action Plan drafting should ensure that environmental justice communities have decision making power. Outreach should be robust and ensure that resources exist in different languages, and resources should be put in place that support the participation of frontline and EJ participation through the process. The individual Action Plans should also include measures that have interim goals, speak to the implementation process and include an assessment component.

V. Prioritize Foundational Actions

The draft plan enumerates numerous “strategies and recommendations” without identifying which are vital near-term actions. Given their centrality to zeroing out MHD emissions and longer implementation horizons, two recommendations should be elevated to priority actions: adopting emission standards and planning charging infrastructure deployment.

When adopting emission standards—manufacturer or fleet requirements—states must provide a two-year lead time from when the rule is adopted to when it can be enforced. Since tens of thousands of new MHDVs are registered each year in the MOU states, delaying adoption means these new vehicles, many of which will operate for decades, will continue to be high polluting combustion engine vehicles. For example, Colorado recently decided to delay adopting the ACT and HDO rules until 2023, missing a possible start date in 2026 and pushing it to 2027. As a result, roughly 94,000 to 163,000 new fossil fuel MHDVs could be sold in Colorado in 2026. These vehicles could remain operational for several decades spewing elevated levels of NO_x and PM due to this misguided decision.

Planning for and deploying charging infrastructure currently requires coordination across several government bodies and various stakeholders, often working through the rigid confines of utility proceedings. The earlier coordination can begin, the greater the likelihood that deployment challenges will be addressed in time to avoid slowing ZEV adoption, and instead enabling rapid adoption.

While not sufficient, actions such as the ACT, HDO, Advanced Clean Fleets, Indirect Source Rule, Innovative Clean Transit, rules will be critical parts of meeting MOU targets – as such, they should be non-negotiable. Put another way, the final plan should direct states to pursue these actions immediately and then build upon them through other strategies and recommendations.

VI. Zero Must Mean Zero

a. Plug-in hybrids are not zero-emission vehicles.

In the draft plan, the definition of zero-emission vehicles includes plug-in hybrid vehicles. The definition of zero-emission vehicles should only include full battery electric and fuel cell electric vehicles. The fact that many plug-in hybrids rely on fossil fuels—indeed, some models only have 10-30 miles of electric

³² <https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=P1014098.pdf>

range³³—means that they do not represent the type of innovation or progress needed to improve air quality or mitigate climate change. As such, these vehicles should not be described as zero-emission in the Action Plan.

b. Transitioning to ZEVs requires complementary policies.

In zeroing out tailpipe emissions, a holistic strategy is necessary to prevent increasing burdens on EJ communities. For example, vehicle electrification efforts must be accompanied by renewable energy policies.³⁴ Further, the Action Plan should clearly dismiss unjust and inequitable solutions such as carbon trading, natural gas, biomass, etc., that are designed in a way that perpetuates inequities or energy that comes from non-renewable and heavy-polluting sources that will harm communities, perpetuate reliance on combustion fuels, and/or result in stranded assets. This includes addressing issues from source, to tailpipe, to grave.³⁵

c. Hydrogen fuel concerns must be addressed.

The draft Action Plan’s recommendations regarding hydrogen currently lack sufficient nuance to be included. MFN and certain other signatories have yet to develop a comprehensive stance on hydrogen; however, regardless of the hydrogen fuel “color,” it is clear that any discussion must include specific parameters. To begin, this would mean coordination with EJ communities, and accountable and transparent measures to prevent unintended consequences and harm from hydrogen as an on-road transportation fuel. Currently, there is no guarantee in the draft Action Plan how hydrogen fuel is sourced:

- Pink hydrogen: nuclear powered;
- Grey hydrogen: from natural gas (or sometimes methane) through a process called “steam reforming”; and
- Blue hydrogen: same as above, but the carbon generated from steam reforming is captured and stored underground through industrial carbon capture and storage.³⁶

The draft Action Plan omits these details and instead makes blanket statements that could be viewed as unconditioned support. Without this and additional nuance, we urge adherence to the precautionary principle³⁷ and the removal of hydrogen as a recommendation.

VII. Incorporate the Latest Research and Developments.

While the draft plan is carefully annotated with research and reports backing up its recommendations, new reports can and should be incorporated to ensure that the most up-to-date information is utilized. For example, while the draft plan cites a total cost of ownership report by Roush, a vital finding is

³³ <https://nap.nationalacademies.org/read/13288/chapter/6#69>

³⁴ Renewable energy may have many definitions based on the source of energy. MFN considers solar and wind to be renewable energy. However, there are important EJ and equity implications that come from these “cleaner” energy sources (i.e siting, manufacturing, shipping, etc.). All of these must be considered with EJ leadership before endorsing specific renewable energy recommendations.

³⁵ “To grave” means that how and where waste from the ZE technology as well as the diesel vehicles that will no longer be in use must consider the waste stream in the planning and implementation of ZE policies and programs. MFN October 26th Letter to the EPA on Zero Emission in Freight Campaign, https://www.movingforwardnetwork.com/wp-content/uploads/2021/11/MFN-Zero-Emission-in-Freight-Letter-to-EPA-10_26_21.pdf

³⁶ https://earthjustice.org/sites/default/files/files/hydrogen_earthjustice_2021.pdf

³⁷ “The precautionary approach (basically, “better safe than sorry”) turns traditional environmental policy on its head. Instead of asking, “How much harm is allowable?” The precautionary approach asks us to consider, “How little harm is possible?” The precautionary approach urges a full evaluation of available alternatives for the purpose of preventing or minimizing harm.” *Rachel’s Democracy & Health News (formerly Rachel’s Environment & Health News)*, #770 -- Environmental Justice and Precaution, May 29, 2003. http://web.archive.org/web/20071219020722/http://www.rachel.org:80/bulletin/index.cfm?issue_ID=2359

overlooked: by 2027, multiple classes of trucks and buses will be favorable on not just a total cost of ownership basis but also in terms of upfront cost, in part due to rapidly falling battery prices.³⁸

The North American Council for Freight Efficiency (“NACFE”) is also a good resource that highlights the potential and challenges of transitioning all market segments to zero-emission models. NACFE has done groundbreaking work to demonstrate the real-world applications of zero-emission trucks, pairing 13 fleets with original equipment manufacturers (“OEMs”) across different vehicle classes. While it is true that the demonstration highlighted challenges, such as availability of charging infrastructure, longer charging times, and the need to develop standards for charging, maintenance, and training, it is notable that NACFE found “for four market segments – vans and step vans, medium-duty box trucks, terminal tractors, and heavy-duty regional haul tractors – the technology is mature enough for fleets to be making investments in production CBEVs [commercial battery electric vehicles]” and that “continuous improvement is expected to be rapid as these technologies gain market share.”³⁹ In addition, a NACFE report from April 2022 states that companies like FedEx, UPS, Amazon, and Walmart are “putting in major orders for electric vans and steps vans that span the next several years,” that “battery technology meets the operational requirements for smaller commercial vehicles, especially in the Class 3 to 6 range,” and that “the TCO for this market segment is approaching parity with diesel- and gasoline-powered vehicles.”⁴⁰

MFN’s May 2021 report *Making the Case for Zero-Emission Solutions in Freight: Community Voices for Equity and Environmental Justice*, provides an overview of the health impacts associated with goods movement, and the disproportionate burdens felt by residents that live on the frontlines of polluting ports, warehouses, railyards, and highways, who are largely people of color. The report features frontline voices who are calling for an end to diesel truck pollution, and a full transition to zero-emissions.⁴¹

The American Lung Association recently published a report that crystallizes the importance of transitioning to zero-emission vehicles. Aside from factsheets that provide tailored findings for all US states, the report underscores the importance of transitioning to zero-emission trucks and buses – and doing so by 2040. While the draft model action plan does an excellent job of detailing the health imperative of cleaning up the transportation sector, the specific statistics cited in this report may be more persuasive. Specifically, the report found that “a national shift to 100 percent sales of zero-emission...medium- and heavy-duty trucks (by 2040), coupled with renewable electricity would generate over \$1.2 trillion in public health benefits between 2020 and 2050....[T]hese benefits would take the form of avoiding up to 110,000 premature deaths, along with 3 million asthma attacks and over 13 million workdays lost due to cleaner air.”⁴²

ERM (formerly MJ Bradley & Associates) conducted numerous state-specific analyses modeling the projected costs and benefits from state adoption of the ACT and HDO rules. These studies and the methodology⁴³ are all publicly available, and demonstrate overwhelming public health, climate mitigation, job creation, and monetized benefits—far in excess of any costs associated with the rules. All of these reports will serve to further strengthen the final plan:

- *Colorado Medium- and Heavy-Duty (M/HD) Vehicle Study*⁴⁴
- *New Jersey Clean Trucks Program*⁴⁵

³⁸ https://blogs.edf.org/climate411/files/2022/02/EDF-MDHD-Electrification-v1.6_20220209.pdf

³⁹ <https://nacfe.org/run-on-less-electric-report/>

⁴⁰ <https://nacfe.org/wp-content/uploads/edd/2022/04/Vans-and-Step-Vans-Report-FINAL.pdf>

⁴¹ Moving Forward Network, *Making the Case for Zero-Emission Solutions in Freight: Community Voices for Equity and Environmental Justice*, available at https://www.movingforwardnetwork.com/wp-content/uploads/2021/10/MFN_Making-the-Case_Report_May2021.pdf.

