Transcript of **HD2027 Rulemaking**
Day 1 of 3

Tuesday, April 12, 2022

*EPA Hearing*

This file has been redacted to remove potential Personally Identifiable Information (PII)

Reference Number: 114614
DOCKET NO.:
EPA-HQ-OAR-2019-0055

Control of Air Pollution from New Motor Vehicles:
Heavy-Duty Engine and Vehicle Standards

9:00 a.m.
April 12, 2022
PARTICIPANTS

ENVIRONMENTAL PROTECTION AGENCY:

WILLIAM CHARMLEY, Director, Assessment and Standards Division

BRIAN NELSON, Director, Heavy-Duty, Onroad and Nonroad Center

ALEJANDRA NUNEZ, Deputy Assistant Administrator for Mobile Sources

ABT ASSOCIATES:

KAYLA THOMPSON, Virtual Event Production Specialist

LAUREN PHILLIPS-THORYN, Virtual Event Production Manager

PANEL 1 TESTIFIERS (in order of appearance):

KELLY CRAWFORD, District of Columbia Department of Energy & Environment

PATRICE TOMCIK, Moms Clean Air Force

PAUL BILLINGS, American Lung Association

ERIK WHITE, National Association of Clean Air Agencies
PARTICIPANTS

PANEL 1 TESTIFIERS (in order of appearance)

[continued]:

JIMMY O’DEA, CALSTART

KATHERINE GARCIA, Sierra Club

RASTO BREZNY, Manufacturers of Emission Controls Association

KEVIN BROWN, Manufacturers of Emission Controls Association

CAROLINA PENALARCON, EDF

LAURA BENDER, American Lung Association

BRITT CARMON, NRDC

CELERAH HEWES, Moms Clean Air Force

DON ROSS, National Waste and Recycling Association

TIFFANY WERNER, Environmental Law and Policy Center

BRYAN BURTON, American Lung Association

ALMETA COOPER, Moms Clean Air Force

ELIZABETH BECHARD, Moms Clean Air Force

JILL AQUINO, Alliance of Nurses for Healthy Environments (ANHE)
PARTICIPANTS

PANEL 2 TESTIFIERS (in order of appearance)

[continued]:

JED MANDEL, Truck and Engine Manufacturers Association

BROOKE PETRY, Moms Clean Air Force

TIMOTHY CRONIN, Health Care Without Harm

HAZEL CHANDLER, Moms Clean Air Force

SHAINA OLIVER, Moms Clean Air Force—Colorado

TIMOTHY CRONIN, Health Care Without Harm

HAZEL CHANDLER, Moms Clean Air Force

MOLLY RAUCH, Moms Clean Air Force

ELIZABETH HAUPTMAN, Moms Clean Air Force Michigan

ANA RIOS, Moms Clean Air Force

SARAH MCBRIDGE, Moms Clean Air Force

DANIEL GAGE, NGVAmerica

ELIZABETH BRANDT, Moms Clean Air Force

VALENCIA BEDNAR, Moms Clean Air Force

NATALIA BEDNAR, Moms Clean Air Force

SUSIE ROBERTSON, Moms Clean Air Force

REVEREND RICHARD KILLMER, Retired Presbyterian Minister
PARTICIPANTS

PANEL 2 TESTIFIERS (in order of appearance)

[continued]:

JONATHAN WALKER, Retired Physician

RICH KASSEL, ClearFlame Engine Technologies

MARGUERITE PENNOYER, Physician

PEGGY ANN BERRY, Alliance of Nurses for Healthy Environments

MARY GREENE, Consumer Reports

QUINTA WARREN, Consumer Reports

WAYNE NASTRI, South Coast Air Quality Management District

PANEL 3 TESTIFIERS (in order of appearance):

DIANA VAN VLEET, American Lung Association

JOSH NASSAR, International Union, United Automobile Aerospace and Agricultural Implement Workers of America

MITCHELL HESCOX, The Evangelical Environmental Network

LEWIE PUGH: Owner Operator Independent Drivers Association
PARTICIPANTS

PANEL 3 TESTIFIERS (in order of appearance)
[continued]:

BRIAN URBASZEWSKI, Respiratory Health Association
WILLIAM BECKETT, Harvard Medical School
KIM GADDY, South Ward Environmental Alliance
STEVEN SONDHEIM, Sierra Club
LAURA HAIDER, Fresnans Against Fracking
REBECCA O'BRIEN, Resident of Virginia
KARL ALDINGER, Sierra Club San Diego

PANEL 4 TESTIFIERS (in order of appearance):
LIANE RANDOLPH, Chair, California Air Resources Board
JENNA RIEMENSCHNEIDER, Asthma and Allergy Foundation of America
SASAN SAADAT, Earthjustice
PEDRO HERNANDEZ, Central Valley Air Quality Coalition
AVERY LAMB, Creation Justice Ministries
NICOLE MARCOT, Moms Clean Air Force
PARTICIPANTS

PANEL 4 TESTIFIERS (in order of appearance)

[continued]:

MANIJEH BERENJI, Occupational and Environmental Medicine Physician

SUSAN PATE, Resident of St. Louis, Missouri

JASON O'DELL, Resident of Long Beach, California

LOUISE MEHLER, Retired Epidemiologist, Sacramento, California

RENE ST. JULIEN, Private Citizen

KIM ANDERSON, Evangelical Environmental Network

SEAN WATERS, Daimler Trucks North America

RAY PINGLE, Sierra Club

JESSIE PARKS, Sierra Club

SANDRA PUROHIT, Environmental Entrepreneurs (E2)

PANEL 5 TESTIFIERS (in order of appearance):

SANDRA PUROHIT, Environmental Entrepreneurs (E2)

(resumed from previous panel)

ADA STEPLETON, Moms Clean Air Force

STEPHEN WYMAN, Evolving Electric Motor Company

KAREN HEUER, Ophthalmologist
PARTICIPANTS

PANEL 5 TESTIFIERS (in order of appearance)

[continued]:

EMILY KENT, Clean Air Task Force

MICHAEL WALSH, Environmental Protection Network

KAREN CAMPBELL, Sierra Club

JANET MCGARRY, Resident of San Francisco, California

JOEL SCHROEDER, Evangelical Environment Network

SCOTT FENWICK, Clean Fuels Alliance America

ANDREA VIDAURRE, Senior Policy Analyst, People's Collective for Environmental Justice

NADINE YOUNG, Elders Climate Action

PATRICIA DUNCAN, Citizens Climate Lobby

ANJULI RAMOS, Sierra Club - New Jersey Chapter

PERRY SPRING, City of Tacoma, Washington

RACHEL CYWINSKI, United Women in Faith

PANEL 6 TESTIFIERS (in order of appearance):

ALEX SCHAY, Northwest Alliance for Clean Transportation

CAROLYN KEISER, Private Citizen
PARTICIPANTS

PANEL 6 TESTIFIERS (in order of appearance)

[continued]:

ALLEN SCHAEFFER, Diesel Technology Forum

LEVI KAMOLNICK, Ceres

ALLISON JASLOW, National Parks and Conservation Association – Veteran's Council

LIONEL MARES, Private Citizen

BEATRIZ SOTO, Conservation Colorado

KIDEST GEBRE, Virginia Interfaith Power & Light (VAIPL)

PETER BAKKEN, Wisconsin Interfaith Power & Light

GARY EWART, American Thoracic Society

MARGARITA PARRA, Clean Energy Works

LAURIE ANDERSON, Moms Clean Air Force – Colorado Chapter

OSCAR HAUPTMAN, Resident of Brighton, Michigan

PHILLIP STREIF, Vandalia Bus Lines
PANEL 7 TESTIFIERS (in order of appearance):

NICK TORRES, American Lung Association

BOB YUHNKE, Policy Committee, Elders Climate Action

LEIGH KAUFFMAN, Resident of Pendleton, Indiana

MARK ROSE, National Parks Conservation Association

DAVE ARNDT, Resident of Baltimore, Maryland, and Climate, Environmental, and Social Justice Advocate

MAGGIE SEGAL, Student, Atlanta, Georgia

KATHRYN DORN, Doctoral Student - Seismology; Resident of Phoenix, Arizona

RAY MINJARES, International Council on Clean Transportation

LESLIE WHARTON, Elders Climate Action

GLORIA GUARDADO, Chispa Nevada (via Interpreter)

KENNETH HAMMOND, Resident of Plainsboro, New Jersey
PROCEDINGS

MS. THOMPSON: Good morning, and welcome to the United States Environmental Protection Agency's virtual public hearing for the Control of Air Pollution from New Motor Vehicles: Heavy-Duty Engine and Vehicle Standards. My name is Kayla Thompson from Abt Associates, contractor to the U.S. EPA.

In order to accommodate testimony in both Spanish and English throughout this hearing, all attendees must select their preferred language via the interpretation icon at the bottom of your screen. If you're providing testimony today, please make sure that you are speaking the language of the channel you are listening to. For example, listening to English while speaking in Spanish could prevent other participants from hearing your statement in the language of choice.

We are now ready to begin. I'll turn it over to EPA to get us started.

MS. NUNEZ: Good morning. On behalf of the U.S. Environmental Protection Agency and the Office of Air and Radiation, I would like to welcome you to today's virtual public hearing. I'm grateful for everyone
who's taking the time out of their day to testify and participate here today.

I am Alejandra Nunez, the deputy assistant administrator for mobile sources with EPA's Office of Air and Radiation. With me today is Bill Charmley, director of the Assessment and Standards Division within EPA's Office of Transportation and Air Quality.

Bill will be the presiding officer for today's hearing. In addition, with me today and listening to the testimony on this proposed rule are several of my EPA colleagues who work on the Heavy-Duty Engines and Vehicles Program. EPA is also being assisted by our contractor, Abt Associates, in the running of today's virtual public hearing.

Last month, EPA proposed a multi-pollutant rule to further reduce air pollution, including ozone, particulate matter, and greenhouse gases, from heavy-duty engines and vehicles across the United States. The goal of this proposal is to deliver significant and needed public health benefits by designing a program that sets ambitious standards and that's feasible for the trucking industry after giving appropriate
consideration to cost and other factors. This action, in concert with other upcoming rulemakings in the heavy-duty sector, reflects our belief that the industry can and should be working towards reducing NOx emissions in their internal combustion vehicles while also investing in a zero-emissions future.

As identified in President Biden's Executive Order 14037, Strengthening American Leadership in Clean Cars and Trucks, EPA intends to issue a series of regulations over the next three years to reduce pollution from trucks and buses and to advance the transition to a zero-emissions transportation future. EPA's Clean Trucks Plan would result in significant emissions reductions from new medium- and heavy-duty vehicles and would be major steps towards improving air quality and addressing the climate crisis.

The three regulatory actions that make up the Clean Trucks Plan are the following. First, the proposal we're discussing today for new criteria pollutant standards for heavy-duty engines and strengthening of the Model Year 2027 greenhouse gas vehicle standards; a separate rulemaking to further
strengthen criteria and greenhouse gas emission standards for medium-duty commercial vehicles for Model Year 2027 and later, in combination with light-duty vehicles; and a third rulemaking to establish new and more stringent greenhouse gas standards for heavy-duty vehicles beginning as soon as Model Year 2030. In developing these actions, EPA is applying its Clean Air Act authority, which allows the Agency to maximize NOx and greenhouse gas emissions reductions over the short and long terms, and which would promote the transition to a zero-emissions transportation future.

Today's proposal would change the Heavy-Duty Emission Control Program -- including the standards, test procedures, useful life, warranty, and other requirements -- to further reduce the air quality impacts of heavy-duty engines across a range of operating conditions and over a longer period of the operational life of heavy-duty engines. As described in the proposal, the new standards would lower NOx emissions, which would result in improved health outcomes attributable to lower ozone and particulate matter concentrations in communities across the United States.
States. Communities near high-traffic roadways experience higher rates of numerous adverse health effects, so this proposal is especially important for the 72 million people who are estimated to live near truck freight routes in America. Residents of these communities are more likely to be people of color and have lower incomes.

EPA has identified several options in the proposal that address the stringency of the standards, the timing for phasing in the standards, options to incentivize early clean technology adoption, and improvements to emissions warranties. EPA is seeking input on these options through the public comment process. In addition, this proposal would make targeted updates to the existing Heavy-Duty Greenhouse Gas Emissions Phase 2 Program, proposing that further greenhouse gas reductions in the Model Year 2027 time frame are appropriate considering lead time, costs, and other factors, including market shifts to zero-emission technologies in certain segments of the heavy-duty vehicle sector.

The proposed revisions to certain existing
greenhouse gas standards for Model Year 2027 and beyond would set more stringent greenhouse gas emissions standards for subsectors where electrification is advancing at a more rapid pace. These sectors include school buses, transit buses, commercial delivery trucks, and short-haul tractors. As I noted, in a separate action, EPA intends to set new greenhouse gas emissions standards for heavy-duty vehicles as soon as Model Year 2030. This future action would more comprehensively address the long-term trend towards zero emissions across the heavy-duty sector. For today, the current proposal includes limited amendments to the regulations that implement our air pollutant emission standards for other sectors, for example, light-duty vehicles, marine diesel engines, locomotives, various types of nonroad engines, vehicles, and equipment. We intend to finalize this proposal before the end of 2022.

Our current proposal reflects input from stakeholders, including community groups, manufacturers, state, local, and tribal governments. Today, we look forward to hearing additional input
through your comments on our current proposal. EPA will consider all the comments we hear today from the many stakeholders participating in this hearing as we develop the final rule. We also look forward to considering additional written comments that we receive during the public comment period, which is open until May 13th.