⁴² <https://www.lung.org/getmedia/13248145-06f0-4e35-b79b-6dfacfd29a71/zeroing-in-on-healthy-air-report-2022.pdf>

⁴³ <https://www.mjbradley.com/sites/default/files/Clean%20Trucks%20Technical%20Report%20FINAL%2009jun21.pdf>

⁴⁴ <https://drive.google.com/file/d/1N8tQp0v1RPK86Kle08ZQ83rKsY4Ja5Tx/view>

⁴⁵ https://www.mjbradley.com/sites/default/files/NJ_Clean_Trucks_Report_Final_05Oct21.pdf

- *New York Clean Trucks Program*⁴⁶
- *North Carolina Transportation Electrification Roadmap*⁴⁷
- *Southern New England Clean Trucks Program*⁴⁸
- *Oregon Clean Trucks Program*⁴⁹
- *Washington Clean Trucks Program*⁵⁰

Newark Community Impacts of Mobile Source Emissions, a community-based participatory research study developed with contributions from the New Jersey Environmental Justice Alliance, members of the Coalition for Healthy Ports including Greenfaith, Ironbound Community Corporation, New Jersey Clean Water Action, and the Natural Resources Defense Council, found that the worst pollution hot spots occurred where freight facilities are concentrated, and along truck routes. The study found that electrifying vehicles can lead to significant local benefits, but urged that electrification must occur simultaneously with reductions in power plant pollution, as these facilities are often located in the same areas that are disproportionately impacted by freight.⁵¹

For Good Jobs & Clean Air, How a Just Transition to Zero Emission Vehicles Can Transform Warehousing, published by Warehouse Workers for Justice, describes the heavy toll that a build out of warehouse distribution centers is having on Will County, Illinois. The report describes how pollution burdens fall disproportionately on Black and Latinx residents, and warehouse workers, who are on the frontlines of truck pollution. The report also provides community air monitoring results, finding unhealthy spikes in PM_{2.5} pollution.⁵²

VIII. *Take a Holistic Approach*

Because the issues around MHD trucks are cumulative and do not impact communities in a silo, the recommendations must also reflect the importance of a holistic approach. The recommendations that MFN submitted, as well as the follow-up response to comments, demonstrate that critical importance. For example, recommendations for utilities and utility regulators are largely focused in one section, but, in reality, many of the recommendations throughout the document involve utility action – including financing, use of monitoring and analytical tools, and even successful implementation of the Advanced Clean Trucks and Fleet rules. Spreading roles across entities, including utilities, and sub-state and federal governments, would better demonstrate the collaborative nature needed to ensure an effective transition. The final plan should consider weaving roles throughout the recommendations more explicitly.

IX. *Develop Comprehensive Recommendations to Address Labor Issues*

The draft Action Plan makes references in and around the connections between the ACT and labor. MFN has made specific recommendations as well as enhanced recommendations on labor. To ensure that the implementation has the most benefit for the workforce, the Action Plan needs to reflect the many layers at which labor needs to be addressed. This is critical to the success of the policy. The draft plan references that short-haul drayage trucks “sit idle for periods while the container units are loaded and unloaded” as an ideal time for charging electric vehicles.⁵³ However, this “idle” time is typically an injustice to the driver who must sit essentially at their job site unpaid. Drivers must be compensated for the time. Drivers

⁴⁶ https://www.mjbradley.com/sites/default/files/NY_Clean_Trucks_Report.pdf

⁴⁷ <https://www.erm.com/globalassets/documents/insights/2022/nc-transportation-electrification-roadmap-april2022.pdf>

⁴⁸ <https://www.ucsusa.org/sites/default/files/2021-11/southern-ne-clean-trucks-report.pdf>

⁴⁹ <https://www.ucsusa.org/sites/default/files/2021-09/or-clean-trucks-report.pdf>

⁵⁰ https://www.mjbradley.com/sites/default/files/WA_Clean_Trucks_Report.pdf

⁵¹ M.J. Bradley & Associates, Newark community Impacts of Mobile Source Emissions, A Community-Based Participatory Research Analysis (Nov. 2020), at pp. 12-13, https://www.njea.org/wp-content/uploads/2021/04/NewarkCommunityImpacts_MJBA.pdf.

⁵² Madison Lisle and Yana Kalmyka, Warehouse Workers for Justice, *For Good Jobs & Clean Air, How a Just Transition to Zero Emission Vehicles Can Transform Warehousing*, at p. 13, https://www.ww4j.org/uploads/7/0/0/6/70064813/wwj_report_good_jobs_clean_air.pdf.

⁵³ Action Plan at 19.

should be engaged as stakeholders to make the best recommendation on the ideal time and structure to support charging their vehicles.

The Action Plan notes that, “small trucking companies operating with six or fewer trucks make up 90 percent of carriers in the United States.”⁵⁴ The Plan goes further to highlight the many challenges and inequities that these drivers face, especially as we move to reduce emission from trucks and/or move forward towards zero emission trucks. That being said, the recommendation in the Action Plan needs to be strengthened to better account for the labor inequities as well as the many ways policy mandates leave frontline workers with the least amount of power and resources to “clean” up the industry if the policy fails to achieve its objectives, and communities are left operating the same dirty, even older trucks. MFN provided NESCAUM with extensive recommendations on ways in which the misclassification of drivers and the inequities put on the workforce can be addressed, which are attached. NESCAUM should include these additional recommendations as a way to maximize the success of the Action Plan. Outreach and Education Programs will not go far enough. There needs to be more of a comprehensive set of recommendations, which MFN has provided in the Attachment A and B. In addition, MFN and signatories want to lift up the process and the results from Warehouse Workers for Justice recent report, *For Good Jobs & Clean Air, How a Just Transition to Zero Emission Vehicles Can Transform Warehousing*, as a tool and resource that the Action Plan should include.

X. Strong Policies can Facilitate Supply Chain Development

In the draft plan, one of the challenges to wider adoption of zero-emission trucks and buses that is cited is low production volumes, which “are also limiting more widespread deployment of electric trucks and buses and making it more difficult to establish a successful performance record for new models” and that “rapid growth of the electric truck and bus market will require the development of a robust supply chain and skilled workforce.” There is no question that a robust supply chain and skilled workforce are needed, and there is already movement to that end. A recent EDF report found that the EV supply chain “illustrates a robust and rapidly growing industry....[A]s of September 2021, 375 companies were identified across the MHD ZEV supply chain, with about 1000 locations across the country...[which] collectively employ more than 333,000 people and have announced over \$53.7 billion in new EV-related investments.”⁵⁵ This, along with announcements from companies like Rivian that have made it clear they are able to meet their production targets,⁵⁶ provide a reason for optimism. While supply chain constraints – which are also applicable to internal combustion engine vehicles – may occur in the near-term, they are not expected to linger, and production volume increases needed to create economies of scale and a robust market will be facilitated by ambitious, forward-thinking state policies. Of course, any policies that are put into place will need to consider labor standards at every step of the supply chain. As Warehouse Workers for Justice appropriately states, “a failure to ‘improve’ working conditions for workers across the supply chain, from warehouse workers to EV manufacturers to mechanics...[means] the existing racialized disparity in clean air and good jobs access will worsen.”⁵⁷ As some of the biggest companies come out with commitments to transition to zero-emission vehicles, states should ensure that a shifting supply chain does not leave behind the workers that would most benefit from this shift.

Conclusion

There is no disagreement about the impacts from medium and heavy-duty trucks. MFN sees this Action Plan as an important document to signal to regulators on the measures necessary to not only ensure equity

⁵⁴ Action Plan at 20.

⁵⁵ https://www.edf.org/sites/default/files/documents/National%20MHD-ZEV-Supply-Chain-Analysis%2010.27.21_0.pdf

⁵⁶ <https://techcrunch.com/2022/04/05/rivian-ev-production-pickup-q1/>

⁵⁷ https://www.ww4j.org/uploads/7/0/0/6/70064813/wwj_report_good_jobs_clean_air.pdf at 25.

in the critical policies to regulate medium and heavy-duty trucks, but also ensure that they are successful. We have seen over the years that policies and programs meant to regulate port trucking have fallen short or failed because they have not adequately accounted for the holistic solutions. For the Action Plan to be successful there need to be recommendations that:

- 1) are clear about the policies that states need to pass;
- 2) ensure outreach strategies and proposals are clear, with EJ communities and frontline workers at the decision-making table throughout the implementation of the ACT and additional policies;
- 3) labor must be included in a comprehensive way to avoid shifting burdens to workers and assure the success of the policy, and
- 4) require renewable energy sources and do not allow for false solutions.

The above recommendations, as well as the included attachments, are aimed at reaching that goal and, on behalf of MFN and the signatories, we urge NESCAUM to incorporate them in their entirety.

Sincerely,

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Attachment A

May 10, 2022

Section I of the following document presents a summary of the degree to which the March 10, 2022 Draft Multi-State Medium- and Heavy-Duty Zero-Emission Vehicle Action Plan ("MHD ZEV Action Plan" or "Action Plan")¹ incorporated the September 2021 recommendations of the Moving Forward Network ("MFN").² Section II then presents a more detailed, point-by-point analysis of whether or not the Action Plan incorporates each MFN recommendation. In that Section, the language from the MFN recommendations is presented verbatim, and under each of MFN's asks, we specify whether the Action Plan addresses the ask, does so only partly, or does not address it at all, with some elaboration.

I. Overview of Action Plan's Incorporation of MFN Comments

i. Rulemaking & programmatic development process

As requested by MFN, the Action Plan emphasizes that States should include and actively engage with community members. It also encourages transparency and self-determination. The Plan does not, however:

- state that community and grassroots members should outnumber industry members in stakeholder groups; nor does it
- include mention of creating programs/funds to support community leaders to participate.

ii. Rulemaking and Program Outcomes

The Action Plan does state that compliance reporting and accountability should be the company's responsibility, not that of the individual drivers, as requested by MFN. The Plan also tries to address and encourage the participation of community members as equal partners in the decision-making process and promotes programs to monitor hot spots using community input. Though the Action Plan encourages states to adopt the ACT and ACF rules, outside of whatever those rules may require, the action plan does not additionally:

- Mandate that any state policy must require reporting data be made available to the public (but does encourage data sharing with communities in various sections throughout);
- Mandate that any state policy must require industry to meet regulatory measures as part of business costs (but does recommend adoption of rules with mandatory requirements on industry like the ACT and ACF rules); or

¹ Northeast States for Coordinated Air Use Management, Multi-State Advanced Clean Truck Rule Action Plan Draft for Public Comment (March 10, 2022), <https://www.nescaum.org/documents/mhd-zev-action-plan-public-draft-03-10-2022.pdf>.

² Moving Forward Network, Multi-State Advanced Clean Truck Rule Action Plan Equity and Environmental Justice Recommendations (Sept. 2021), https://www.nescaum.org/files/mhdzev-attachments/NESCAUM_%20Multi-State%20Advance%20Clean%20Truck%20Rule%20Equity%20and%20Environmental%20Justice%20Recommendations.pdf.

- Mandate that any state policy must have enforceable or traceable timelines or include enforceable or meaningful penalties for parties that don't meet requirements.

iii. Additional Policies, Initiative and Programs Needed to Address Equity and Environmental Justice

The Action Plan discusses focusing on frontline workers conducting business in EJ communities, making sure those most in need are receiving incentive money, and developing workforce programs to assist EJ communities in pursuing quality careers in transport electrification infrastructure building and operations. It also touches on the concern of displacing workers and proposes educational and skill-building programs such as apprenticeships to prevent this. As for clean energy concerns, a cap-and-trade market approach is not recommended, but the "cap-and-invest" programs that some states currently have in place were mentioned in passing as a possible source of funding for climate and EV incentive programs. The Plan also repeatedly refers to hydrogen fuel and fueling stations even though NESCAUM admits that hydrogen fuel is not "green" since it uses natural gas. The Action Plan also encourages community engagement in monitoring, tracking, and reporting of air quality, as well as focusing on OBCs first for electrification and climate mitigation. The Action Plan does not:

- address a number of the equitable distribution concerns such as:
 - disqualifying companies from funding for employment tax violations;
 - excluding well-funding corporations and individuals from funding;
 - proving good standing with the National Labor Relations Board;
 - making funds contingent on improvement of workplace quality and union non-interference (though "certifying compliance" with labor laws is mentioned);
 - recommending that incentive programs for private businesses be short term;
 - requiring fleet purchasers maintain full control and responsibility for vehicles; purchased with incentive money; or
 - ensuring trucks purchased using state incentives are not used for predatory leasing schemes or by misclassified drivers.

At the end of this document, a few additional points made in the Action Plan are listed that may be of interest. One such point is that scrappage incentive programs could slow electrification and unfairly exclude certain fleets without older vehicles to spare. Further incentives such as property tax credits are also mentioned.

II. Detailed Analysis of Action Plans' Incorporation of MFN Comments

Rulemaking and programmatic development process:

I. **Adopt Principles of Environmental Justice**

- Establish meaningful community engagement practices that focus on frontline community voices and accommodates and facilitates the ability for community members and frontline workers to fully participate in the process
 - Does MHD ZEV Action Plan incorporate this? Yes** – at different points in the document NESCAUM emphasizes that States and other actors should be sure to

incorporate frontline workers, OBCs and other frontline members in their implementation of the Action Plan

- b. Develop public engagement practices that consider the limitations that Covid-19 presents to environmental justice communities. More time and full accommodations must be made to allow for all stakeholders to participate in the process.
 - i. **Does MHD ZEV Action Plan incorporate this? No** – COVID is not mentioned in the document but there is mention of making sure meetings/engagement occur within the communities affected/in question. Also references making sure meetings provide translation services and are held “at times and locations that are convenient, familiar, and accessible to community members” (pg. 7)
- c. Grassroots and frontline community-led organizations must be supported and put in positions to lead in stakeholder and public engagement efforts. Community leaders must be represented at a larger percentage than industry, corporations, and businesses in all stakeholder groups.
 - i. **Does MHD ZEV Action Plan mention this? No** – there is no specific mention of community leaders outnumbering industry, corporations and/or businesses in any stakeholder gatherings.
- d. There must be clear, transparent, and truly democratic processes by which decisions are made.
 - i. **Does MHD ZEV Action Plan mention this? Sort of** – this is insinuated throughout the document via the emphasis on community incorporation in decision making, air quality monitoring, and initiative and incentive programs for electrification.
- e. Include programs and funding to allow for community leaders to fully participate in the process.
 - i. **Does MHD ZEV Action Plan mention this? Sort of** – mentions that States should partner with OBC leaders and members to address barriers to community access to “training programs, jobs, and small business ownership opportunities.” (pg. 40) Funding for community leader engagement is not mentioned specifically, but States are generally urged to pursue federal funding for electrification efforts and to fund community-led air monitoring programs. (pg. 41)
- f. Support self-determination by adopting local solutions
 - **Does MHD ZEV Action Plan mention this? Sort of** – Local solutions are referred to in different places throughout the document. Action Plan mentions helping communities access air monitoring tools so they can collect localized data “to develop a more granular picture of air quality for more effective policy planning and evaluation.” (pg. 43) Also mentions that States should “support utility engagement with frontline [OBCs] in their service territories in planning, developing and implementing utility MHD ZEV programs.” (pg. 33)

II. Establish Transparency, Inclusivity, and Accessibility

- a. Authentic and equitable collaborative partnerships only work with honesty, accountability, and mutual respect towards environmental justice and equity.

Transparency, accountability, and inclusivity are expected at all levels throughout the policy making process. To this end all policy making must:

- i. Ensure frontline communities and EJ groups have full access to all information, research, and data.
- ii. Allow for public access to key staff and decision makers. Schedule regular meetings at times and locations that are available to community members.
- b. **Does MHD ZEV Action Plan address the two above? Sort of**—emphasizes that states should “Ensure community members have access to relevant information, research, data, and key agency staff and decision-makers” (pg.7)

Rulemaking and Program Outcomes

I. **Adopt Regulatory Frameworks with Enforcement Mandates that Advance Equity**

- a. The relevant industries should be required to meet regulatory measures as part of their business cost. Voluntary zero emissions vehicle programs and policies are non-starters.
 - i. **Does MHD ZEV Action Plan mention this? No** – there is no express prohibition on states using voluntary measures, but if the State adopts the mandatory provisions of the ACT Rule and/or the ACF Rule, these concerns may be addressed.
- b. Policy making must consist of rules, mandates, and requirements that are enforceable and tractable with timelines, interim targets, and metrics to ensure that goals are met to improve health outcomes and assure community benefits.
 - i. **Does MHD ZEV Action Plan mention this? No** – nothing is required, mandated or enforceable within this Action Plan per se. However, States are encouraged to adopt the ACT and ACF rules, which are in themselves mandatory and include reporting and enforcement provisions.
- c. Policy making must include regulatory frameworks with enforceable penalties if goals are not met.
 - i. **Does MHD ZEV Action Plan mention this? No** – but if the State adopts ACT and/or ACF rules, this concern may be addressed.
- d. These penalties need to be at least the same level as California if not higher.
 - i. **Does MHD ZEV Action Plan mention this? No** – but if State adopts the ACT and/or ACF rules, this mandate will be met.
- e. Policy making must impose meaningful penalties for responsible parties that do not meet requirements across the board, such as reductions, reporting, productions, engagement, perpetuation of environmental racism, workforce development outcomes and equity results need to result in equivalent cost of implementing programs or mitigations to the short fall.
 - i. **Does MHD ZEV Action Plan mention this? No** – while states are encouraged to adopt reporting requirements for certain entities based on size or public ownership, control or contracts, penalties are not discussed, but may be covered if the State adopts the ACT and/or ACF rules.