Thank you all for attending this important public hearing, and thank you to everyone who will provide testimony today and the following two days. I now will turn it over to Bill Charmley, the presiding officer for today's hearing. EPA looks forward to hearing from all stakeholders during this public hearing and through the submission of written public comments. Thank you.

MR. CHARMLEY: Thank you, Ale. As Ale said, the purpose of this hearing today is to receive comments from interested parties on the proposed rulemaking titled, Control of Air Pollution from New Motor Vehicles: Heavy-Duty Engine and Vehicle Standards, which was published in the Federal Register on March 28 of 2022.

This hearing provides interested parties the
opportunity for the oral presentation of views and arguments. Witnesses will be allowed to make oral statements, which they may later expand in writing for the record. When you are finished with your comments, members of this panel may ask clarifying questions.

This hearing is not intended to be a discussion of the proposed rulemaking. While we might ask questions or request additional data or supporting materials, we will not respond to comments in this forum. Instead, we'll provide a written response to comments as part of the process of finalizing this proposed rulemaking.

Finally, I would like to remind everyone that in addition today's -- to today's hearing, there's also opportunity to send EPA written comments. The written comment period closes on May 13th of 2022 at 11:59 p.m. Eastern Time. The details on where to submit written comments can be found in the Federal Register notice announcing the proposal as well as on our website.

Now, I'd like to go over how we'll be conducting today's hearing.

We are conducting this hearing under Section 307(d) of the Clean Air Act to provide interested
parties an opportunity for oral presentation, in addition to written submissions, on the proposed rulemaking. A written transcript of this hearing will be available electronically on EPA's website and at the web -- at the Regulations.gov website under the docket for this rulemaking, which is Docket Number EPA-HQ-OAR-2019-0055. The official record of this hearing will be kept open for 30 days after the date of the hearing to provide opportunity to submit rebuttal and supplemental testimony. You may submit this additional testimony to the same docket for this action by using one of the methods described in the Federal Register notice announcing the proposal.

Today's hearing will be conducted informally, and formal rules of evidence will not apply. I will be serving as the presiding officer for today's hearing, and, as such, I'm authorized to apply reasonable limits on the duration of the statement of any witness. We ask that each person limit their verbal testimony to three minutes, given the number of testifiers for today, we'll need to hold speakers to that time limit. Our contractor, Abt Associates, will be facilitating
the lineup of speakers and helping to keep testimony to
three minutes. We'd appreciate all of your cooperation
in allowing us to give everyone an opportunity to speak
today.

Please note that EPA has distributed a list and a
tentative order of those registered to speak today,
tomorrow, as well as on Thursday, and we'll make slight
adjustments through the hearing for accommodations. We
plan to take a 15-minute morning -- sorry -- a 15-
minute break this morning around 11:00 a.m., as well as
a 30-minute lunch break around 1:00 p.m. today, and an
afternoon break around 3:30 today. All of those are
Eastern Time. Because of the very large number of
testifiers, we'll continue today's session into the
evening, and we plan to break briefly around 5:30 and
then resume at 6:15 Eastern. We will then continue the
hearing tomorrow, starting again at 9:00 a.m. Eastern.

Finally, while the EPA representatives speaking
today will attempt to ensure the accuracy of any
descriptions that we provide to the proposed
rulemaking, the official version of the proposal is
that which was published in the Federal Register on
March 28th of 2022, and it controls in any case of conflict between it and what you may hear today. Please refer to the official version in the developing -- in developing your written comments on this proposal.

Should there be members of the press that have further questions about today's hearing, we ask that they please contact Julia Burch at EPA, and Julia's email is Burch.Julia@epa.gov, and her last name is spelled B-U-R-C-H.

Thank you very much, and with that, I'm going to turn it back to Kayla Thompson from Abt Associates, and Kayla is going to go over some logistics for today's virtual public hearing. Thank you.

MS. THOMPSON: Thank you. Before we begin we'd like to go over some logistics for today's public hearing.

As a reminder all attendees are muted automatically. If you are speaking today you will receive a notification on your screen that you're being promoted to the role of panelist shortly prior to your speaking time. You must accept that invitation to be
able to unmute when you are called to testify. This
will also allow you to turn on your camera, which we
encourage you to do. Speakers connected by telephone
should unmute their phones when called to testify. If
you are experiencing technical difficulties, please
send an email to public_hearing@abtassoc.com, or call
(919) 294-7712. If you are not registered to speak but
would like to, please send an email to
public_hearing@abtassoc.com, or call (919) 294-7712.

Now we will begin our public testimony. The
expected speaking order is currently displayed on
screen. We ask that each person limit their verbal
testimony to three minutes. We encourage you to
provide your full written testimony and any additional
comments of any length to Docket Number: EPA-HQ-OAR-
2019-0055 on Regulation.gov. I'll be introducing each
speaker in turn. Please speak slowly and clearly so
our court reporter can record these proceedings
accurately.

The first speaker will be Kelly Crawford. Kelly,
you may now unmute, and please state your name and
affiliation for the record.
MS. CRAWFORD: Good morning. My name is Kelly Crawford, and I am the associate director for the D.C. Department of Energy and Environment, Washington, D.C.

MR. CHARMLEY: Kelly, you can go ahead and give us your testimony today. Thank you.

MS. CRAWFORD: Thank you. Good morning. I'm happy to be here today. Thank you, Bill and Ale, for convening this hearing today. I'm really excited. My name is Kelly Crawford. I'm the associate director for the Air Quality Division at the D.C. Department of Energy and Environment. DOEE is the leading authority on energy and environmental issues affecting the District of Columbia. In regards to air quality, DOEE is the lead agency in ensuring health- and welfare-based air quality standards are met and maintained.

I'm speaking today on the Notice of Proposed Rulemaking for the Control of Air Pollution for New Motor Vehicles: Heavy-Duty Engine and Vehicle Standards.

We broadly are supportive of EPA's proposal and urge you to adopt new emission standards as quickly as practicable, but we've already voiced our support for such a rule through several letters from national...
Association of Cleaner Agency and Ozone Transport Commission, of which we are members.

Ideally, the alternative option would be adopted. The alternative option has stricter emission standards implemented four years earlier and compared to Option 1, 2031 Second Step Implementation Date, this gives DOEE a head start in reducing transportation emissions in the District. We understand the reservation that you have about implementing the alternative option, particularly regarding the timeline for putting this regulation into effect. If the alternative option is not possible, then Option 1 is the next best option. Of the two fully-evaluated options proposed, this Option 1 best represents readily-available resource control technology as mandated by the Clean Air Act.

I want to, however, highlight the concerns in the proposal that are specific to the District of Columbia, including rules and offered options about the idle emission standard and the inducement schedules. This proposal made the emission standard and idle optional for manufacturers when, ideally, it should be a requirement, similar to the other emission standards.
The decision for the emission standard for idling to be optional will adversely impact the health and well-being of our residents who walk, ride bikes, and stand near idling diesel trucks, especially given the preponderance for idling in urban settings. EPA demonstrated that the technology to meet the idle standards is feasible. Therefore, manufacturers should not be given the option to not meet this standard.

Another concern is that the inducement schedules in the proposal are too weak. After engine control devices, like selective catalytic reduction technologies, contribute most to NOx reductions for modern diesel engines, and when those devices are not functioning, emissions increase by orders of magnitude. The proposed inducement schedule for vehicles subject to low-speed inducements are not restrictive enough. There will be a significant number of vehicles operating within the District where the final inducement speed of 35 miles per hour will not be enough. Many any roads within the District, like other urban areas, have speed limits of 25 miles per hour or lower. These vehicles travel through our residential
and commercial neighborhoods where they should be required to be running as cleanly as possible. For vehicles which the engine derating is incentive enough for them to perform required maintenance, the new schedule allows for up to 60 hours of dirty engine operation before the final inducement goes into effect. This amounts to 60 hours of driving on local streets near our schools, our small businesses, our residences, where the SCR is completely non-functional due to a depleted diesel emission fluid tank. I strongly urge EPA to consider the low-speed vehicle inducement schedule and make the derated vehicle speed significantly lower so that vehicles operating on roads within the District always comply with their rating emission standards. Although as a whole, the District boasts an impressive health profile, life expectancies, and quality of life indicators, many historically overburdened communities in the District do not reflect that trends found in other parts of the city. While traffic and air pollution are problems throughout the city, evidence points to motor vehicle air pollution
being concentrated along the interstates and highways that serve as major commuter and goods movement routes, with the heaviest traffic channeled through Southeastern D.C. The communities in Ward 7, Ward 6, and Ward 8 have higher than average rates of asthma, a disease which is correlated with higher NOx emissions, such as are emitted from diesel vehicles. If EPA does not act to -- on the specific issues highlighted in my testimony, DOEE fears communities will not see clearer air and, thus, will continue to suffer adverse health effects.

It is vital that EPA promulgates new emission standards for trucks in a timely fashion, but the rules must also be strict enough for tangible and significant emission reductions for those who are vulnerable. The proposed Option 1 provides real emission reductions on an acceptable timeline, and, if necessary, this is the option EPA should implement. You have already demonstrated that the technologies exist, and to become a reality, DOEE urges to take immediate action to adopt Option 1 for the health and safety of District residents.
1 Thank you for allowing me to testify.

2 MS. THOMPSON: Thank you for your comment. The
next speaker will be Patrice Tomcik. You may now
unmute, and please state your name and affiliation for
the record.

6 MS. TOMCIK: Hello. I can't unmute my camera.

7 SPEAKER: Sorry about that. You should be able to
now. There you go.

9 MS. TOMCIK: Thank you. My name is Patrice Tomcik
-- P-A-T-R-I-C-E -- last name Tomcik -- T-O-M-C-I-K. I
want to thank you for this opportunity to testify
today. My name is Patrice Tomcik, and I'm a senior
national field manager for Moms Clean Air Force, and
organization of over one million moms and dads united
to protect our children's health from air pollution and
climate change. I live in the town of Gibsonia,
located in Southwestern Pennsylvania, with my husband
and two children where vehicle pollution degrades our
air quality and contributes to climate change. I
support the EPA Heavy-Duty NOx and Greenhouse Gas
Emissions Proposal, but it must be strengthened to
better protect children from the health harms of air
Air pollution from trucks is a major public health problem. Studies have shown that the highest daytime exposures of traffic pollution are within 500 feet of a busy road. My children's school is located only 175 feet from state Route 228, which has congested heavy traffic. On an average day, at least 10,000 vehicles and 500 trucks and buses travel this heavily-congested roadway. Closing school windows and doors can help to lessen the traffic pollutant exposures, but the reality is, is that NOx fine particles and vapors are able to readily penetrate the indoors where they can be breathed in by young lungs. In the evening my kids attend outdoor sports practices and games at the school sports complex located near this roadway. This is the environment my children have been exposed to year after year since kindergarten and now through their high school years.

Unfortunately my story is not unique since many schools across the Nation are built near busy roadways because the land is cheap. I know that children are especially impacted by pollution since their lungs and
1. brains are still developing until early adulthood.
2. Toxic air pollution exposures have harmful effects that can last a lifetime. I'm very worried about what my children are breathing into their lungs every day. My youngest son is a cancer survivor, and he is immune compromised. As a mother, I try to make his home environment as healthy as possible, but I know I can't control the air my son breathes and depend on Administrator Regan and the EPA to do your jobs and protect him from harmful truck pollution.

The proposed standards must go farther in reducing deadly NOx pollution, and they must put our national bus and truck fleet on a clear path to 100 percent zero-emission, all electric vehicles, as quickly as possible. Please strengthen the final standards to better protect children from the health harms of air pollution. Thank you.

MS. THOMPSON: Thank you for your comment. The next speaker will be Paul Billings. Paul, you may now unmute, and please state your name and affiliation for the record.

MR. BILLINGS: Good morning. I'm Paul Billings --
P-A-U-L, B-I-L-L-I-N-G-S, national senior vice president of public policy at the American Lung Association. The Lung Association strongly supports the cleanup of pollution from heavy-duty engines and vehicles. We urge EPA to finalize this rule this year, 2022. First, I want to thank EPA for conducting this hearing, providing time for the public to sign up prior to the hearing, and adding an additional day to hear public testimony.

This proposal is long overdue. EPA last strengthened the NOx and PM emission standards for trucks 22 years ago, which were fully implemented in 2010. The technology is available now to meet stronger standards. Trucks remain a dominant source of NOx pollution in many communities, threatening the health of millions of people. In 2016, local and state air pollution control agencies, led by the South Coast Air Quality Management District, petitioned EPA to set more protective standards. The American Lung Association joined with eight health and medical nursing organizations in a July 2016 letter to then EPA Administrator Gina McCarthy, urging to "promptly
I propose a new standard to cut emissions of oxides of nitrogen from heavy-duty vehicles by 90 percent, limiting the emissions to .02 grams per brake horsepower-hour." Our letter continued: "Cutting these emissions will significantly reduce ambient ozone pollution in our communities and help reduce the enormous health burden air pollution are imposes on people who live, work, or attend school near roadways. Today, the American Lung Association reiterates that request.

Seventy-two million people live near truck routes, and this puts their health at risk. They're more likely to be people of color and those of lower income. Cleaning up trucks is an environmental justice issue. EPA's proposed Option Number 1 is stronger than Option 2 for public health because it provides greater pollution reduction and will result in up to 2,100 fewer premature deaths and a wide range of other health benefits, especially for children and people with chronic diseases, like asthma.