- f. Policy making must develop a structure that allows community members and groups to participate as equal partners at every level of decision-making including resource allocation, needs assessment, planning, implementation, enforcement, and evaluation.
 - i. **Does MHD ZEV Action Plan do this? Yes** – emphasizes that states should “work with community groups to co-develop robust community engagement frameworks designed to institutionalize inclusive, accessible, and transparent community engagement practices that” include community input in all aspects and at all levels; elevates community knowledge, expertise, and leadership; and provides information in an accessible and digestible way. (pg.7)
- II. **Address and Prevent Health Disparities**
 - a. Policy making must include programs that repair the harm done to communities with mitigation and financing that invest in the environmental justice communities that assure local benefits determined by the local community.
 - i. **Does MHD ZEV Action Plan mention this? No**
 - b. Policy making must include measures and matrices that address existing health disparities. These strategies should improve health outcomes, quality of life, and life expectancy in impacted communities.
 - i. **Does MHD ZEV Action Plan mention this? Sort of** – It is implied in the efforts to address existing disparities in OBCs, specifically re the community-led air monitoring and hotspot location initiatives recommended, but does not delve into quality of life and life expectancy specifically. (pg. 42)
- III. **Adopt Robust Reporting Requirements and Penalties.**
 - a. Reporting must include truck company contracting patterns across subsegments; economics asset and non-asset fleets; truck leasing practices; contractor finances, and extent of employee misclassification.
 - i. **Does MHD ZEV Action Plan mention this? Sort of** – addressing worker misclassification is mentioned (pg. 6, 40), as well as leasing programs to lower up-front costs as a financing tool (pg. 36), but none of the others.
 - b. Collect data that demonstrates the public health benefits both locally and globally, equity and environmental justice outcomes and goals that are associated with the ACT and related programs and hold accountable the parties for meeting the milestones set within the rules, programs and initiatives.
 - i. **Does MHD ZEV Action Plan mention this? Sort of** – data collection on public health benefits both locally and globally as well as analysis on equity and environmental justice is encourages towards the end of the Action Plan, but holding parties accountable for ACT and other program milestones is not considered in this regard.
 - c. Develop monitoring programs that use hot-spot analysis
 - i. **Does MHD ZEV Action Plan do this? Yes** – recommends that State agencies “work with communities located near ports, railyards, trucking distribution hubs, fleet

depots and major trucking corridors to design community air monitoring programs that deploy mobile or portable sensors to support reasonably accurate and cost-effective localized data to develop a more granular picture of air quality for more effective policy planning and evaluation.” Also recommends that states work with federal partners to provide communities with funding, tech, and basic training to build the community’s capacity and knowledge to create their own community-led monitoring programs so they can better engage with their states. (pg. 43)

- d. Require companies to report and be accountable for compliance. This responsibility should fall on the company, not individual drivers.
 - i. **Does MHD ZEV Action Plan mention this? Yes** – recommends “reporting requirements required by incentive programs should be structured to minimize the administrative burden on fleets.” (pg. 28)
- e. All reporting data and information must be available to the public.
 - i. **Does MHD ZEV Action Plan mention this? No**, not explicitly, but it does encourage data sharing with communities in various sections.
- f. Report fleet sizes. – **Yes** – if States adopt the ACT Rule, they will be subject to the fleet reporting requirement therein, “along with one-time fleet reporting” for the large entities. (pg. 26) Also, the Action Plan recommends States set annual fleet reporting requirements for “publicly owned, controlled, and contracted fleets designed to achieve 100% zero-emissions MHD fleet vehicle purchases where technically feasible by no later than 2040...” (pg. 26-27) Lastly, the Action Plan recommends states establish reporting requirements for “publicly owned and contracted school bus fleets designed to achieve 100% zero-emissions purchases and contracts by no later than 2040.” (pg. 27)
- g. Report number of truck and truck routes. **Does MHD ZEV Action Plan mention this? No**, only mentions using truck routes in discussing charging infrastructure, etc.
- h. Impose meaningful penalties for responsible parties that do not meet requirements across the board, such as reductions, reporting, productions, engagement, perpetuation of environmental racism, workforce development outcomes and equity results.
 - i. **Does MHD ZEV Action Plan mention this? Not really** – however, if a State adopts the ACT and/or ACF rules, penalties may be addressed therein.

Additional Policies, Initiative and Programs Needed to Address Equity and Environmental Justice

- I. **Equitable Distribution of Funding and Resources**
 - a. Policy making must prioritize and focus incentive spending on frontline workers conducting business in environmental justice communities (i.e. drayage drivers).
 - i. **Does MHD ZEV Action Plan do this? Yes** – “offer increased incentives that cover a larger portion of the cost differential to fleets that are domiciled or operate in frontline and overburdened communities such as ports and drayage trucks, fleets operating near warehouse and goods distribution hubs, and school and

transit buses; and Provide technical assistance to help fleets that are domiciled or operate in frontline and overburdened communities apply for incentives and understand financing and infrastructure deployment options.” (pg. 30)

- b. Policy making must require that companies participating in state ACT and related programs prove good standing with the National Labor Relations Board.
 - i. Does MHD ZEV Action Plan mention this? **No**
- c. Policy making must disqualify companies that have state and federal labor and employment tax law violations from funding.
 - i. Does MHD ZEV Action Plan mention this? **Sort of** – while making incentive program funding dependent on certifying compliance with labor laws is explored, it is unclear whether this certification would be self-reported. (pg. 30) There is no statement regarding employment tax law violations.
- d. Policy making must require that fleet purchasers maintain full control (full responsibility, maintenance etc.) of vehicles purchased with state incentive money meant to meet state zero emission goals.
 - i. Does MHD ZEV Action Plan mention this? **No**
- e. Policy making must ensure that trucks purchased with state dollars are not used as part of predatory leasing schemes or used by misclassified drivers.
 - i. Does MHD ZEV Action Plan mention this? **No**, but does acknowledge misclassification leads to drivers having to lease and the burden that creates. (pg. 40)

II. **Funding Incentive Programs without Harming Frontline Workers or Communities**

- a. Incentive spending needs to be prioritized and focused on frontline workers conducting business in environmental justice communities (i.e. drayage drivers).
 - i. Does MHD ZEV Action Plan do this? **Yes** – “offer increased incentives that cover a larger portion of the cost differential to fleets that are domiciled or operate in frontline and overburdened communities such as ports and drayage trucks, fleets operating near warehouse and goods distribution hubs, and school and transit buses; and Provide technical assistance to help fleets that are domiciled or operate in frontline and overburdened communities apply for incentives and understand financing and infrastructure deployment options.” (pg. 30)
- b. Recipients of incentive monies must be those in most need. Companies and individuals that are well resourced and have the means to purchase zero emissions trucks and equipment should be ineligible for incentive funding (ie. Amazon, Target etc.)
 - i. Does MHD ZEV Action Plan discuss excluding the well-funded? **No**, it does not specifically mention excluding well-funded corporations or individuals.

- ii. Does MHD ZEV Action Plan discuss making sure those who are most in need get incentive monies? Yes, it does:
 - 1. “The MHD ZEV MOU directs the signatories to accelerate the deployment of zero-emission trucks and buses to benefit communities that have been historically burdened with higher levels of air pollution. This can be achieved by designing incentive programs to prioritize the electrification of fleets operating in communities that are disproportionately impacted by diesel emissions and to support the goals and strategies outlined in climate justice planning documents developed by environmental justice communities.” (pg. 28)
 - 2. Asks that utility regulators “prioritize investments in [OBCs] by establishing requirements for deployment of make-ready infrastructure and investment of incentive funding to benefit fleets operating in or near these communities” and “support utility engagement with frontline [OBCs] in their service territories in planning, developing, and implementing utility MHD ZEV programs.” (pg. 33)
 - 3. States should offer utility on-bill financing and repayment for MHD electric vehicles and charging infrastructure and prioritize financing for small fleets, transit agencies, and school districts with fewer capital resources. (pg. 32)
 - 4. Says a percentage of funding should be reserved for small fleets, minority-owned fleets, and independent owner/operators, additional incentives should be offered to cover cost differential, tech assistance to help them apply for incentives, and simplification of the application process. (pg. 30)
- c. Make funds contingent upon companies’ agreement to improve workplace standards, union neutrality and non-interference policies.
 - i. Does MHD ZEV Action Plan do this? No
- d. Generating revenues to incentivize the deployment of zero emission vehicles and equipment must not come from market based (ie. cap-and-trade, carbon tax, offsets etc.) programs.
 - i. Does MHD ZEV Action Plan do this? Yes – Generating revenues to incentivize ZEVs is addressed (see “Additional recommendations...” section at end of document) and there are no recommendations for cap-and-trade or carbon tax programs. The Plan does, however, point to existing “cap-and-invest programs operating in California, Quebec, and the Northeast and Mid-Atlantic” as a possible source of funding, but does not recommend the creation of any new ones, only that States “explore opportunities to co-fund incentive programs with local governments”. (pg. 29)
- e. Incentive programs meant to support private business and the success of the ACT and related programs should be short term. Private industries and the success of the ACT

should not depend on public dollars. The transportation industry should include the price of compliance with zero emission rules into the cost of doing business.