EPA should strengthen the standards even further by ensuring that the rules reflect the full useful life
of heavy-duty vehicles. The proposal's Option 1 does increase the warranty and useful life requirements above current levels, but they still fall short of reflecting the full life of these vehicles. Ensuring the warranty and useful life requirements meet 100 percent of the expected life of these vehicles will ensure health benefits throughout the vehicle's life. EPA should align the stringency timelines and durability of real-world engine performance requirements with the California rules at a minimum. EPA should also ensure the final standards cover engines during all their operating environments, not just at peak highway running capacity. Two weeks ago, the American Lung Association released a new report zeroing in on healthy air. The report showed the enormous public health and climate benefits of a transition to zero-emission vehicles powered by a clean, non-combustion renewable electricity grid. We found that over the next 30 years, 110,000 premature deaths could be avoided.

We urge EPA to finalize stronger truck standards this year and promptly propose additional rules to
accelerate the transition to zero-emission vehicles.

Thank you very much.

MS. THOMPSON: Thank you for your comment. The next speaker will be Erik White. Erik, we do not see you listed among the attendees. However, if you have joined using a different name, we would ask that you raise your hand at this time, and we will promote you to the role of panelist. Great.

(Virtual hand raised.)

MS. THOMPSON: Great. We're promoting you to panelist now. You may now unmute, and please state your name and affiliation for the record.

MR. WHITE: Good morning. My name is Erik White. I'm the executive director of the Placer County Air Pollution Control District in California. I'm testifying this morning on behalf of the National Association of Clean Air Agencies, for which I serve as co-chair of the Mobile Sources and Fuels Committee. NACAA is still studying all aspects of this heavy-duty truck proposal and will provide written comments by the May 13th deadline. Today, I would like to share why the outcome of this rulemaking with respect to NOx is
so vitally important to state and local air regulators and the constituencies that.

More than one-third of the U.S. population lives in areas of the country designated non-attainment for the Health-Based National Ambient Air Quality Standard for Ozone, and many others live in areas just on the cusp of non-attainment. Most of these areas are NOx limited, meaning they need to reduce NOx to improve air quality. It's been 21 years since EPA last set NOx emission standards for heavy-duty trucks. There is a clear and profound need for more rigorous Federal standards and requirements that will result in significant NOx reductions from heavy-duty trucks nationwide, and better protect health and welfare, especially in our most vulnerable communities. In the absence of far more stringent heavy-duty truck NOx standards, areas struggling with ozone will find themselves unable to address emissions from one of their largest sources, likely delaying their statutory obligation to attain the NAAQs or driving them into non-attainment.

NACAA strongly supports the stringent technology-
forcing Federal rule that will reduce heavy-duty truck NOx emissions by at least 90 percent and implement other key requirements to ensure these reductions will continue to be realized over the full useful life for vehicles, beginning not later than Model Year 2027. Such requirements include revamped test procedures correlated to real-world operation, end use performance requirements to ensure achievement of the emission standards across all duty cycles, longer, useful life and warranty periods, and enhanced enforcement.

State and local agencies have made great strides in regulating stationary sources, but for the most part, they lack the authority to regulate mobile sources. This is an authority that lies squarely within the purview of the Federal Government. Unfortunately, emission standards for this heavy-duty Federal source have not kept pace with standards for other source categories and fall woefully short of what is needed to meet clean air and public health protection goals.

As large swaths of the country slip deeper into non-attainment or teeter on the cusp of it, many state
and local agencies are left with few, if any, avenues to achieve the emission reductions they sorely need. Areas that miss their attainment deadlines face the threat of bump-up to a more demanding non-attainment specification if there aren't -- if they're not already yet classified as extreme, and statutorily-required economic sanctions. Even more perilous, their citizens, especially those who reside in disadvantaged communities, will continue to suffer the harmful adverse impacts of unhealthful air. Timing is key. It is imperative that EPA adopted final rule by the end of this calendar year to ensure that it will take effect in Model Year 2027.

In closing, EPA must take full advantage of this important opportunity to adopt a stringent, technology-forcing final rule that will achieve the full measure of potential emission reductions. The gravity of compliance with the NAAQs requires meaningful, timely Federal action on heavy-duty trucks. The protection of public health and welfare, particularly in overburdened communities across the country, demands it. Thank you very much.
MS. THOMPSON: Thank you for your comment. The next speaker will be Jimmy O'Dea. Jimmy, you may now unmute, and please state your name and affiliation for the record.

MR. O'DEA: Good morning. My name is Jimmy O'Dea, and I'm the deputy director of trucks at CALSTART. We are an industry-based organization with more than 300 members dedicated to the growth of the clean transportation industry. My comments are informed by our members but do not represent consensus across our membership.

There are three points I'd like to make on the proposed Clean Trucks Plan. First, this policy must accelerate the transition to zero-emission trucks and buses. It currently does not. The proposal assumes zero-emission vehicles will comprise just 1.5 percent of truck and bus sales in 2027. Technology is no longer the limiting factor in our transition to zero-emission vehicles, but policy is, especially Federal policy.

Zero-emission trucks and buses will provide significant savings for fleets in the coming years, if
not today in some applications. Conference halls are
lined with zero-emission vehicles with ranges well
within the needs of many fleets. We need policy to get
these vehicles out of showrooms and onto roads. We
cannot expect to have strong policies in 2030 without
actions between now and then. We need Federal policy
to at least match the rollout of zero-emission vehicles
in the Advanced Clean Truck Standard, a policy adopted
by six states representing 20 percent of the national
truck market.

Second, this policy should result in trucks with
net NOx emissions that are 90 percent lower than
today's engines. Option 1 in the proposal is a step in
this direction. Today's engines are complying with
standards set more than 20 years ago, and the
transition to zero-emission technologies won't be
instantaneous. The Clean Trucks Plan must reduce
pollution from the many combustion engines that will
continue to be sold. We support a policy that gives
manufacturers flexibility in meeting emission targets
through accelerated deployments of battery and fuel
cell technologies. However, this leads to my third
point that crediting for zero-emission vehicles should not erode the improvements intended for combustion engines. The final rule should not allow double counting of zero-emission vehicles that are already required by other policies. Multipliers for zero-emission vehicles should be scaled back, if not entirely eliminated, and the lifetime of credits should be capped.

We thank EPA staff for their work on the Clean Trucks Plan. This policy will impact the next 30 years of air quality in the U.S., and it's critical that EPA get it right. The technology is here. We just need the policy to match it. Thank you.

MS. THOMPSON: Thank you for your comment. As a reminder, if you are speaking today, you'll receive a notification on your screen that you are being promoted to the role of panelist shortly prior to your speaking time. You must accept that invitation to be able to unmute when you are called to testify. This will also allow you to turn on your camera, which we encourage you to do. Speakers connected by telephone should unmute their phones when called to testify. If you're
having technical difficulties, please send an email to public_hearing@abtassoc.com, or call (919) 294-7712.

If you are not registered to speak but would like to, please send an email with your name and phone number to public_hearing@abtassoc.com, or call (919) 294-7712.

The next speaker will be Katherine Garcia.

Katherine, you may now unmute, and please state your name and affiliation for the record.

MS. GARCIA: Good morning. My name is Katherine Garcia, and I'm the director of Sierra Club's Clean Transportation for All campaign. Thank you for the opportunity to testify today.

Our campaign is focused on advocating for strong policies that are -- so that by 2035, all new cars, trucks, and buses will be zero emission, and ensuring that we have a robust charging network powered by renewable energy to support those vehicles. At the same time, the transition to a clean energy economy must create good, family-sustaining jobs.

The proposed Clean Trucks Rule that we are here to discuss is an essential component to the future that we are working so hard to realize. For the NOx portion of
the rule, California's Heavy-Duty Omnibus Rule should be the floor for curbing smog- and soot-causing NOx pollution. For the greenhouse portion, the vehicle market is moving far faster than what is forecasted in these draft rules, meaning that the standards for trucks and buses would be less stringent over time. EPA must strengthen both portions of its rule.

and

fortunately live near convenient public transportation and my son's daycare, I don't own a car. However, that means when we're on the go, my two-year-old breeze in toxic emissions. Every day when I'm walking or bike riding with my toddler, I am frustrated by the health-threatening diesel fumes spewing from trucks and buses driving through our neighborhood. While my son is in awe of the huge yellow school buses, garbage trucks, concrete mixer trucks, and big rigs that drive past our cargo bike, I desperately want those vehicles to be zero emissions to reduce the exposure of diesel pollution on his young lungs and the lungs of his peers across the country.

We have a crucial opportunity right now to require
manufacturers to deliver cleaner heavy-duty vehicles.

We have a responsibility to ensure that every school bus that picks up our children, van that passes through our neighborhood, and truck that crosses busy corridors is zero emission. We know that manufacturers are recognizing the demand for zero-emission trucks and buses from states and fleets across the U.S. based on their public commitments and investments. But they won't move away from fossil fuel vehicles at the pace required, unless there is strong Federal regulation to drive action on their part.

The fact is that zero-emission technology has arrived, but we urgently need -- excuse -- but we urgently need the policy to match it. We've experienced exponential growth in zero-emission vehicles during the past few years, and today, we're discussing a rule that will go into effect in 2027. We need a visionary, transformative, and lifesaving clean trucks rule to ensure that we protect our health and tackle the climate crisis. Please be bold and develop these truck rules in line with Biden's environmental justice and climate commitments. Toddlers, parents,
truck and bus drivers, residents of D.C. and across the country all deserve clean air. We need the strongest possible bus and truck standards to protect everything and everyone we hold dear.

Thank you again for the opportunity to testify.

MS. THOMPSON: Thank you for your comment. The next speaker will be Rasto Brezny. You may now unmute, and please state your name and affiliation for the record.

MR. BREZNY: Good morning. I'm Rasto Brezny, the executive director of the Manufactures on Emission Controls Association. I thank you for this opportunity to share our initial thoughts on the proposed Truck Rule. From clean combustion to electrification, MECA members are delivering the technology solutions for clean mobility. The process to develop the current proposal has been a monumental effort that included a comprehensive test program at Southwest Research Institute, and involved technical experts from industry, national laboratories, and government agencies.

MECA supports technology-neutral standards founded
on performance-based, cost-effective solutions. We support EPA's decision to include many of the provisions from the California Omnibus Rule in Option 1 because suppliers agree that national vehicle standards are the most effective way to reduce emissions while controlling costs. We support the refueling control provisions for incomplete heavy-duty gasoline vehicles to capture VOCs from this truck category. However, we believe the 2027 to 2030 Option 1 requirements can be improved through closer alignment with the omnibus, while considering new test information and potentially reducing low load and idle limits to prevent emission backsliding when operating in urban settings. We suggest setting an intermediate life standard in 2027 to keep marginally-designed emission control systems off the roads. This approach has precedence and better aligns with the single national program.

We recommend that EPA consider the structure of credit flexibilities in three primary areas to prevent the erosion of NOx reduction benefits from combustion engines. First, we believe the 2027 FEL caps should be tightened to align with California. Second, ZEVs be
excluded from generating NOx credits, recognize the
deteriorating emission impacts of NOx credits on the
non-electric fleet, and sunset these credits generated
by electric trucks in 2026. Third, ZEV GHG credit
multipliers are overly generous and should be phased
out even faster than proposed. Number studies have --
including from the ICTT and Carnegie Mellon have found
that these multipliers erode CO2 reductions from diesel
trucks while potentially reducing the electric vehicle
sales. These minor improvements to Option 1 would lead
to the cleanest diesel engines while accelerating
electric truck penetration through the Phase 2
revisions.

MECA thanks EPA for conducting their independent
cost analysis to provide yet another methodology that
supports previous analyses conducted by CARB, ICCT, and
MECA. One area of concern that represents uncertainty
on its cost impact for suppliers remains the durability
and warranty provisions, especially for on-engine
components whose deterioration cannot be accelerated.
We'll elaborate on this in our written comments, but we
agree with EPA staff. This is an area for additional
demonstration and data gathering. Now, my colleague Kevin Brown will elaborate on the technologies important for reducing emissions from trucks. Thank you.

MS. THOMPSON: Thank you for your comment. The next speaker will be Kevin Brown. Kevin, you may now unmute, and please state your name and affiliation for the record.

MR. BROWN: Good morning. I'm Kevin Brown with MECA, and I'd like to highlight the work that has been done to demonstrate additional complementary technologies since CARB adopted its Heavy-Duty Omnibus. These commercial technologies, already deployed in some passenger cars, will further benefit trucks by building greater compliance margin that the truck manufacturers need to manage real-world variability. Technologies, such as cylinder deactivation, active heating, driven turbos, and hybrid powertrains can simultaneously reduce NOx and CO2. Combining these engine technologies with cross-coupled catalyst designs that leverage decades of experience with SCR system designs will help heavy-duty engines and vehicles meet
tighter NOx and Phase 2 greenhouse gas standards.

Since the Southwest Research Program as a program began over seven years ago, suppliers have provided three generations of technology, with each better than the last, including additional catalyst improvements and exhaust system optimization in the two-and-a-half since CARB finalized their Heavy-Duty Omnibus Rule. EPA's contribution to the test program has provided vital data on end-of-life durability, performance over real-world cycles, and new system compliance with new moving average window requirements, emission sensor measurement capability, among others. In particular, testing over multiple real-world driving cycles has shown that the same technologies that delivered the 20-milligram per brake horsepower-level of NOx emissions over today's certification cycles delivered even greater reductions under low load conditions where it counts the most: for urban areas, freight corridors, and disadvantaged communities.

Most importantly, finalizing these regulations will be the spark that starts the real collaborative process between suppliers and their customers to
1 integrate the cleanest and most cost-effective
2 combinations of technology solutions on new trucks over
3 the next four to seven years and beyond. In addition,
4 California's initial implementation in 2024 of a 50
5 milligram NOx per brake horsepower is one that will
6 provide the industry with an opportunity to use
7 existing after-treatment architectures while gaining
8 experience with the new provisions of the rule,
9 including a low load cycle and compliance programs.

   Similar to other areas of technology innovation,
10 the forecasts of electrification for the commercial
11 vehicle sector have undergone rapid evolution over the
12 past several years, and Europe has set new aggressive
13 targets for CO2 reductions from heavy-duty trucks out
14 to 2030. We urge EPA to review this new information
15 before finalizing Phase 2 vehicle CO2 reduction
16 targets, which appear to be conservative.

   In closing, we thank EPA staff for their
18 comprehensive research and collaboration with all
19 stakeholders. MECA strongly urges EPA to finalize this
20 truck rule by the end of the year so it can be
21 implemented in 2027. Our industry remains committed to
delivering cost-effective and durable-advanced emission control and electronic technologies, and simultaneously achieve lower greenhouse gas and NOx emissions from all trucks. Thank you for your time, and our written comments will provide further details supporting these oral comments. Thank you.

MS. THOMPSON: Thank you for your comment. The next speaker will be Carolina Pena-Alarcon. You may now unmute, and please state your name and affiliation for the record.

MS. PENA-ALARCON: Good morning. My name is Carolina Pena, and I am the manager of EcoMadres Program with Moms Clean Air Force, living in Alexandria, Virginia.

We must achieve net zero global warming pollution emissions by 2050, and that 2050 timeline is aligned with the latest science and the goals of the historic Paris Agreement agreed to in 2015. But here's the catch: the science is very clear that we will only be able to achieve that goal if we cut our current emissions in half by 2030. Greenhouse gas emissions from the transport sector has more than doubled since
1970 and has increased at a faster rate than any other energy use sector to reach. Around 80 percent of this increase has come from road vehicles. The actions taken right now this year and over the next eight years will determine whether we are able to keep the 2050 goal we reach.

Air pollutions put human health at risk in numerous ways. More than 13 million people, including 3.5 million children, live near ports and railyards. An additional 45 million people live within 300 feet of a highway or distribution center. As a Latina and in the context of COVID-19, this is more personal because as of April 2021, Latinos are more times -- more likely to contract COVID-19, three times more likely to be hospitalized from COVID-19, and 2.3 times more likely to die from COVID-19 than our non-Hispanic white counterparts. The pandemic has made crystal clear that community of color bear the burdens of the 21st century. Climate change exacerbated by hat air pollution is slowly killing our black and brown communities.

The new proposed rule reduces the nitrogen oxides,
or NOx, emissions from tracks by as much as 60 percent in 2045, with benefits exceeding its cost by billions of dollars, including up 2,100 fewer premature death and 3.1 million fewer cases of asthma symptoms. This EPA proposal does not go far enough. These standards must go farther in reducing this deadly NOx pollution, and they must put our national bus and truck fleet on a clear path to 100-percent, zero-emission, all electric vehicles as quickly as possible. This is a public health necessity. That is why my colleague previously, and the ones that you're going to hear later on this afternoon, are strongly advocating from rapid transition to every vehicle on every road to run on clean zero pollution electricity.

Please strengthen the final standards to better protect the children, people with asthma, older adults, and underserved communities that all are burdened with air pollution. We must do this in a way that prioritize environmental justice so that no community is left behind. Thank you for the opportunity to testify.

MS. THOMPSON: Thank you for your comment. The
next speaker will be Laura Bender. Laura, you may now unmute, and please state your name and affiliation for the record.

MS. BENDER: So my name is Laura Kate Bender -- L-A-U-R-A, K-A-T-E, B-E-N-D-E-R, and I'm the national assistant vice president for healthy air at the American Lung Association. Our mission is to save lives by improving lung health and preventing lung disease. My colleagues and I are each highlighting different points throughout this hearing on the health need to reduce emissions from heavy-duty vehicles and the ways the rule can go further to protect public health.

We urge EPA to maximize the health benefits of this proposal, finalize the strongest possible standards into law, and to do it this year. Between Options 1 and 2 in the proposal, Option 1 is more protective of health and should be strengthened even further, and we know that the alternative proposal would offer even more health benefits. I'll use my time today to highlight the health imperative of cleaning up dirty trucks and buses.
Nitrogen oxides pose a serious health threat, both immediately and as they react to the atmosphere. As soon as it comes out of the tailpipe, NOx can cause health harm, including airway inflammation, coughing and wheezing, and a greater likelihood of asthma attacks, emergency department visits, and hospital admissions for people with lung disease. NOx is also highly reactive, and it can form into particulate matter and ground-level ozone pollution. Ozone and PM are two of the most widespread dangerous air pollutants. Ozone can cause breathing problems, heart problems, and premature death. Long-term exposure can lead to permanently reduced lung function in children and may cause central nervous system, reproductive, and developmental harm.

Particulate matter also causes asthma attacks, COPD exacerbation, and premature death, including increased mortality in infants. And just like with ozone, long-term exposure, even at lower levels, is linked with increased risk of heart attacks, strokes, cognitive decline, preterm birth, and low birth weight, and particle pollution causes cancer. And, of course,
this rule isn't just about NOx. It's also a starting point for further reducing greenhouse gas emissions from trucks and buses.

Climate change is a health emergency. The warming climate is already damaging lung health nationwide, from more frequent and intense wildfires smoke, to more unhealthy ozone days, to indoor air hazards and homes that have been flooded. We urge EPA to not only reach a 90-percent reduction in NOx pollution with this rule but also to make the greenhouse gas provision stronger. Ultimately, what the nation needs and what our health requires is a full transition to zero-emission trucks and buses. This rule is an important step on the way to what EPA must do next: set the next round of standards to drive a nationwide transition to zero-emission heavy-duty vehicles. That transition offers a real opportunity for improvements for public health and environmental justice, and people will celebrate it.

In my time working for the Lung Association, truck pollution has come up again and again in conversation: a community leader in Southwest Virginia, who led a charge to keep a new truck stop going in right next to
an elementary school; another in New York City who highlighted the expansion of grocery delivery warehouses in the community and the increased truck traffic that it was bringing people. People get it. They get that trucks and buses powered by diesel are making their families sick. Ensuring that no neighborhood has to bear a pollution burden of a nearby highway, port, or distribution center will save lives, reduce illness, and help address the urgent health crisis of climate change.

We call on EPA to maximize the benefits to public health of this rule, finalize it this year, and then move swiftly to drive a nationwide transition the zero-emission vehicles. Thank you.

MS. THOMPSON: Thank you for your comment. As a reminder, if you are speaking today, you will receive a notification on your screen that you are being promoted to the role of panelist shortly prior to your speaking time. You must accept that invitation to be able to unmute when you are called to testify. This will also allow you to turn on your camera, which we encourage you to do. Speakers connected by telephone should
unmute their phones when called to testify. We ask that all speakers speak slowly and clearly so our court reporter and interpreters can capture these proceedings accurately. If you are having technical difficulties, please send an email to public_hearing@abtassoc.com, or call (919) 294-7712. If you are not registered to speak but you would like to, please send an email to your -- with your name and phone number to public_hearing@abtassoc.com, or call (919) 294-7712.

The next speaker will be Bryan Burton. Bryan, you will need to accept the invitation to become a panelist in order to provide your testimony, and when you are ready, you may unmute, and state your name and affiliation for the record.

(No response.)

MS. THOMPSON: Bryan, you may now provide your testimony.

(No response.)

MS. THOMPSON: It appears that we're encountering some technical difficulties, Bryan, so we will move to the next speaker while we troubleshoot.

The next speaker will be Britt Carmon. Britt, you
may now unmute, and please state your name and
affiliation for the record.

MS. CARMON: Thank you. Good morning. My name is
Britt Carmon, and I'm a senior advocate at the Natural
Resources Defense Council, or NRDC. I'm here today on
behalf of in NRDC's more than three million members and
activists who support our efforts to safeguard the
rights of all people to clean air, clean water, and a
healthy planet.

Eliminating heavy-duty vehicle and engine
pollution is essential to protecting human health,
communities, and our planet. Unfortunately, EPA's
proposal fails to meet the moment by failing to
adequately account for emissions reductions already
required by state rules, and by failing to heed the
call for strong standards from environmental justice
communities. EPA has a duty under the Clean Air Act to
set the strongest possible NOx engine and GHG tailpipe
standards. For this reason, NRDC urges the EPA to
finalize a rule on NOx that is stronger than Option 1
by at least doing the following: immediately
harmonizing with state action in Model Year 2027,
adoption that rapidly advances zero-emission solutions, and by eliminating early-action credits that don't spur additional action but instead serve as a giveaway that erodes the standard.

EPA acknowledges that Option 1 is the strongest of the two proposals it is considering and reaffirms that setting the level of standard outline in Option 1 would be consistent with the Agency's statutory authority.

EPA also mentions that by its own analysis, Option 1 may be a more appropriate level of stringency as it will result in a greater level of achievable emission reduction. Not only does Option 2 fail to achieve that level of reduction, but it also fails to realize several of the health, climate, and other annual benefits that would be achieved by Option 1, and it never harmonizes with the Heavy-Duty Omnibus and state-level action on slashing NOx emissions. Another area of concern is that EPA claims it designed this proposal to be reflective of input from stakeholders, including community groups, but also indicates that it won't consider the main ask of these groups, which is the inclusion of a zero-emission vehicle, or ZEV, sales.
mandate. This is unacceptable, especially since ZEVs are feasible, already being deployed, and are becoming increasingly cost-competitive in every vehicle class.

We stand in solidarity with the Moving Forward Network and join frontline communities’ request for EPA to strengthen the school and advance zero-emission vehicles now. For the GHG portion of the rule, NRDC urges EPA to finalize a rule that includes stringency levels that more accurately reflect the heavy duties ZEV penetration rates in Model Year 2027, and will be -- that accurately reflect that they will be significantly higher than the 1.5 percent of the market that EPA projects, especially since six states have already adopted ZEV sales requirements, and others are expected to follow.

The recent IPCC report also underscores the urgent need to zero out tailpipe pollution and accelerate the transition to zero-pollution vehicles in order to stave off the worst impacts of climate change.

In conclusion, anything less than the strongest NOx engine standard and a GHG tailpipe standard that accurately reflects Model Year 2027 ZEV penetration
fails to adequately address both the health crisis in communities burdened by freight traffic and the climate crisis that is being propelled by transportation emissions. Thank you.

MS. THOMPSON: Thank you for your comment. The next speaker will be Celerah Hewes. Celerah, you may now unmute, and please state your name and affiliation for the record.

MS. HUGHES: Thank you, and thank you so much for this opportunity to testify on this important issue. My name is Celerah Hewes -- C-E-L-E-R-A-H, H-E-W-E-S -- and I am a project manager for Moms Clean Air Force and a mother living in Albuquerque, New Mexico. I'm here today to support the EPA's proposal to strengthen pollution standards for heavy-duty vehicles. However, the proposed standards do not go far enough to protect our families from pollution caused by these vehicles.

Parents from across the country want to see a rapid transition to zero-emission trucks that reduce pollution and provide clean air for our children to breathe. Albuquerque has consistently received an "F" rating for ozone pollution or smog from the American
Lung Association's "State of the Air" report. Heavy-duty vehicles are major contributors to the creation of this pollution, and when NOx combines with heat and sunlight in the atmosphere, both of which are plentiful in the Southwest, they form smog, which is a lung irritant and an asthma trigger.

In our neighborhood, we are no stranger to heavy-duty vehicles. We are only a few blocks from one of the main bus routes in Albuquerque, as well as being within a couple miles of the interstate, the Albuquerque Airport, and Kirtland Air Force Base. All of this means increased traffic from heavy-duty vehicles, such as city buses, semi-trucks, and delivery vehicles. We also see numerous school buses driving down our street during the week as we are only a few blocks from a public school. My nine-year-old daughter often comments on the pollution we see from these vehicles as we walk around our neighborhood and is concerned about the impact it has on her and other children, as well as her grandparents, who are more likely to have health impacts from pollution.

In addition to smog, we are also concerned about
the greater climate impacts these vehicles have. Heavy-duty vehicles are a major contributor to the carbon pollution that is causing climate change, and in the Southwest, we are seeing that firsthand with increased drought, wildfires, and intense heat. Last summer, we had many days where the heat was so high or the pollution so intense that my daughter's summer camp could not play outdoors.

There's no time to waste. The trucks covered by this rule will be on the road for decades, so these vehicles must be cleaned up as soon as possible. Again, I ask that the proposed heavy-duty NOx and greenhouse gas standards be strengthened and finalized this year to protect the health of our communities. The EPA must enact standards that put the American truck and bus fleet on the road to 100 percent zero-emission sales by 2035. Thank you again for your time.

MS. THOMPSON: Thank you for your comment. The next speaker will be Don Ross. Don, you may now unmute, and please state your name and affiliation for the record.

MR. ROSS: Don Ross, National Waste and Recycling
1 Association. Good morning, ladies and gentlemen.
2 Thank you for this opportunity to testify on the
3 important issue of rulemaking for the Control of Air
4 Pollution for Heavy-Duty Engine and Vehicle Standards.
5 Like I said, my name is Don Ross, and I'm the vice
6 president of New Way Trucks, the largest privately-held
7 manufacturer of refuse- and recycling-related equipment
8 in the United States. I speak to you today as the
9 incoming chairman of the National Waste And Recycling
10 Association. NWRA is the trade association
11 representing the waste and recycling industry, an
12 industry that maintains the quality of American life by
13 protecting public health and the environment through
14 proper waste management.
15 Waste and recycling services impact every
16 residential, commercial, and industrial property
17 throughout the United States daily. Our members
18 collect, process, and manage waste, recyclables, and
19 organics. They operate and service large heavy truck
20 fleets, including the second and fifth largest
21 commercial fleets in the United States. And they
22 design, manufacture, sell, and service refuse and
recycling equipment. NWRA members, such as Waste Management for Public Services, GFL, and Waste Connections, along with over 700 other members, are the foundation of nationwide recycling services and waste diversion programs. So it's part of their DNA to support EPA's goals to make the environment a better place, including the cleanliness and efficiency of the vehicles these member companies produce and operate.