- i. Does MHD ZEV Action Plan discuss this? **No**

III. **Workforce Development Opportunities and Just Transition**

- a. all policy making must establish economic and workforce development programs in environmental justice communities that support and are linked to quality careers for commercial vehicle drivers and others currently working in the freight transport and logistics sectors.
 - i. Does MHD ZEV Action Plan do this? **Yes** – The Action Plan proposes “that states partner with communities, labor groups, and others to develop workforce development programs to ensure that workers are prepared to fill new jobs created by the transition” and develop apprenticeship and other educational programs at high schools, community colleges, vocational schools, etc. in OBCs to further develop the necessary skill to obtain these quality careers. (pg. 6, 41)
- b. all policy making must establish economic and workforce development programs in environmental justice communities that support and are linked to quality careers in transportation electrification Infrastructure construction and operations.
 - i. Does MHD ZEV Action Plan do this? **Sort of** – for the economic aspect, the Action Plan suggests that states establish or utilize existing inter-agency working groups to address economic and labor issues stemming from electrifications and that States, “partner with frontline and OBC leaders to understand and proactively address barriers that may prevent community access to training programs, jobs and small business ownership opportunities, and conduct outreach and education about new resources to locate and prepare for high quality jobs.” (pg. 40) In terms of workforce development, the Plan recommends the creation of educational and skill development programs such as apprenticeships to prepare the workforce in OBCs for quality careers in electrification. (pg. 41)
- c. Establish programs that require participating companies to raise industry standards across the supply chain that improve the workplace environment for truck drivers, warehouse workers, railroad workers and dock workers.
 - i. Does MHD ZEV Action Plan discuss this? **No**
- d. Ensure that the transition to zero emissions transportation does not displace workers. The transition of fossil fuel vehicles to zero emission vehicles must not displace operators with automated vehicles or systems.
 - i. Does MHD ZEV Action Plan do this? **Sort of** – discussed the possibility of losing jobs to overseas locations without strong government policies (pg. 39). Also discusses job training for frontline, OBC, and low-income communities so they develop the electrical and other specialized skill needed for the “new, higher-

quality jobs.” Suggests educational and apprenticeship programs at high schools, community colleges, vocational schools, etc. (pg. 41)

- e. Position and align action plans with federal infrastructure resources, projects and programs that support the success of the ACT, low NOx rules, workforce development and just transition efforts.
 - i. **Does MHD ZEV Action Plan discuss this? Not explicitly** but encourages states to adopt ACT and pursue federal support, funding, and other resources.
- f. Establish workforce programs that resource local community groups to monitor, track and engage in related programs. These programs can be focused on local community ACT related program engagement that tracks, monitors reporting, air quality and enforcement to ensure success of efforts.
 - i. **Does MHD ZEV Action Plan do this? Yes** – pg.7 into 8 discuss engaging communities to develop identifying parameters, health metrics, location of sensitive populations and truck counts, etc. Also suggests considering utilizing existing environmental justice and equity councils and advisory bodies to ensure frontline and overburdened community voices are included. Community-led air monitoring initiatives are also recommended. (pg. 41)

IV. **Clean Energy, Zero Emissions, Sustainable Solutions and Infrastructure**

- a. policy making must ensure that the transition to zero emission is achieved through renewable/green energy sources and do not include power plant emissions, near zero emissions approaches, fossil fuel use/combustion, and incineration as energy sources.
 - i. **NOTE: MHD ZEV Action Plan** → Hydrogen fueling stations are mentioned multiple times in this Plan, even though NESCAUM admits: “Today, hydrogen fuel is mostly produced using natural gas. Only a small fraction of hydrogen fuel produced today is “green” fuel, produced by an electrolytic process powered by renewable energy, because it is currently more expensive to produce.” (pg. 24)
- b. policy making must not include cap and trade and carbon pricing market approaches as part of climate mitigation efforts.
 - i. **Does MHD ZEV Action Plan discuss this? Yes**, since no recommendation is made for cap and trade or carbon pricing. The Plan does point to existing “cap-and-invest programs” as a possible source of funding. (pg. 29)
- c. policy making must consider the impact of electrification and battery production on mining communities and the planet.
 - i. **Does MHD ZEV Action Plan discuss this? Yes** – encourages states to support research initiatives and policies designed to avoid adverse impacts domestically and abroad “resulting from the mining and processing of raw materials such as cobalt and lithium” and analyze the costs and benefits of battery reuse, recycling and more. (pg. 47, 48)

- d. Zero emissions initiatives must prioritize EJ communities and guarantee emissions reductions in areas disproportionately burdened by poor air quality so that those communities benefit first from electrification and other climate mitigation efforts.
 - i. **Does MHD ZEV Action Plan discuss this? Sort of** – no guarantee is made, but prioritizing electrification in OBCs first is highly encouraged.
- e. policy making must position and align action plans with federal infrastructure resources, projects and programs that support the co-benefits for environmental justice communities (i.e. resiliency hubs, public transit centers and public charging etc.)
 - i. **Does MHD ZEV Action Plan discuss this? No** – not directly but emphasizes public charging station infrastructure development and encourages utilizing federal funding and initiatives to further electrification.

Additional recommendations that were of note:

- I. **MHD ZEV Action Plan suggests states adopt ACT** and require manufacturers sell increasing percentages of ZEVs, emphasizing that regulatory requirements are necessary to drive investments in ZE tech, charging, and fueling infrastructure at the pace and size we need to support the level of electrification.
 - a. Also suggest that states can build public confidence in ZEVs by publicly demonstrating their viability by way of adopting ZE trucks and buses in their fleets (uses NY and Quebec as examples). (pg. 26)
 - b. Encourages states adopt the existing Advanced Clean Fleets and ZE Airport Shuttle regulations, (pg. 26) and develop indirect source rules for warehousing and other trucking distribution facilities! (pg. 48)
- II. **MHD ZEV Action Plan discusses scrappage incentive programs:** The Action plan also notes that scrappage requirements could preclude certain large and small fleets from participating in an incentive program if they don't have older vehicles to spare. "Consequently, fleets that do not have older, more polluting vehicles to scrap, or that do not want to forego the sales proceeds of the vehicle to be replaced, may not be eligible for incentive programs with scrappage requirements. Scrappage requirements are also a disincentive to fleet operators that are expanding their operations and to those that prefer to lease, rather than purchase vehicles. Thus, as currently structured, incentive programs that require the scrappage of older vehicles (e.g., pre-2010) could slow the pace of electric truck and bus adoption." (pg. 28)
- III. **Additional points on incentives in the Action Plan:**
 - a. The incentives that are proposed in terms of "property tax credits to incentivize businesses without fleets to install charging infrastructure for trucks" that service them or capital loans etc. seem more general, not particularly focused on OBCs or frontline workers. (Appendix A, pg. ii)
 - b. "Small trucking companies operating with six or fewer trucks make up 90 percent of carriers in the United States. Instead of purchasing new trucks to replace older trucks that have reached the end of their useful lives, many smaller fleets, independent

owner/operators, and contract drivers buy used trucks on the secondary market” because of lack of capital resources. States should provide enhanced incentives to help these small owners to overcome the upfront costs. (pg. 20, 28)

- c. Some mentions of offsetting higher upfront capital costs with government incentives and ratepayer funded programs, as well as savings on maintenance services and fuel offsetting costs of electric buses and their charging infrastructure. (pg. 35)

Attachment B

NESCAUM Follow Up – Next Steps

The information below is not reflective of the comprehensive positions or recommendations from MFN. The following reflects the MFN Grassroot Zero Emission Truck Work Group members' responses to the follow up topics and questions specific to the Action Plan and the ACT. The recommendations herein are directed toward NESCAUM and states adopting the MHD ZEV Action Plan.

AIR MONITORING

We urge states to prioritize the inclusion of measures, tools, policies, and programs in the Action Plan that: 1) prioritize environmental justice/community-led projects, 2) incentivize community programs and collaboration, and 3) prioritize projects measuring pollution that have the greatest public health impact. In particular,

- States' Action Plans must prioritize funding for local neighborhood air monitoring and go beyond the criteria pollutants of interest by the EPA.
 - Included in these monitoring plans should be resources that provide grants to communities and organizations directly, as well as resources that ensure additional access to low-cost sensors. E.g. P-TRAQ, devices that measure personal exposure of pollutants like black carbon and ultrafines, such as Airmetrics's MiniVol Portable Air Sampler, can be priced anywhere between \$300 - \$2,000 for low cost sensors, including laboratory costs for filter based sampling.¹
 - The following are recommended literature on developing community air monitoring programs:
 - *The Public Health Institute: Guidebook for Developing a Community Air Monitoring Network*²
 - *Our Air: Monitoring Pollution and Air Quality*, is a guidebook/resource for both community organizations that have concerns about air pollution and for regulators as guidance on developing supportive community air monitoring programs.³
- Funding should include resources that give environmental justice organizations and communities access to the tools necessary for data interpretation and maintenance of the monitors, etc. i.e. GIS, laptops/computers, Wi-Fi access, website creation and maintenance
 - In tandem with a commitment from the agencies to participate and incorporate the skills being shared by the community, air monitoring programs should include funding for environmental justice organizations to train the enforcement staff on environmental justice issues that occur within their community.
- Community-based air monitoring should include freight related sectors and industries, truck

¹ "In 2018 low cost monitors typically ranged from \$150 to \$300 per unit, mid cost monitors ranged from about \$1,000 to \$2,000." Env'tl. Prot. Agency, *OUR AIR: Monitoring Pollution & Air Quality*, https://engr.k-state.edu/chsr/files/chsr/SA2_Project/SASA%20Guidebook%20All%20Sections%20FINAL.pdf (last visited May 9, 2022).

²Public Health Institute, *Guidebook for Developing a Community Air Monitoring Network* (Oct. 2018), <https://www.phi.org/thought-leadership/guidebook-for-developing-a-community-air-monitoring-network/>.