Clean air is critical to our members. However, we ask for careful consideration to any new regulation that may limit the advancement our members are already making to incorporate zero and near zero-emission vehicles into their fleets. An overly-burdensome, prescriptive standard could limit or slow the momentum transitioning to these new technologies, including battery electric vehicles. NRWA equipment manufacturers are already seeing an increase for orders for zero-emission vehicles. We simply ask that EPA instituted a technologically-feasible rule, and that EPA work with short-haul companies and manufacturers, like our members, to find viable alternatives.

NWRA member companies have a unique perspective
that allow our manufacturers and haulers to work
together to best understand impacts of new air
pollution regulations, specifically on the short-haul
truck industry, and we commend EPA for recognizing the
difference between long- and short-haul trucking as it
relates to pollution controls. For example, due to
frequent stops and starts in short-haul trucking,
certain pollution control devices have limited
effectiveness due to lower operating temperatures.
Waste and recycling drivers start and stop hundreds of
times each day, averaging less than 10 miles per hour,
equating to a run time of about 2,500 hours per year
instead of the proposed regulation's 4,500-hour run
time per year average. We ask that EPA calculate the
proposed warranty hours based on the maximum number of
driver hours allowed by the Federal Motor Carrier
Safety Administration's hour of service regulations.

Although our industry is rapidly moving the
adoption of zero-emission vehicles forward, our members
are faced with challenges. Battery electric technology
is heavier and compromises compliance with truck weight
restrictions. We ask that EPA work with the U.S.
Department of Transportation to amend weight limits on zero-emission vehicles, and by working together, EPA and the USDOT can minimize pollution without sacrificing cargo-carrying capacity. The higher cost of battery electric technology compared to current equipment is also challenging, and we ask EPA to assist with funding sources where applicable.

Again, thank you for this opportunity to speak on the important issue of pollution reduction from heavy vehicles that make this country run while protecting Americans. Thank you.

MS. THOMPSON: Thank you for your comment. The next speaker will be Tiffany Werner. Tiffany, you may now unmute, and please state your name and affiliation for the record.

MS. WERNER: Hi. Thank you. My name is Tiffany Werner, and I am a community science organizer for the Environmental Law and Policy Center, or ELPC, which is a Midwestern-based environmental nonprofit that advocates to protect public health and natural resources.

Chicago is a major crossroads resulting in a
constant barrage of heavy diesel truck traffic.

Chicago as well as cities with heavy concentrations of warehousing and manufacturing, did not experience improved air quality early on in the pandemic due to increased truck traffic from online orders and deliveries. Persistent diesel truck traffic is polluting the air and putting communities within 300 feet of roadways, and facilities, and workers the most at risk. Because of this, some communities have had the ability to step in to assess their own exposure to pollution by using hand-held monitors to trap particulate matter pollution, and by conducting truck counts. This is being done in an effort to help residents better understand how trucking can improve air quality and health — or sorry — how trucking can impact air quality and health.

Some intersections within environmental justice neighborhoods see as many as 11 trucks per minute and have noted that particulate matter rises to moderate and unhealthy levels when there is a higher volume of trucks. This is especially harmful because along with PM, these trucks are spewing NOx for which there are no
affordable, easy-to-use monitors that can allow residents to collect data and understand their levels of exposure.

As we know, trucks are a major source of lung-damaging air pollution. PM, NOx, and other criteria pollutants contribute to negative health outcomes and exacerbate pulmonary and respiratory illnesses, resulting in higher ER visits, increased number of missed work or school days, and premature deaths.

There are also large emitters of greenhouse gases which is driving the climate crisis and further amplifying the negative public health impacts. Stronger NOx standards will protect cities like Chicago and disproportionately-impacted environmental justice communities nationwide.

This is why ELPC strongly supports the EPA acting to strengthen the NOx and GHG greenhouse gas emission standards for heavy-duty trucks. However, we strongly urge you to take an additional step to protect communities and the climate from NOx emissions by promoting the adoption of electric zero-emission vehicles for our Nation's trucks and bus fleet. Thank
Thank you for the opportunity to testify.

MS. THOMPSON: Thank you for your comment. The next speaker will be Bryan Burton. Bryan, you may now unmute, and please state your name and affiliation for the record.

MR. BURTON: Hello. I apologize. My name is Bryan Burton. I'm the advocacy for clean air for the American lung -- advocacy manager for healthy air for the American Lung Association.

Our economy has become more and more accustomed to on-demand availability and delivery of consumer goods and commodities via a nationwide transportation network, largely dependent on heavy-duty diesel engines. This has been ever more true during the COVID pandemic. Unfortunately, the environmental and health burden of this system has not been and continues not to be equally distributed. Heavy-duty on-road engines are among the largest emitters of oxides of nitrogen, which result in increased levels of ozone and fine particulate matter. Particulate matter was named a known definite carcinogen by the International Agency for Research on Cancer, among a slew of other health
problems.

Lower-income groups have been determined to receive one-third more particulate matter exposure than their higher-income counterparts. Residents near urban areas and commercial centers are subject to low-speed traffic conditions, which are currently unregulated by EPA, while people living in lower-density communities benefit from the current rules governing a high-speed operation. In some neighborhoods, an estimated 20 percent of children have asthma, putting them at greater risk of health harm from air pollution. The South Bronx itself has been nicknamed "Asthma Alley" where hospitalizations operate at 5 times the national average and 21 times the rate of other New York City neighbors. These same trends are repeated in cities and industrial clusters throughout the Nation.

There is, however, a legacy of advancement in this area by EPA and a continued story of success, and the regulation of NOx and greenhouse gases are waiting to be written by the implementation of these proposed rules. Much like advances in agriculture and medicine, advances in science and technology once again promise
to relieve millions of Americans of the negative symptoms of poverty through stronger controls on these heavy-duty engines.

Since the turn of the 21st century, NOx emissions have been reduced in heavy trucks from 10.7 grams per brake horsepower-hour to .2 grams. Full adherence to the most ambitious goals of the NOx and greenhouse gas standards promises dramatically fewer emissions in the future for the diesel industry. These two rules taken together promise to multiply our previous admissions -- emissions reductions by a further 90 percent, the .02 grams per brake horsepower-hour. When you consider that new trucks built with the proposed Federal standards will, in many cases, replace older trucks built prior to 2010, the same trucks producing the majority of the harmful emissions, these potential health benefits and environmental benefits grow exponentially greater. This rule is a crucial step on the road to a zero-emissions future for heavy-duty vehicles, and we strongly emerge the proposed Option Number 1. Thank you very much.

MS. THOMPSON: Thank you for your comment. As a
1 reminder, if you are speaking today, you will receive a
2 notification on your screen that you are being promoted
3 to the role of panelist shortly prior to your speaking
4 time. You must accept that invitation to be able to
5 unmute when you are called to testify. This will also
6 allow you to turn on your camera, which we encourage
7 you to do. Speakers connected by telephone should
8 unmute their phones when called to testify. We ask
9 that speakers speak slowly and clearly so our court
10 reporter and interpreters can capture these proceedings
11 accurately. If you are having technical difficulties,
12 please send an email to public_hearing@abtassoc.com, or
13 call (919) 294-7712. If you are not registered to
14 speak, but you would like to, please send an email with
15 your name and phone number to
16 public_hearing@abtassoc.com, or call (919) 294-7712.
17
18 The next speaker will be Almeta Cooper. Almeta,
19 you may now unmute, and please state your name and
20 affiliation for the record.
21
22 MS. COOPER: I am not -- at least I don't appear
23 to be visible on the camera. Is there something I
24 should?
MR. CHARMLEY: Almeta, we can see you, and we can hear you.

MS. COOPER: Oh, okay. Thank you. Good morning.

My name is Almeta Cooper -- A-L-M-E-T-A -- Cooper -- C-O-O-P-E-R. I am a field manager with Moms Clean Air Force, which consists of about a million--and-a-half parents, caregivers, and supporters nationally who fight for clean air and to protect children's health.

I live in downtown Atlanta, Georgia in Fulton County where I've lived for seven years. Fulton County was again flagged with a failing grade by the American Lung Association in its 2021 "State of the Air" report, and in a city known for its monstrous traffic jams, I understand the importance of clean air. You will be hearing a common message from Moms Clean Air Force. We view EPA's proposal to set new standards to reduce pollution from heavy-duty vehicles and engines starting in Model Year 2027 as a welcome step forward. However, it doesn't go far enough.

EPA's proposal must be strengthened to better protect children. We need cleaner air for our children and our communities. Parents and caregivers across the
1 country want to see a rapid transition to zero-emitting trucks because the U. S. transportation sector is the largest source of air pollution and is responsible for 29 percent of all climate pollution. Even worse, heavy-duty vehicles are the second largest contributor in the transportation sector, second only to the largest contributor, passenger vehicles.

The specific reason that I am here today is that pollution from the transportation sector adversely affects health. As a mom and a member of my community, I care deeply about environmental justice, especially the connection between climate change and health equity for our most vulnerable populations. Climate change is a major contributor to the health crisis in African-American communities now, not in some distant future, when severe heat waves regularly threaten public health, preying especially on older adults, pregnant women, and low-income communities in Georgia and elsewhere. African Americans contribute 23 percent less to the adverse impact of climate change but bear 21 percent more of the harms when compared to other racial groups.
We need strong standards in place now to reduce dangerous climate pollutants. Across the country, African-American communities face more dangerously hot days, temperatures above 105 degrees Fahrenheit, than other communities. A study estimated that, on average, counties with higher numbers of African-Americans living in them had two to three more days of dangerous heat per year. That number could increase by 10 times by the Year 2050. African-Americans are twice as likely to die from dangerous heat compared to other groups.

In closing, I recommend that EPA go farther in reducing deadly NOx pollution and by rapidly phasing in zero-emission fleets. I urge EPA to strengthen the final standards to better protect children, people with asthma, older adults, and other vulnerable groups from the health harms of air pollution. Everyone should be able to breathe clean air. Thank you to the EPA and its staff for inviting public comment and permitting digital and remote testimony to allow for increased participation in these public hearings.

MS. THOMPSON: Thank you for your comment. The
next speaker will be Elizabeth Bechard. You may now unmute, and please state your name and affiliation for the record.

MS. BECHARD: Thank you for the opportunity to testify. My name is Elizabeth Bechard. My pronouns are "she" and "her," and I am a senior policy analyst at Moms Clean Air Force and a graduate student in public health. I'm from Durham, North Carolina, and I have two young children.

EPA's proposal is a welcome step forward, but it doesn't go far enough. The proposal must be strengthened to better protect children, people with asthma, older adults, and other vulnerable groups from the health harms of air pollution. As you've heard many of my colleagues from Moms Clean Air Force already name, parents across the country want to see a rapid transition zero-emitting trucks, and we need cleaner air for our children and our communities.

I grew up in a family that really, really loved vehicles. My dad is from Michigan, and my grandfather worked for the henry Ford Museum in Dearborn, Michigan where he curated an extensive collection of car and
truck radios. My mother says that when she met her
future in-laws for the first time, there were parts of
at least 20 different vehicles scattered across the
front lawn of their house, and I don't think she was
kidding. To marry into my dad's side of the family was
to marry the vehicles, too, but as I've grown up, I've
learned that the cars and trucks my dad and grandfather
loved are contributing directly to climate change. And
as a mom of two young kids, I'm deeply, deeply worried
about how climate change threatens our children's
future.

The largest source of climate pollution in the
U.S. is the transportation sector, responsible for 29
percent of all climate pollution, and within the
transportation sector, heavy-duty vehicles are the
second largest contributor. As the most recent IPCC
reports tell us, we are at a critical crossroads with
climate change, and we must do absolutely everything
within our power to reduce climate pollution as quickly
and efficiently as possible protect our children's
right to a livable future. America's love affair with
cars and trucks is written into the love stories of my
own family, but the only way for the love story to continue with a clear conscience is to make sure our vehicles aren't hurting our children. We need stronger standards to reduce deadline climate pollution from cars and trucks, and we need standards that put our national bus and truck fleet on a clear path to 100-percent, zero-emission, all-electric vehicles as quickly as possible. Please strengthen the final standards to better protect children, people with asthma, older adults, and other vulnerable groups from the health harms of air pollution. Everyone has the right to breathe clean air, and our children deserve to live on a healthy planet.

Thank you for the opportunity to testify.

MS. THOMPSON: Thank you for your comment. The next speaker will be Christopher Jennings. Christopher, we do not currently have you listed among our list of attendees. However, if you have joined under a different name, we would ask that you raise your hand at this time, and if you have joined by phone today, you can raise your hand by dialing star-9.

(Pause.)
MS. THOMPSON: We will move on to the next speaker. The next speaker will be Jill Aquino. Jill, we do not currently see you listed among our list of attendees. However, if you have joined using a different name, we would ask that you raise your hand at this time, and if you have dialed in, you may raise your hand by dialing star-9 on your phone. I will promote you to the role of panelist now. When you are ready, you may unmute, and please state your name and affiliation for the record.

MS. AQUINO: Good morning. My name is Jill Aquino -- J-I-L-L, A-Q-U-I-N-O. I'm a representative of an ANHE, Alliance of Nurses for Healthy Environments. My 20-plus years as a pediatric nurse has made it very apparent to me that our children's health continues to decline at alarming rates on a daily basis due to air pollution and poor air quality. I spoke to Congress about this very topic on September 14th, 2021, in front of our Nation's Capitol about why bold investments in electric school buses is greatly -- will greatly improve the health of our Nation's children, and especially those in marginalized communities.
As a former school nurse of 16-and-a-half years, I worked on the front lines of helping children facing environmental health harms. I witnessed an alarming rate in asthma, severe allergies, and obesity in my student body. All three of these are interconnected. When I resigned from my nursing school career at the end of June 2021, I noted that there were well over 100 students in my care who were trained in self-administration of either their asthma inhalers or epi pens, or a combination of both. This number was quite alarming to me, and I feel it's totally unacceptable.

Asthma is exacerbated by poor air quality and so are severe allergies. Many do not understand, however, how overweight or obesity are linked to unhealthy air. A recent study showed that high levels of air pollution lead to childhood obesity while there's also a greater risk for asthma and obesity combined. There is a 79-percent greater chance for the development of asthma in children where air quality is poor, and this is especially common in low-income and marginalized communities. We all know that air pollution is a major public health concern. I even noted that student
athletes that were under my care and had well-controlled asthma had a very difficult time exercising outdoors on days where poor -- where air quality was poor and the heat index was high. Setting stringent standards to reduce pollution from heavy-duty vehicles and engines are of the utmost importance, in my opinion, as a pediatric nurse and former school nurse.

Significant reductions in emissions of smog- and soot-forming nitrogen oxides from heavy-duty gasoline and diesel engines and setting more stringent greenhouse gas standards for commercial vehicles cannot come soon enough.

The health of our Nation and the health of our Nation's children is on a precipice. We need to eliminate air pollution completely. We would never eliminate only a portion of a poison that was making our child sick. We would eliminate 100 percent of that poison. Thus, eliminating toxins that diesel-fueled vehicles emit is essential to improving our children's asthma rates, obesity rates, and severe allergy rates. This will improve their lungs, their airways, their hearts, their blood vessels, and greatly decrease
inflammation in the body. Thank you for allowing me to speak today.

MS. THOMPSON: Thank you for your comment. The next speaker will be Jed Mandel. Jed, you may now on you, and please state your name and affiliation for the record.

MR. MANDEL: Thank you, and good morning. I'm Jed Mandel speaking today on behalf of the Truck And Engine Manufacturers Association. Our members manufacture the medium and heavy-duty engines and vehicles that are the subject of today's rule. EMA and its members support the adoption of a stringent, single-step reduced NOx standard, a low load cycle, enhanced in-use test procedures, and cost-effective improvements to extended emission warranty and useful life periods. We also support a program that can be a successful bridge to a zero-emission commercial vehicle future, for which EMA members are investing billions. And we support EPA's proceeding with the Phase 3 greenhouse gas rule. We are significantly aligned with and supportive of EPA's goals.

That said, EPA's proposed rule in its current form
is not technologically feasible, cost effective, or customer acceptable. As a result, critically-important fleet turnover will be delayed, and customers will keep their higher-emitting trucks longer. That not only will delay EPA's anticipated environmental benefits, it also would cause environmental backsliding which would be especially harmful to disadvantaged communities, and which would undermine environmental justice goals that we support. Further, a poorly-designed final rule will cause market disruptions, will delay or undermine the ability of manufacturers to recoup their investment in developing compliant technologies, and, worse, could have significant adverse impacts on the economy and jobs. Finally, a poorly-designed final rule could force manufacturers to divert resources needed for zero-emission vehicle and greenhouse gas research and development.

We are committed to working with EPA and other stakeholders to ensure adoption of a final rule that is appropriately stringent, that will address the Nation's needs for reducing heavy-duty, on-highway diesel engines, NOx contribution to ozone formation, and that
will still provide our customers a full range of durable, reliable, and affordable products. We believe that Option 2 provides a starting point for achieving those goals, although modifications clearly are needed, but I can tell you right now that Option 1 simply is not the answer. Option 1's stringency goes beyond the detection capability of available technology and will result in false failures and recalls for otherwise compliant products. Manufactures, in turn, will be forced to invest to try to mitigate those risks, thereby further diverting resources from ZEV and GHG development.

Finally, we are surprised and disappointed that EPA is considering reopening the Greenhouse Gas Phase 2 Final Rule. As you know, EMA and its members defended that rule and opposed its being reopened under the previous administration to make it less stringent. We similarly are opposed to it being reopened now to make it more stringent. Our members count on the stability and certainty of EPA's final rules. That is the basis for their investing capital and making business plans for compliance. Reopening Phase 2 not only undermines
those investments and plans but also would set of horrible precedent that future administrations can change rules they don't like, thereby eviscerating regulatory certainty and stability.

Thank you. I appreciate the opportunity to comment.

MS. THOMPSON: Thank you for your comment. As a reminder, if you are speaking today, you will receive a notification on your screen that you are being promoted to the role of panelist shortly prior to your speaking time. You must accept that invitation to be able to unmute when you are called to testify. This will also allow you to turn on your camera, which we encourage you to do. Speakers connected by telephone should unmute their phones when called to testify. We ask that speakers speak slowly and clearly so our court reporter and interpreters can capture these proceedings accurately. If you are having technical difficulties, please send an email to public_hearing@abtassoc.com, or call (919) 294-7712. If you are not registered to speak but would -- but would like to, please send an email with your name and phone number to
The next speaker will be Brooke Petry. Brooke, you may now unmute, and please state your name and affiliation for the record.

MS. PETRY: Hi. My name is Brooke Petry. I'm a field organizer for Moms Clean Air Force, and I live with my family in South Philadelphia. I'm speaking today on behalf of myself, my family, and our nearly 100,000 members across Pennsylvania in support of the EPA's proposal to strengthen pollution standards for heavy-duty vehicles.

While the EPA's proposal is a welcome step forward, it doesn't go far enough. The proposal must be strengthened to better protect children, people who live with asthma, older adults, and other vulnerable groups from the health harms of air pollution. In order to mitigate the dangerous health impacts of the climate crisis and of air pollution, we need a rapid transition to zero-emitting trucks.

The children in our communities need clean air to breathe. The largest source of climate pollution in
the U.S. is the transportation sector, responsible for 29 percent of all climate pollution. Within the transportation sector, heavy-duty vehicles are the second-largest contributor at 23 percent. Pollution from the transportation sector accelerates climate change and also affects our health. For those who have asthma, tailpipe pollution can trigger asthma attacks. That's a daily challenge we live with since we walk everywhere.

Here in Philadelphia, the childhood asthma rate is more than double the national average, and we have the very unfortunate distinction of being one of the top 10 asthma capitals in the United States. Children, even at rest, have an increased breathing rate. This makes them even more vulnerable to the harms of air pollution because they take in more pollutants per pound of body weight than the average adult. Over a quarter of children ages five to 13 in Philadelphia have asthma. We know that increased exposure to these pollutants can cause and exacerbate childhood asthma, stunt long growth, and cause cardiovascular problems. Breathing difficulties in our children mean more doctor visits
and more missed days of school, and can also have lifelong health implications.

Zero-emission electric trucks are the best available technology to both reduce harmful NOx and climate pollution. The EPA can and should use these proposed truck standards to accelerate the transition to electric trucks to put the country's medium- and heavy-duty fleets on a pathway to 100-percent, zero-emission electric vehicles as quickly as possible.

These standards present an important opportunity to address the climate crisis, to improve public health, and to protect our children and the planet they will inherit. Therefore, they must go farther in reducing fleet pollution, and they must put our national bus and truck fleet on a clear path to 100-percent, zero-emission, all-electric vehicles as quickly as possible.

Thank you for the opportunity to testify today.

MS. THOMPSON: Thank you for your comment. The next speaker will be Shaina Oliver. Shaina, we do not currently see you listed among the list of attendees. However, if you have joined using a different name, we would invite you to raise your hand at this time, and
if you have dialed in today, you may raise your hand by
dialing star-9 on your phone.

(Pause.)

MS. THOMPSON: We will move on to the next
speaker. The next speaker will be Timothy Cronin. You
may now unmute, and please state your name and
affiliation for the record.

MR. CRONIN: Good morning. My name is Tim Cronin.
I am the Massachusetts director of climate policy for
Health Care Without Harm U.S. Thank you for the
opportunity to testify. Health Care Without Harm is an
international nonprofit founded in 1996 that works to
help healthcare systems address the environmental
footprint of the sector, become anchors for community
resilience, and advocate for environmental health and
justice.

I'd like to thank the EPA for acting swiftly on
proposing the Clean Truck Rule and urge you to create
the strongest possible limits on heavy-duty vehicle
pollution. Here in Massachusetts, these standards will
provide much-needed relief for exposure to diesel air
pollution, especially for those communities who live
nearest to large roads, highways, and other similar infrastructure where the pollution burden from these vehicles is especially high. Additionally, to successfully reduce healthcare transportation greenhouse emissions and protect patient health, it's essential that the EPA implement strong, heavy-duty vehicle NOx and greenhouse gas standards.

According to an actual study from NRDC and USCS in 2021, within Massachusetts in the Southern region, commercial trucks and buses account for only six percent of vehicles on the road but have an outsized impact on public health, and are responsible for forty-eight percent of emissions of smog-forming nitrous oxides, and 41 percent of fine particulate matter from those vehicles. The largest of these air quality impacts of these emissions occur in underserved and overburdened communities near highways and transportation depots, and among black people and other people of color, resulting in persistent elevated pollution and exposure to harms of health.

The Agency's minor adjustments to the existing Phase 2 greenhouse gas standards are too weak and
reflect neither the urgency of the climate crisis nor
the rapid advancement in zero truck vehicle technology.
Vehicle manufacturers have the technology to meet
stronger standards, and many recent analyses have shown
that they can do this cheaper in a way that operates
within the time frames of these standards. These
proposed changes will not accelerate the deployment of
zero-emission trucks. In fact, the market is moving
faster. As written, the rules would yield about 1.5
percent zero-emission truck sales by 2027, yet existing
state policies already deliver three times that within
the time frame. The trucks regulated by this rule will
be on the road for decades, so these vehicles must be
cleaned up as soon as possible. EPA must enact
standards that put the American truck and bus feet on
the clear roadway to 100-percent, zero-emission sales
by 2035, and the rule must be finalized this year.

Again, thank you for your time and for providing
these comments. Thank you.

MS. THOMPSON: Thank you for your comment. The
next speaker will be Hazel Chandler. Hazel, you may
now unmute, and please state your name and affiliation
for the record.

MS. CHANDLER: Hi. Thank you for the opportunity to testify. I'm Hazel Chandler, field organizer for Moms Clean Air Force living in Phoenix. I'm having difficulty getting my camera on.

MS. THOMPSON: We can see you now.

MS. CHANDLER: Oh, okay. Thank you. My camera is on now. I'm Hazel Chandler. I'm a field organizer for Moms Clean Air Force, and I support the EPA's proposal as a welcome step, but I don't think it goes far enough. The proposal must be strengthened to better protect our children, people that are living with asthma, Redacted for PII, and other vulnerable groups from air pollution. For the sake of the children, we want to see rapid transition to zero-emitting trucks. We need cleaner air for our children and our communities.

I'm a 76-year-old grandmother, mother, and great grandmother, and I've personally been impacted by Phoenix air pollution for most of my adult life, resulting in progressive lung damage, cancer, difficulty breathing, and asthma attacks. My own personal experience with air pollution led me to direct
the Maricopa County Asthma Coalition in the early 2000s. In this role, I witnessed the toll that air pollution takes on our children. Working with schools in the Phoenix low-income neighborhoods, I witnessed the struggles so many children experience just trying to breathe.

According to the American Lung Association, we have consistently scored an "F" on our air quality, and we are the seventh most polluted city right now in the -- in the Nation. In many of the schools located in the most polluted parts of the city and along the transportation corridors, we have found asthma rates among four-year-old children between 20 and 25 percent, and along the I-17 corridor, there were schools that had rates that were in the 30 to the 35 percent of the children. This is totally unacceptable.

After extensive study of the issues and working on with the legislature community, partners, and health officials, I realized that heavy-duty vehicles are the major contributor to air pollution and cannot be ignored. Diesel engines emit deadly particle pollution, and NOx combines with heat and sunlight to
cook ozone that is a major lung irritant and asthma trigger. I watch children struggle to breathe near diesel trucks and buses.

I, too, felt that elephant on my chest as well. The air that I breathe has damaged my health, and it’s a contributing factor to inflammation and immune damage that led to the fact that I have been living with advanced stage cancer for the last 10 years. I shudder to think the long-term damage that we are doing for our babies and our children. What will their lives be like with the cumulative impacts of growing up in toxic air?

For the sake of the children and myself, I ask you, be bold. Enact standards that go father in reducing NOx pollution and put our national bus and truck fleet on a clear path to 100-percent, zero-emissions -- all electric vehicles -- as quickly as possible. Everyone has the right to breathe.

I want to thank the EPA staff for the opportunity to testify. Think about those of us that are struggling to breathe and act boldly. Thank you.

MS. THOMPSON: Thank you for your comment. The next speaker will be Shaina Oliver. Shaina, you may
now unmute, and please state your name and affiliation for the record.

MS. OLIVER: Thank you. My name is Shaina Oliver. Thank you hearing my comments today. My name is Shaina Oliver. I'm a field organizer for Moms Clean Air Force and EcoMadres, Colorado of 40,000 members and one million strong nationally: parents, guardians, caregivers united in fighting for our children's right to breathe clean air and have a safe environment.