³ Env'tl. Prot. Agency, *supra* note 1.

routes, warehouses, and railyards near roadways, sensitive receptors, and micro grids. In addition to ambient monitoring of criteria pollutants, communities need more data on levels of contaminants that pose a health threat to public health, including but not limited to:

- Hazardous air pollutants such as VOCs, Pesticides, Ethylene oxide, Benzene, Toluene,
- Hexavalent Chromium, etc.,
- Measurement of Ozone,
- Nitrogen Oxide (NO_x),
- Sulfur Oxide (SO_x),
- Black Carbon,
- PM₁₀ and PM_{2.5},
- Ultrafines, and
- Elemental carbon.

Funding and supporting community-based monitors and monitoring programs is an important part of community engagement, involvement, public oversight, and community self-determination. Although community-based monitoring is critical, regulatory air monitoring and enforcement must also be addressed, improved upon, and at minimum, meet the state and federal legal requirement.

Environmental justice communities⁴ often have no federal or state regulatory air quality monitoring nearby, and the regulatory air monitors that do exist are not properly maintained. These monitors fail to adequately capture industrial releases and exceedances as well as transportation emissions or fugitive emissions that threaten public health daily.⁵ It is important to note that air monitoring recommendations should be coupled with cumulative impacts analyses and emissions reductions policies for environmental justice communities.

The Clean Air Act requires monitoring of six “criteria” air pollutants: ground-level ozone, PM_{2.5}, carbon monoxide (CO), lead, sulfur dioxide, and NO₂.⁶ However, these monitoring networks are not sufficiently measuring local and short-term spikes in air pollution and are not capturing pollution hotspots. In addition to the lack of adequate air pollution monitoring, the Clean Air Act does not consider cumulative impacts from multiple air pollutants, nor does it adequately hold polluters accountable for standards that already exist. State enforcement of emissions standards is weak. *Enforcement and emissions reduction plans must be part of the process, otherwise monitors and the data they collect are not in service of the communities that are being impacted by toxic air pollution, and the State will be unable to account for and mitigate air pollution within a community.*

⁴ The term “environmental justice communities” (henceforth “EJ communities”) here refers to overburdened, marginalized communities who should be prioritized by air districts or agencies for funding, including but not limited to: immigrant, working-class, Black, Brown, Indigenous and POC communities. .

⁵ “When regulators don’t take action to make sure our air is breathable, we equip ourselves with the knowledge and technical capacity to do it effectively on our own.” KANSAS CITY STAR (Oct. 8, 2021), <https://www.kansascity.com/opinion/readers-opinion/guest-commentary/article253312238.html>. See also, <https://www.newsbreak.com/news/2334526364507/officials-wouldn-t-make-sure-kansas-city-kansas-air-was-safe-to-breathe-so-we-did>.

⁶Tim McLaughlin et al., *Exclusive: U.S. air pollution monitoring network falling into disrepair - GAO report*, REUTERS (Dec. 7, 2020), <https://www.reuters.com/article/us-usa-pollution-airmonitors-gao/exclusive-u-s-air-pollution-monitoring-net-work-falling-into-disrepair-gao-report-idUSKBN28H2MR>.

- All regulatory monitoring data locations should be coordinated with consultation of EJ communities, and the raw data and data analyses must be made publicly accessible and transparent for all.
- Community-based air monitoring programs should be used for *both* regulatory and non-regulatory efforts. Community-based monitoring programs should be set up to connect with regulatory agencies and decisions. An example is the current process that the EPA is considering for the implementation of the new Methane Rule.⁷
 - The data must also apply to existing cumulative impacts tools, Hazard Mapping Tools, and hot spot analyses. These data systems should be complementary and inclusive of all the departments and programs needed to inform a robust cumulative impacts/hot spot analysis, such as departments in charge of transportation, zoning, health, etc.
- Agency led air monitoring should include: freight related sectors and industries, truck routes, warehouses, and railyards near roadways, sensitive receptors, and micro grids. In addition these ambient monitoring of criteria pollutants, communities need more data on levels of contaminants that pose a health threat to public health, including but not limited to:
 - Hazardous air pollutants such as VOCs, Pesticides, Ethylene oxide, Benzene, Toluene,
 - Hexavalent Chromium, etc.
 - Measurement of Ozone,
 - Nitrogen Oxide (NOx),
 - Sulfur Oxide (SOx),
 - Black Carbon,
 - PM10 and PM 2.5,
 - Ultrafines, and
 - Elemental carbon.
- The state needs to support the connection between regulatory monitors and local community-based organizations co-locating air quality sensors.

⁷“EPA also is requesting information on additional sources of methane for the Agency to consider in developing a supplemental proposal to reduce emissions even further. In addition, EPA is taking comment on how to structure a community monitoring program that would empower the public to detect and report large emission events for appropriate follow-up by owners and operators for possible further development in a supplemental proposal. EPA intends to issue the supplemental proposal in 2022, and to issue a final rule before the end of 2022.” Env’tl. Prot. Agency, *U.S. to Sharply Cut Methane Pollution that Threatens the Climate and Public Health* (Nov. 2, 2021), <https://www.epa.gov/newsreleases/us-sharply-cut-methane-pollution-threatens-climate-and-public-health>.

HEALTH

Health equity is critical to addressing the many impacts from a legacy of environmental racism. To begin addressing this extremely complex problem, programs, policy, tools, and funding must be prioritized in a way that addresses health as a product of many social determinants. In other words, the solutions need to have a collaborative and intersectional approach. Furthermore, solutions need to ensure that communities have the power to name the issues, collect data, and be leaders in promoting health, which can only be accomplished if communities are adequately funded and supported. While many of these efforts will be reliant on connections and collaborations between governments and private entities like universities and medical centers, there needs to be requirements of these programs that ensure community leadership in determining the issues and the solutions. Additionally, all the tools need to be transparent and accessible to communities. There should also be timelines establishing a feedback loop to measure the effectiveness of the intervention.

We also generally recommend that states and NESCAUM look at *Communities in Action: Pathways to Health Equity*, which takes an extensive and collaborative look at the causes of, and solutions to, addressing health inequalities and promoting health equity. Within the text are recommendations on policies, programs, and processes that account for the connection between health and environment, the understanding of which is necessary to grasp the impacts from environmental racism. This report focuses on what communities can do to promote health equity, what actions are needed by the many and varied stakeholders that are part of communities or support them, as well as the root causes and structural barriers that need to be overcome (see chapters 4 and 5, in particular).⁸

PROGRAMS

There are existing programs that aim at mitigating harm. However, for many EJ communities, these programs do not have long term support structures in place to ensure that they are actually able to improve public health. Successful health programs need to account for the historical forces that have acted as barriers and ensured a lack of access for environmental justice communities to benefit from most health programs. Examples of these barriers include language, general access, operating hours for clinics, mobility and transportation challenges.

Health programs need to acknowledge the cumulative impacts from living in overburdened communities. This includes physical, mental, and emotional health. Programs need to recognize the role of privilege in contributing to inequity in health outcomes and acknowledge that policies have afforded privilege to some groups at the expense of others.⁹ Programs need to encourage meaningful public participation with

⁸ *Communities in Action: Pathways to Health Equity*, NAT'L LIBRARY OF MED. (Alina Baci et al. eds., 2017), <https://pubmed.ncbi.nlm.nih.gov/28418632/>.

⁹ *Understanding Race and Privilege*. National Association of School Psychologists. 2016, file:///Users/molly/Downloads/Social-Justice_Understanding-Race-and-Privilege.pdf. Privilege is problematic (a) when it skews our personal interactions and judgments and (b) when it contributes to or blinds us to systemic barriers for those who do not possess a certain privilege, thereby creating or perpetuating inequity. It is important to note that the groups who have received these advantages have not earned them due to their own hard work but rather their affiliation (e.g., being born into a wealthy family provides privileges that others do not have, such as accessing education as well as mental health and medical services; White Americans are more likely to walk into a mall without the suspicion of stealing). Equally important to note is the reality that while some benefit from unearned advantages, others are victims of unearned disadvantage.

attention to implementation, accountability, language, inclusion, and cultural understanding. Mitigating harm must include recommendations of policy, data collection, and funding.

- The state may fund training and resources to support a community-led Promotoras Model in which local residents receive specialized training to provide basic health education in the community without being a professional health care worker. Thus, promotoras serve as liaisons between their community, health professionals, and social service organizations. This allows community organizations to act as a bridge between health and health resources directly to the residents, like in the SALTA program.¹⁰
- The state should develop and implement programs that support up-to-date access to information and educational resources for healthcare providers, like Washington State's HEAL program and policy.¹¹

POLICY

There should be overarching goals within the policies such as: (1) explicitly including equity as a goal; (2) laying out an open and public process that allows for frequent and impacted community participation with reasonable timing, time commitments, and schedules; (3) responding to and incorporate the feedback received from community members during the public engagement efforts and from written comments; and (4) including an independent facilitator to coordinate community participation and ensure documentation and consideration of community input.

- Reports such as the *Local Land Use Policy for Environmental Justice* share municipal recommendations on land use aimed at reducing health risks. These include examples of enhanced public health codes that reach both existing and new sources of pollution impacting public health, augmenting public review and notification processes, imposing development fees, implementing overlay zones or special zone designations, or simply tightening existing zoning codes.¹²
 - Ex. Los Angeles Green Zones
- Developing cumulative impacts policies and programs that identify EJ/vulnerable communities (e.g., NJ Environmental Justice Legislation).¹³
- Adopting additional analysis of the hot spot areas: ex. Mini-NEPA (National Environmental Policy Act), which requires a comprehensive environmental assessment, including review of cumulative environmental and health impacts and demographics.^{14,15}

DATA/TOOLS

¹⁰ See, SALTA: Salud Ambiental Lideres Tomando Accion, ENVTL. HEALTH COAL., <https://www.environmentalhealth.org/index.php/en/what-we-do/leadership-development/salta> (last visited May 9, 2022).