Importantly, I'm an indigenous mother of four kids, family of six. My children and I are descendants and survivors of the genocide known as the Indian Removal Act, known to the Dene as the Long Walk of the Navajo. As indigenous people we know environmental harms are embedded and inflicted by our laws, policies, and governance, and as Dene, my people have seen our wealth plans and health become degraded due to these environmental harms.

Living in Denver, Colorado, we are one of the top 10 states that have failed in our air quality for ozone smog non-attainment standards, according to the American Lung Association, and population growth and
increased traffic has contributed to poor air quality, putting over 434,000 asthmatic recipients and myself at risk of asthma attacks, stroke, and premature death. Indigenous black and brown communities are at higher risk to asthma, diabetes, cancer, heart disease, leukemia, respiratory disease, adverse birth outcomes, and premature death than white counterparts, not to mention that when we leave the reservations, we are redlined, segregated, and/or gentrified.

Because we are people of color, we are systematically pushed to live near highways and in industrial zoning areas that receive a hefty amount of truck traffic and particulate matter pollution, inflicting environmental harms on our communities, especially our children. We need to support zero-emission standards and strengthen rules to reduce deadly NOx pollution, and they must put our national bus and truck fleet on a clear path to 100-percent, zero-emission, all-electric vehicles as quickly as possible. The bottom line: we need to strengthen the final standards to better protect vulnerable communities and members' maternal health, babies and
children's health, ensuring in every breath and every community.

Thank you.

MS. THOMPSON: Thank you for your comment. The next speaker will be Molly Rauch. Molly, you may now on mute, and please state your name and affiliation for the record.

MS. RAUCH: Hi. Can you hear me?

MS. THOMPSON: We can.

MS. RAUCH: Great. This is Molly Rauch -- M-O-L-Y, R-A-U-C-H -- and I am the public health policy director with Moms Clean Air Force. Thank you for the opportunity to testify today. I live with my family in Washington, D.C.

EPA's proposal is a welcome step forward, but as you've heard from many of our members and organizers, it doesn't go far enough. Moms and dads across the country want a rapid transition to zero-emitting trucks because we need clean air for our children and our communities. You are hearing from dozens of Moms Clean Air Force volunteers, organizers, and staff from all across the country today. We support stronger tailpipe
emission standards, and we know that air pollution from heavy-duty vehicles can make diseases worse.

For any child with asthma any adult with COPD or lung cancer, anyone with cardiovascular disease with a weakened immune system, air pollution from heavy-duty vehicles makes your disease worse. If you're pregnant, if you're an infant or a child, if you're an older adult, you are especially vulnerable to air pollution.

And despite overall progress in cleaning up our Nation's air over the past several decades, 40 percent of Americans live in places where the air is unhealthy to breathe, according to the American Lung Association.

Transportation is a major contributor to that unhealthy air, and especially the pollution from heavy-duty vehicles.

Here in D.C. where I live, we have a problem with high ozone days. D.C. has a failing grade for ozone. My teenage boys, whose lungs are still developing -- into their 20s their lungs are still developing, so even as teenagers, their lungs are still developing. They are athletes. They often spend their afternoons and weekends outside breathing in high levels of a
pollutant that makes their lungs vulnerable to
infection and interferes with normal lung development. And as a parent, I don't accept the current levels of
air pollution, and I think we need to be doing a lot
more for all parents and all family members of
vulnerable people to reduce transportation pollution.

On the NOx portion of the proposal, Proposed
Option 1 is insufficient. It should be strengthened.
Option 1 would result in higher emissions of smog- and
soot-causing NOx pollution than California's Heavy-Duty
Omnibus Rule. The California rule should be the bare
minimum baseline for smog and particle pollution
reduction goals, and EPA should go farther than that.
On the greenhouse gas portion of the rule, EPA's
proposal does not reflect the urgency of the climate
crisis, and it does not, importantly, reflect the rapid
advancement in zero-emission truck technology. The
proposed standards will not accelerate the deployment
of zero-emission electric trucks. The market is moving
closer than what these rules are predicting.

So we urge you to strengthen the standards both in
the NOx portion and the greenhouse gas portion, and,
specifically, we want a clear path to 100-percent zero emission, all-electric vehicles as quickly as possible. This will better protect children, people with asthma, older adults, and other vulnerable groups from the health harms of air pollution, because, as you've heard several times today, everyone has the right to breathe clean air.

I want to thank you for the opportunity to testify and especially the opportunity to do that in a virtual way, which makes this more accessible to more people from all parts of the country. Thank you.

MS. THOMPSON: Thank you for your comment. As a reminder, if you're speaking today, you will receive a notification on your screen that you are being promoted to the role of panelist shortly prior to your speaking time. You must accept that invitation to be able to unmute when you are called to testify. This will also allow you to turn on your camera, which we encourage you to do. Speakers connected by telephone should unmute their phones when called to testify. We ask that speakers speak slowly and clearly so our court reporter and interpreters can capture these proceedings.
accurately. If you are having technical difficulties, please send an email to public_hearing@abtassoc.com, or call (919) 294-7712. If you are not registered to speak but would like to, please send an email with your name and phone number to public_hearing@abtassoc.com, or call (919) 294-7712.

The next speaker will be Elizabeth Hauptman. Elizabeth, you may now unmute, and please state your name and affiliation for the record.

MS. HAUPTMAN: Hello. Thank you. My name is Elizabeth Hauptman, and I'm with Moms Clean Air Force. My name is Elizabeth Hauptman. On behalf of Moms Clean Air Force and our nearly 31,000 members throughout Michigan, I'm asking the EPA to adopt, strengthen, and finalize the proposed heavy NOx and greenhouse gas standards. These rules must be strengthened this year to protect the health of our communities. The EPA must enact standards that put the American truck and bus fleet on a clear roadway to 100-percent, zero-emission sales by 2035.

Pollution harms all of us, but it disproportionately impacts children. Redacted for PII
asthma, and his disease is made worse by air pollution. Because of him and over 166,000 children in Michigan who suffer from asthma, we need tougher air quality standards to protect our children from the Nation's largest source of carbon pollution: tailpipe pollution. Michigan has some of the worst asthma rates in the country, according to the American Lung Association. Children are more impacted by air pollution for many reasons. They breathe more rapidly than adults, spend more time outdoors, and are more physically active than adults, thus exposing their still-developing lungs to more air pollution. Kids are also smaller, living closer to the ground than the rest of us, standing just about tailpipe high where concentrations of pollution from these trucks and buses is coming directly at them.

Pollution can lead to increased asthma rates in kids, and poor air quality can exacerbate asthma, causing more asthma attacks, resulting in millions of missed school days for kids across the country, and often missed workdays for adults. In the summertime, we need to look at our weather app to see if it's safe
for our son to play outdoors. Redacted for PII

Furthermore, childhood asthma rates are significantly higher for children of color. Latino children are twice as likely to die from asthma, and black children are 10 times more likely to die from asthma than white non-Hispanic kids. These statistics make it abundantly clear that strong clean car standards and a shift to zero-emission vehicles is an environmental as well as a social justice issue. Our children deserve justice in every breath.

Strengthening truck and bus emission standards are the best tool we have in our toolbox to fight climate change. This urgent crisis is not something that will see impacts someday in the distant future. We are seeing these climate impacts right now with extreme weather events, like floods, storms, and heat waves.

Addressing the pollution from heavy trucks and bus
transportation sector to fight climate change cannot wait. Eliminating emissions from heavy-duty vehicles, especially through rapid transition to zero-emission vehicles, is essential for strides towards desperately-needed cleaner air in these communities and a safe climate.

Zero-emission trucks are the best available technology to both reduce harmful NOx and climate pollution. EPA can and should use these truck standards to accelerate the transition to electric trucks, to put the country's medium and heavy duty fleets on the pathway to 100-percent, zero-emission electric vehicles as quickly as possible. Michiganders need strong standards to reduce air pollution and protect our health, especially where the communities of color will bear the brunt of the health impacts from truck and bus pollution.

Thank you, and I apologize for my dachshunds.

MS. THOMPSON: Thank you for your comment. The next speaker will be Ana Rios. Ana, you may now unmute, and please state your name and affiliation for the record.
MS. RIOS: Good day. My name is Ana Rios, and I am the field organizer with Moms Clean Air Force in Albuquerque, New Mexico. I have three children, and like any mother, they are my priority. And I want the best for them, and I want them to grow up in a healthy community free of pollution. EPA's proposal to limit truck pollution is a welcome step forward, but it doesn't go far enough. Moms and dads across the country want to see a rapid transition to zero-emitting trucks. We need cleaner air for our children and our communities.

My family and I live in the San Jose neighborhood in Albuquerque, which is well known in the city as a low-income area where people of color and Latino community live, and, most notably, because it is surrounded by pollution. My house is located a mile away from a highway interstate, nearby, the railroad, and, even worse, a few steps away from what used to be an oil transfer station and is now a heavy-duty truck company. This is why I am here today, because my family and I are part of a community highly impacted by climate pollution caused by transportation, and I am
very concerned about how these circumstances may affect my children's development and their future with transportation being responsible for 29 percent of all climate pollution.

As a family concerned about the climate conditions we are living in, we installed a photovoltaic energy system in our house, and we use an electric vehicle to reduce the environmental impact they produce. But we are only one family, and there is no time to waste.

EPA must enact the standards that put the American truck and bus fleet on a clear roadway to 100 percent, zero-emissions sales by 2035. Eliminating emissions from heavy-duty vehicles, especially through a rapid transition, to zero-emission vehicles is essential for making strides toward desperately-needed cleaner air in these communities and safer climate. Please strengthen the final standards to better protect children, people with asthma, older, and other vulnerable groups from health harms of air pollution.

Everyone has the right to breathe clean air. I am doing my part to take care of the environmental crisis. What are you doing about it? Thank you so much for the
opportunity to give my testimony today.

MS. THOMPSON: Thank you for your comment. The next speaker will be Sarah McBride. You may now unmute, and please state your name and affiliation for the record.

MS. MCBRIDE: Thank you for this opportunity to testify. My name is Sarah McBride, spelled S-A-R-A-H, M-C-B-R-I-D-E, and I'm a staff member of Moms Clean Air Force. I'm from Falmouth, Massachusetts, which is a small town on Cape Cod. I'm testifying today because EPA's proposal to strengthen pollution standards for heavy-duty vehicles is a welcome step forward, but it doesn't go far enough. Stronger standards than those proposed would better protect children, people with asthma, older adults, and other vulnerable groups from the health harms of air pollution, and would protect our future by cutting climate pollution, which is fueling the climate crisis.

Climate change is a significant threat to my home in Falmouth. Scientists say that Cape Cod and the surrounding islands could be submerged in 50 years due to sea-level rise. Our allergy seasons have already
gotten longer, and two years ago, my family had to finally buy air conditioners to cope with the increasingly hot summers. But another less visible impact of climate change is what concerns me most in this -- in the present: an increase in tick-borne disease.

Lyme disease, which is carried by ticks, is considered a public health crisis on Cape Cod because there are so many ticks here. I've seen firsthand how devastating this disease can be. One of my friends in high school developed meningitis as a complication of Lyme disease and had to miss the first half of our sophomore year to recover. Another person I know here who had Lyme disease went from biking 40 to 50 miles a day to walking with a crutch because the inflammation caused by the disease led to such severe joint pain. It's terrifying that climate change is making this disease is even more common in my community.

The largest source of climate pollution in the U.S. is the transportation sector, which is responsible for 29 percent of all climate pollution. Within the transportation sector, heavy-duty vehicles are the
second largest contributor at 23 percent. I urge EPA
to finalize standards that significantly cut climate
pollution from this highly-polluting sector. This will
help us avoid the worst consequences of the climate
crisis, protecting my home here on Cape Cod, and
protecting the health of the people that live here.

Thank you for this opportunity to testify.

MS. THOMPSON: Thank you for your comment. The
next speaker will be Daniel Gage. Daniel, we do not
currently see you listed among our list of attendees.
However, if you have joined using a different name, we
would ask that you raise your hand at this time. And I
believe I saw you raise your hand, so I will promote
you to the role of panelist now. When you're ready,
you may unmute, and please state your name and
affiliation for the record.

(Pause.)

MR. GAGE: How's that?

MS. THOMPSON: We can hear you.

MR. GAGE: Okay. Good. Sorry about that. I am
Daniel Gage, president of NGVAmerica, a national trade
association dedicated to the decarbonization of the
transportation sector through the increased use of
gaseous fuels, including renewable and conventional
natural gas, and eventually hydrogen. Our 200-plus
sustainability solutionist members support the goal of
the U.S. EPA's clean trucks plan to decarbonize the
medium- and heavy-duty transportation sectors as
quickly as possible, while greatly reducing harmful
criteria emissions that contribute to poor air quality
and Federal ambient air standards non-attainment.

Speakers preceding me today expressed the urgency
of acting now. A hundred and thirty-five million
Americans awoke this morning in neighborhoods with
dangerously dirty air, more than four of every 10
Americans. My 200-plus members have a solution that is
making a clean air difference as we speak, one that
already meets the certified stricter standards proposed
in this rulemaking. Ultra-low NOx, medium- and heavy-
duty natural, gas-powered trucks and buses are on our
roads today and perform at levels that are 95 percent
below the current Federal NOx standard and 98 percent
below the Federal particulate matter standard. And
when fueled by renewable natural gas recovered from
landfills, wastewater treatment facilities, and food and agricultural waste digesters, these trucks and buses produce greenhouse gas emissions that are up to 500 percent lower the diesel-powered vehicles, and deliver carbon neutral or carbon-negative emissions in even the most specialized real-world applications.