¹¹ HEALWA, <https://heal-wa.org/> (last visited May 9, 2022).

¹² Ana Isabel Baptista, *Local Policies for Environmental Justice: A National Scan*, THE NEW SCHOOL (Feb. 2019), https://static1.squarespace.com/static/5d14dab43967cc000179f3d2/t/5d5c4bd0e1d5150001a5a919/156632981.1163/NRDC_FinalReport_04.15.2019.pdf.

¹³ S. Rep. No. 232 (2020), https://www.njleg.state.nj.us/2020/Bills/S0500/232_11.HTM.

¹⁴ Cumulative Impact Sub-Committee, *Strategies for Addressing Cumulative Impacts in Environmental Justice Communities* (March 2009), https://www.nj.gov/dep/ej/docs/ejac_impacts_report200903.pdf.

¹⁵ California Environmental Justice Alliance, *Toolkit Download Form*, <https://caleja.org/2017/09/sb-1000-toolkit-release/#form> (last visited May 10, 2022).

- Develop and/or improve both qualitative and quantitative tools that are based on a variety of local, state, and federal data, in particular health data and local narratives which are often not updated or comprehensive.
- Data needs to be collected to both better understand the environmental and public health conditions on the ground as well as track how the mitigation strategy is affecting these hot spots, so as to shift the plan/program if the impacts are not improving.
- Include school related health data like how many missed days due to illness, number of children with asthma, etc.
- State agencies such as the Department of Health, the Department of Transportation, Department of Energy, the Department of Community Affairs, and the Economic Development Authority all have an important role to play if we consider the full extent of the issues facing EJ communities.
- Support the development of localized data targeted in hotspot communities that can act as a way to quality check the modeling and statewide data often used by government departments (i.e., truck counts, block by block mapping, community air monitoring, etc.)
 - A pollution mapping tool is an online interactive platform that displays emissions data spatially and contains detailed graphs, tables, and search functionality that enable communities to be better informed of air pollution sources in their neighborhoods. (Ex. Cal Enviro Screen 4.0¹⁶)
 - Communities have further requested, however, that states expand and integrate additional community-scale, real-time air quality monitoring data into the state's air quality monitoring networks where possible.

FUNDING

- Funding needs to be allocated and prioritized to mitigate the health effects from freight related pollution.
- This can be done based on the hot spot analysis, identification, and characterization of air pollution sources, creating buffers to restrict the spread of dust/particulate contamination, odors, noise, and other impacts of freight related operations.
- Prioritize air filtration systems based on hot spot analysis which will map where EJ and vulnerable communities are located.
- Install sound-dampening windows in schools and residences in proximity to freight related pollution, including but not limited to truck routes, rail lines, warehouses, port property, airports, etc.
- Increase funding for hospitals, community clinics, medical training facilities, and other health care providers to address health impacts related to pollution emanating from Port operations.

¹⁶ California Office of Env'tl. Health Hazard Assessment, *Draft CalEnviroScreen 4.0* (Oct. 13, 2021), <https://oehha.ca.gov/calenviroscreen/report/draft-calenviroscreen-40>.

Labor

Across the country, worker centers, labor programs, unions, etc. are developing worker rights resources which include standards that are necessary to protect workers. For more detailed information, we recommend reaching out to some of the following: Labor Network for Sustainability, Warehouse Workers for Justice, New Labor, National Employment Law Project, labor unions, as well as local environmental justice organizations, who can speak to specific needs/standards that are critical to protecting the frontline workers and environmental justice communities in a specific area.

- **Jobs should include:**

- First Source Hiring¹⁷ This should include construction as well as operation and maintenance.
- Eligibility: enrollment opportunities in all job-training programs
- Living Wage: all jobs, including work performed by contractors, temp services, and tenants, should earn at least \$15 an hour, indexed for inflation, as well as full benefits for full-time employees.¹⁸
- Paid Sick Days: all jobs at a site, including work performed by contractors, temp services, and tenants, should have access to paid sick days
- Health & Safety Committee: All parties share a sense of responsibility to the community and workplace health and safety. As such, a health and safety committee should be formed and meet quarterly to address those needs, as well as labor conditions in general.
- Establishing education, training, and employment centers to provide skills for port-related jobs and improve the health of communities. Support local businesses in their transition to being able to repair zero-emission vehicles.
- Direct hiring should be prioritized. Warehousing often relies on third-party logistics firms and temporary staffing agencies. These firms place continual pressure on contractors to provide cheaper services. These lower rates are passed on in the form of decreased wages for workers, lack of access to benefits, and precarious work structures that make it more difficult to organize for better working conditions.
- Support for Community Benefits Agreement¹⁹ structures which put into place specific localized benefits for workers and direct hire practices.²⁰ (Important to note that third-party logistics firms are also used for other workers throughout the freight sector and therefore additional efforts to ensure that workers have access to safe and healthy

¹⁷ Gross, Julian. Fall 2007/Winter 2008. *Community Benefits Agreements: Definitions, Values, and Legal Enforceability*, Journal of Affordable Housing Vol. 17:1–2.

https://www.forworkingfamilies.org/sites/default/files/publications/CBAs_Definitions_Gross_2008.pdf

¹⁸ SEATAC, WASH., MUN. CODE ch. 7.45 (2014),

<http://www.ci.seatac.wa.us/Modules/ShowDocument.aspx?documentid=8233>

¹⁹ Julian Gross, Greg LeRoy, Madeline Janis-Aparicio 2005. *Community Benefits Agreements Making Development Projects Accountable* https://juliangross.net/docs/CBA_Handbook.pdf

²⁰ Eunice Cho et al., *WHO'S THE BOSS: Restoring Accountability for Labor Standards in Outsourced Work*, NATIONAL EMPLOYMENT LAW PROJECT (May 2014),

<https://www.nelp.org/wp-content/uploads/2015/02/Whos-the-Boss-Restoring-Accountability-Labor-Standards-Outsourced-Work-Report.pdf>; Warehouse Workers Justice Center, <https://www.ww4j.org/industry.html> (last visited May 10, 2022).

environmental and livable wages is critical across the freight sector, and additional policy may be needed to stop worker misclassification.

- Anti-Discrimination: Federal law prohibits both temporary staffing agencies and host employers from discriminating against temporary workers based on their race, color, religion, national origin, gender, or disability. It also prohibits discriminating against women employees because of pregnancy or a related medical condition as well as employees older than 40 because of their age. Discrimination in the temporary staffing industry is common not only in hiring and job placement, where people of one race or gender are assigned to certain jobs, but also in pay, promotions, and discipline. In a recent report published in collaboration with Warehouse Workers for Justice, organizers found that 63% of investigated temporary staffing agencies engaged in hiring discrimination, and more than half of the investigated agencies segregated job offers based on race.²¹ Either employer, or both, may be held responsible for discrimination, depending on the circumstances. States need to adopt, implement, and enforce strong anti-discrimination laws.
- Right to Organize - The National Labor Relations Act protects people's right to advocate for and join a union in their workplace. It also protects their right to join with co-workers to advocate for better working conditions, regardless of whether they are in, or want to, join a union.
 - The Right to Organize must be inclusive of temporary workers, and those who are employed by staffing agencies, even if they are not considered to be permanent employees at the particular worksite.
 - One way to support the Right to Organize and ensure better labor standards would be to ban the use of temp agencies for companies seeking funds to electrify vehicles and support additional infrastructure construction. .
- Ban the Box: all jobs at this site, including work performed by contractors, temp services, and tenants, should abide by the following Ban the Box standards.
 - An employer may not:
 - Make any inquiries related to the criminal history of any applicant prior to making a conditional offer of employment.
 - Conduct a criminal history inquiry on a candidate unless the employer has made a good faith determination that the relevant position is of such sensitivity that a criminal history inquiry is warranted.²²
 - Support the policies that protect workers like the PRO ACT, local and state policies that are vital to ensuring worker protection and organizing rights. This includes OSHA protections for all workers connected to the global freight movement.²³

²¹ Brittany Scott, *Opening the Door: Ending Racial Discrimination in Industrial Temp Hiring Through Innovative Enforcement*, PARTNERS FOR DIGNITY & RIGHTS (2021), https://fa0fbce7-d85e-4925-af7c-4b7d25478b8c.filesusr.com/ugd/3b486b_1a0b55b0b90b4ca99d63a057406c4b96.pdf

²² Justin B. Cutlip et al., *Newark, New Jersey Enacts Ban-the-Box Criminal Conviction Legislation Applicable to Private Sector Employers* (Oct. 26, 2012), <http://www.jacksonlewis.com/resources.php?NewsID=4234>.

²³ Brandon Magner, *The Amazon Union Drive in Alabama Would've Looked Very Different Under the PRO Act*, JACOBIN (Mar. 30.2021),

- There are also state policies that target the protection of temporary workers such as NJ [Assembly Bill 5246](#),²⁴ which has been referred to the Assembly Labor Committee.^{25,26}
- **Additional policy examples:**
 - Warehouse Indirect Source Rule (ISR) -The South Coast AQMD ISR applies to operators and owners of existing and new warehouses with floor space greater than or equal to 100,000 square feet within a single building. These warehouses are used to receive, store, and serve as a distribution point for goods. PR 2305 requires warehouse operators of warehouses subject to PR 2305 to earn a certain number of points each year from emission-reducing activities or pay a mitigation fee. This program would work similarly to the LEED system by the United States Green Building Council in that actions are assigned a specified level of points based on a menu. The point system is as follows:
 - First, for PR 2305, the amount of points every warehouse operator must earn annually depends upon the number of truck trips to their warehouse.
 - Second, an operator may choose to implement a site-specific custom plan that incorporates actions that are not on the menu, however, plan approval is required prior to being able to earn points. Custom plans could include onsite and offsite measures within the control of the operator that can be demonstrated to reduce emissions of NOx and/or diesel PM.
 - Third, an operator may choose to pay a mitigation fee to South Coast AQMD. The funds generated from the mitigation fee will be used to provide financial incentives for truck owners to purchase NZE or ZE trucks, or for the installation of fueling and charging infrastructure, with priority given for projects in the communities near warehouses that paid the fee. In addition, warehouse operators and owners would also have reporting and recordkeeping requirements.
 - Finally, warehouse operators would pay fees as established by PR 316 to reimburse South Coast AQMD for administrative costs associated with ensuring compliance with PR 2305.²⁷

https://jacobinmag.com/2021/03/amazon-union-drive-pro-act-bessemer-alabama?fbclid=IwAR2Wy5eG0nqOp10x0eqVJ5-07ogjG1zvJl_zoMxmrPfKr9U5DPF-yMkis5o

²⁴ https://www.njleg.state.nj.us/2018/Bills/A9999/5246_I1.HTM.

²⁵ The NJ Bill would: Notify temp workers of the agency's billing rate for their labor; Provide written notice to temp workers with details about their job, pay, hours, and safety requirements; Establishes a minimum of 4 hours pay for every daily assignment; Eliminate agency fees for transportation, check cashing, credit reports, or drug tests of any kind; Cap non-compete and conversion fees prior to 60 days; Eliminate non-compete and conversion fees after 60 days; Track temp-to-perm conversions at each agency; Track demographic information of temp workers and job applicants to monitor for discrimination; Protect temp workers from retaliation for exercising their rights. N.J. Assemb. No. 5246 (May 13, 2019), https://pub.njleg.gov/bills/2018/A9999/5246_I1.PDF.

²⁶ *Ensuring New Jersey Temporary Workers have Good Jobs with Living Wages*, NATIONAL EMPLOYMENT LAW PROJECT (Mar. 2018), https://fa0fbce7-d85e-4925-af7c-4b7d25478b8c.filesusr.com/ugd/3b486b_dc7d68215eac43f785b30ad9eb33e820.pdf.

²⁷Second Draft Staff Report: Proposed Rule 2305 – Warehouse Indirect Source Rule - Warehouse Actions and Investments to Reduce Emissions (WAIRE) Program and Proposed Rule 316 – Fees for Rule 2305, SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT (Apr. 2021), https://www.aqmd.gov/docs/default-source/planning/fbmsm-docs/pr-2305_sr_2nd-draft_4-7-21_clean.pdf?sfvrsn=8.

- To offset the air pollution impacts of warehouses, communities can advocate for projects to include zero-emission technologies such as use of electric trucks and forklifts, electric charging stations, and plug-in capabilities for Transport Refrigeration Units.
- In Southern California, community and environmental organizations have brought lawsuits over agency approvals of warehouse projects, resulting in settlement agreements that required installation of zero-emission infrastructure. The settlement agreement for the World Logistics Center, for example, requires installation and use of electric infrastructure at all loading docks to plug-in Transport Refrigeration Units, that all forklifts used onsite be electric, and installation of electric vehicle charging infrastructure, among other terms.

Establishing economic and workforce development programs in EJ communities that provide for quality career advancement can be accomplished by:

- Creating and retaining jobs that stimulate clean energy activity in the state
- Imbedding workforce training and employment service in infrastructure investments so that services are more directly connect to the jobs created
- Using community benefits agreement, community workforce agreements and project labor agreements
- Preparing students with relevant career technical education responsive to zero emissions technologies and infrastructure
- Developing worker retraining programs to assist existing workforce to upgrade their skills
- Responding to the job creation and workforce needs of the state's new and emerging industries, including emerging technologies that will result in greater greenhouse gas emissions reductions and zero emission technologies
- Developing job training programs to assist specific populations, such as at-risk youth, displaced workers, veterans, the formerly incarcerated, and others facing barriers to employment
- Implementing job training programs through robust partnerships between community groups, workforce development agencies, community colleges and public universities, and unions. These job training programs should be connected to job entry programs, pre apprenticeships programs and provide pathways to union jobs.
- Creating opportunities for community-based organizations to partner with local workforce agencies to improve the labor-market outcomes of targeted disadvantaged populations.
- Targeting workforce development programs and activities in environmental justice communities that are located near industries regulated by state or federal agencies
- Identifying and leveraging state and federal funding resources to implement programs (similar to companion policies).

There has been a dearth of federal labor policies and standards which would ensure that there are protective workplace standards, wages reflective of the cost of living, and that workers have the rights to organize. In fact, over the last few decades industries have increased their reliance on temporary or third-party worker hiring practices, thus further distancing the employers from their responsibility to prioritize workers' rights, health, and safety. While improving the standards across the freight sector is critical, enforcement expansion also needs to be intentional and prioritized. For new contracts and applications relating to Zero-Emission vehicles and the coinciding infrastructure updates, there should be explicit language within the application that requires companies to account for high quality labor

standards. The questions recommended above should be explicit in the application, and whether companies receive grants, contracts, etc. should be contingent upon their intention to implement the ACT and related zero-emission vehicle policies.²⁸

There must be agencies and officials made responsible for strong enforcement of labor laws, and that duty must be owed to the worker, not the employer. There are essential statutory powers that administrative agencies need to robustly enforce labor standards laws.²⁹ Many of the standards recommended needed to *raise industry standards across the supply chain* are found in the response to question one, but ultimately the state needs to invest in supporting labor laws that protect workers, require a livable wage, and encourage organizing and unionization, while also developing the necessary enforcement structures.

There need to be labor standards in contracts that the government supports with industries. Within the freight sector, industry standard recommendations have been made to address the misclassification of port truck drivers as well as the increasing health, safety and environmental threats coming from a new demand on the use of automation.³⁰ For driver misclassification, states must correct worker-status misclassification of truck drivers and other freight workers to promote livable wages and benefits. For more on this topic, read: [*The Big Rig: Poverty, Pollution, and the Misclassification of Truck Drivers at America's Ports a survey and research report*](#)³¹ and [*The Big Rig Overhaul: Restoring Middle-Class Jobs at America's Ports through Labor Law Enforcement*](#).³² Labor standards should confront or address the mislabeling of workers as independent business which deprives them of labor protections such as minimum wage, overtime pay, and safe and healthy workplace protections as well as others. These standards should be explicit and supportive of ensuring that workers across the freight sector are held to higher standards as mentioned above.

²⁸“Cities, states, and public agencies can incorporate the USEP into their bidding process to adjust what kind of information is required for a company to submit a bid for a public contract. Rather than just submitting information about traditional factors like technical specifications and price, the USEP requires the companies competing for public contracts to disclose the number, type, and location of jobs the contract will create and retail, as well as salaries, benefits, training program, and their plan to recruit and train historically marginalized workers” *Resources: U.S. Employment Plan*, JOBS TO MOVE AMERICA (Apr. 10, 2020), <https://jobstomoveamerica.org/resource/u-s-employment-plan-2/>.

²⁹ Jenn Round, *An Advocate's Guide to Building Stronger Labor Standards Enforcement*, RUTGERS (Janice Fine, ed. Oct. 2019), https://smlr.rutgers.edu/sites/default/files/Documents/CIWO/19_1011_basic_enforcement_powers_draft_7_e_distrib.pdf.

³⁰ *Freight Automation: Dangers, Threats, and Opportunities for Health and Equity*, MOVING FORWARD NETWORK (Apr. 2021), https://www.movingforwardnetwork.com/wp-content/uploads/2021/04/RAMP_freightreport_web.pdf

³¹ Rebecca Smith, David Bensman & Paul Alexander Marvy, *The Big Rig: Poverty, Pollution, and the Misclassification of Truck Drivers at America's Ports* (Dec. 8, 2010), <https://teamster.org/wp-content/uploads/2018/12/povertypollutionandmisclassification.pdf>.

³² Rebecca Smith, Paul Alexander Marvy & Jon Zerolnick, *The Big Rig: Restoring Middle-Class Jobs at Merica's Ports Through Labor Law Enforcement* (Feb. 2014), <https://www.nelp.org/wp-content/uploads/2015/03/Big-Rig-Overhaul-Misclassification-Port-Truck-Drivers-Labor-Law-Enforcement.pdf>.

Additional Document Provided to the EPA Science Advisory Board

ERM Group. 2022. *Impact of Engine Regulations on Heavy-Duty Vehicle Manufacturing Employment, Production, and Sales.*

Available at: <https://www.erm.com/globalassets/publications/hdv-prebuy-report-final-oct2022.pdf>