The latest data from California's Low Carbon Fuel Standard Program demonstrates how clean and low carbon these heavy-duty, high-fuel use vehicles truly are. According to the latest California Air Resources Board data, the average carbon intensity of bioCNG sold in California in the third quarter of 2021 was negative 62.7 grams of carbon dioxide equivalent per mega-joule, making renewable natural gas the lowest of any in-use motor fuel, including fully-renewable electric from wind or solar. Large national fleets, like Amazon, UPS, PepsiCo, Frito-Lay, and waste management, are quickly transitioning their heavy-duty fleets to RNG fuel cabs in box and delivery trucks in addition to their last mile EV investments.

This administration's decarbonization and clean goals will only be achieved by focusing on a multi-
technology approach that includes cost-effective, carbon-negative solutions, like RNG trucks, that can begin accruing and compounding significant clean air and carbon reductions right away. We support the setting of more stringent standards but point out that tighter standards do not necessarily translate to significant reductions in emissions or cleaner air. Other factors, such as vehicle miles traveled, life of vehicles in service, fleet turnover, and where and how vehicles are deployed, are also very important.

We at NGVAmerica believe that climate change is cumulative: the longer we wait, the harder it gets to solve, and no single solution exists that will magically fix everything. A successful green transportation strategy is one that all of America can buy into and from which every American, urban to rural, can benefit and participate. Flexibility, commercial availability, scalability, and affordability are key. Early reductions now will result in compounded emissions benefits later. Start now. RNG-fueled vehicles are how. And we ask that you include provisions in this rule that will support, encourage,
and incentivize the adoption of RNG-fueled fuel trucks and buses. We look forward to submitting detailed written comments next month, and I appreciate your time. Thank you.

MS. THOMPSON: Thank you for your comment. The next speaker will be Elizabeth Brandt. You may now unmute, and please state your name and affiliation for the record.

MS. BRANDT: Hello. My name is Elizabeth Brandt. I'm with Moms Clean Air Force. Hi. Thank you for listening to my testimony today. I am a social worker and a national field manager for Moms Clean Air Force. Moms Clean Air Force is an organization of more than one million parents across America who are taking action against air pollution and climate change.

Thank you for following through on President Biden's promise to confront pollution from heavy-duty vehicles by proposing this rule. However, the rule's two options, respectively, a bare-minimum floor for regulations and a weak industry-friendly option that's full of giveaways to the worst-polluting truck companies. The EPA must advance the more health
protective option in accordance with its mission to protect human health and the environment, and eliminate loopholes for companies. However, this can only be a first step forward to greater production from truck pollution.

These days I live in Maryland, but I've lived most of my life in Tacoma and Seattle, Washington. Both cities are major ports with tremendous numbers of trucks traveling through the center of the cities. Our West Seattle home was just over the hill from the Port of Seattle, and I worked at the Office of Indian Child Welfare, less than half a mile from one of the main gates for the Port of Seattle. It is not a coincidence that a state child welfare office, primarily dedicated to serving indigenous families, is so close to a major source of truck pollution. Many social service offices are located around truck routes in Seattle and in other cities. Allowing economics and race to push people into pollution hotspots shows how little we regard the health and overall value of some of our fellow Americans.

When I worked at the office of Indian Child Welfare.
Welfare, I would often take walks with my co-workers in effort to stay fit. Several of us, including me were pregnant during these years. The air outside the office was manifestly unhealthy. A steel recycling plant is on the next block, and beyond it is the backup of trucks waiting to enter the port. The air smells industrial of diesel and metal, and sometimes I would get a headache after being outside. I lived over the hill where the pollution was much less pervasive. Not everyone gets to leave these sources of pollution at the end of the day, though. Many lower-income communities in Seattle and Tacoma are directly on the truck routes on I-5, a major trucking corridor. Schools like Maple Elementary are right next to the interstate.

The Puyallup tribal lands are deeply impacted by pollution around the Port of Tacoma, and the Port of Seattle is on unrecognized Duwamish land. In these neighborhoods, historically unjust pollution seems to be its own rationale for allowing pollution to continue. The EPA can show solidarity with the strong indigenous nations who continue to fight to restore
these port areas by enacting the most health-protective truck standards. You can show my colleagues, who continue to work at the Office of Indian Child Welfare, that you value their health and the health of the people they serve. You can stand up for the health of patients served by the dialysis clinic in the same building.

EPA must enact standards that put the American truck and bus fleet on a clear roadway to 100-percent, zero-emission sales by 2035. Thank you, and my daughter, Valencia Bednar, is next.

MS. THOMPSON: Yes. Thank you for your comment.

The next speaker will be Valencia Bednar. You may now on mute, and please state your name and affiliation for the record.

MS. VALENCIA BEDNAR: Hi. My name is Valencia Bednar, and I'm nine years old. I'm from Seattle, Washington, originally, but I went across the United States to still live here now. I'm joining you today because it is important to me to have a healthy climate and less pollution from trucks. Some kids have health problems, and truck pollution makes that worse. I just
I want the EPA to protect us from truck pollution so we can have clean air and a healthy climate.

My family lives close to busy roads, and truck pollution isn't good for us. Here's a triangular park we walk in and ride our bikes and skate around, but the trucks and some buses make it harder. Trucks create a lot of pollution and are a big part of the climate change problem. We need the EPA to help trucks and buses pollute less. This month, we started having an electric school bus to take us to school sometimes. It's really different on days when an electric bus picks us up. It smells great, it's quieter, and we breathe easy when we stand next to it. It smells like new shoes. When we line up to a diesel bus, it's hard to breathe, and I get -- and I need to cough sometimes. It's worse because there's so many buses together at school when we were getting ready to leave. It's definitely a pollutant.

Kids want (inaudible) trucks and buses so we can breathe and play better. I'm worried about skiing because I really like to ski. Because we have a lot of climate change, I may never be able to ski. Also,
climate change is a problem for us in Maryland in the summer, and field hockey in the summer, it gets really hot, and we can't play as well when it's too hot. We have really strong rainstorms. And so I'd just say climate change makes rainstorms worse. I hope diesel trucks and buses go away and we have electric ones instead so many -- so my family can breathe. Please create the strongest truck pollution rules you can to keep kids healthy. Please tell Russ and Brian hi for me. Thank you.

MS. BEDNAR: And, Natalia, did you want to say something? This is Natalia Bednar. She's next. Do you want to talk about what you made?

MS. NATALIA BEDNAR: I made a picture that has me (inaudible) -- I made this truck that (inaudible) of the truck, and then -- and stop truck pollution.

MS. BEDNAR: Thank you.

MS. NATALIA BRANDT: Thanks.

MS. THOMPSON: Thank you for your comments. As a reminder, if you are speaking today, you'll receive a notification on your screen that you are being promoted to the role of panelist shortly prior to your speaking
You must accept that invitation to be able to unmute when you are called to testify. This will also allow you to turn on your camera, which we encourage you to do. Speakers connected by telephone should unmute their phones when called to testify. We ask that speakers speak slowly and clearly so our court reporter and interpreters can capture these proceedings accurately. If you are having technical difficulties, please send an email to public_hearing@abtassoc.com, or call (919) 294-7712. If you are not registered to speak but would like to, please send an email with your name and phone number to public_hearing@abtassoc.com, or call (919) 294-7712.

The next speaker will be Susie Robertson. Susie, you may now unmute, and please state your name and affiliation for the record.

MS. ROBERTSON: Hi. I would like to thank you for the opportunity to testify. My name is Susie Robertson, and I am a member of the Moms Clean Air Force. I am from Brighton, Michigan, so slightly between Lansing and Detroit, and I am a mom of three. My kids are seven, nine, and 12. I am a middle school
teacher. I am a middle school counselor. I work in a school, and that is enough for me to know that I have to do everything in my power for my kids, not my kids, but your kids. I call my own students -- I have 450 on my caseload, and they are my kids, so I am here speaking on behalf of them because they deserve to have me speak up for them.

The EPA's proposal is definitely a welcomed step forward, but it certainly does not go far enough. As a former science teacher, I have studied decades and decades of data with my students, and we are not moving fast enough to make really bold changes for our world, and our earth, and our children, and your children.

So this proposal has to be strengthened. It needs to better protect our children. It has to have -- better protect people with asthma, older adults, anyone who's vulnerable. I think of people with COVID, and they've got this lung COVID, and there's a lot of health issues that are going along with that. And we have to do better for everybody, not just kids, but everybody. Moms and dads across the country, they would love to see zero-emitting trucks, and we have to
have cleaner air for our children and our communities.

We deserve it, and you are the only ones who can do it.

I can speak up, but you guys have the power to do that.

So there isn't time to waste.

You know, the proposed, you know, no heavy, you

know, nitrogen oxides and greenhouse gases, it has to

be strengthened. It needs to be finalized this year.

We don't have time. Time's done, you know. The bell

rang long ago. You're now tardy, you know? I'm going
to use my terminology. We're now tardy, and we've got

people who have very big health issues and very --

health problems in our communities. So we have to

enact that put -- the American trucks and the bus

fleet, you know, let's hold them accountable for the

emissions that they are putting out there in our

breathing air.

And we need to be 100 percent zero emissions by

2035, and if I'm speaking as a science teacher, 2035 is

not soon enough, if I'll be honest with you. We have

already run out of time. We're not running out of
time. We have run out of time. So if it were -- you

know, if I had the magic wand, we'd be doing this now.
We need to change our factories. We need to change the way that we have engineered our, you know, our engines and things like that in order to make this happen sooner, not even 2035. That's too far down the road. We're going to be kicking ourselves in the budgets here pretty soon if we wait until 2035.

You know, I wanted to share a little bit that, you know, as a teacher, we do study climate change and the causes of pollution. And my students look at me, and they're like -- they'll say, Ms. Robertson, like, why aren't we doing anything about it. And it breaks my heart every time that I look at them as an adult and I say, I am so sorry that my generation and my parents' generation has messed this up so royally for you guys, and I'm trying to do everything I can to make this better for you, and, frankly, I don't have a better answer for them. You guys have a better answer, and you can give them a better answer. I can't pass, you know, the policies that you guys can pass to make it actually better for them. So, please, I beg you, use your power.
She wants to go on walks with me and her grandchildren, and oftentimes, a walk, she can't handle a walk. And she works, and she's active, and she's very cognitively aware, but walking around the block with her grandchildren, she's out of breath.

And when I think about it, I want to cry because it's not okay that our kids can't play basketball because of what we have done to them. My seven-year-old son, who is an active, healthy -- is he healthy? I don't know any more -- boy had to stop playing basketball with his mom and his brother because he couldn't breathe.

And so I am begging you. I am begging you as a member of the Moms Clean Air Force, please. These standards have to go much farther. You have to put our
national bus and truck fleet on a much better path. We are hurting our kids. We're hurting them right now. So please strengthen these standards. Protect them. Protect the kids with asthma. Protect older adults. Protect sick people and people who are vulnerable. Everybody has the right to breathe clean air.

MS. THOMPSON: Thank you for your comment, and I apologize for interrupting. EPA needs to keep the statements to three minutes so everyone has a chance to testify. You have reached the three-minute limit. Please complete your testimony within the next 30 seconds. We encourage you to provide your full written testimony and any additional comments of any length to Docket Number: EPA-HQ-OAR-2019-0055, on Regulations.gov.

MS. ROBERTSON: Thank you. I was actually saying the last sentence, which was just thank you for the opportunity to testify today. That's all.

MS. THOMPSON: Thank you for your comment. The next speaker will be Richard Killmer. You may now unmute, and please state your name and affiliation for the record.
MR. KILLMER: Hi. My name is Reverend Richard Killmer. I'm a retired presbyterian minister. The proposed rule we are discussing during this hearing will help our Nation address two significant problems: the reality of climate change and the health and well-being of our citizens, especially people of color and those who live in low-income communities. This proposal would change the heavy-duty Emission Control Program in order to reduce the harmful air quality that impacts from those engines.

Heavy-duty vehicles and engines are important contributors to concentrations of ozone and particulate matter, and they're a resulting threat to public health, which includes premature death, respiratory illness, including childhood asthma, cardiovascular problems, and other adverse health impacts. Because of historical systemic racism that placed highways through communities of color, these communities also are often closest to highways and bear the greatest burden from vehicle pollution. Exhaust from heavy-duty vehicles is one of the main pollution sources in BIPOC communities. The proposed rule would also reduce greenhouse gas
emissions. The recent reports from the IPCC make clear that the U.S. needs to do everything it can to at least meet President Biden's goal of a 52-percent reduction of greenhouse gases by 2030, on the way to net zero by 2050. Communities of color face an undue, disproportionate, and unjust burden of air pollution and climate impacts from the production of fossil fuels. Therefore, EPA must enact standards that put the American truck and bus fleet on a clear roadway to 100-percent, zero-emission sales as quickly as possible, but at least by 2035. The trucks regulated by EPA's rule will be on the road for decades, so these vehicles must be cleaned up as soon as possible.

Cleaner trucks are available and ready now. There are dozens of zero-emission medium- and heavy-duty trucks already available and coming to the market soon. The EPA has an opportunity to help address both the injustice of pollution and the catastrophic results of climate change by enacting the strongest possible heavy-duty truck standards. The standards EPA sets should achieve 100-percent, zero-emission truck sales as quickly as possible but certainly at least 2035.
Thanks for this opportunity.

MS. THOMPSON: Thank you for your comment. The next speaker will be Jonathan Walker. You may now unmute, and please state your name and affiliation for the record.

MR. WALKER: Hello, and thank you, Kayla, for so expertly running this meeting. My name is Jon Walker, and I'm here today as a private citizen and retired physician to ask the EPA to adopt the strongest emission standards possible. But I also want to thank you guys on the committee, on the panel, for what you're doing. You know, in our hyper-polarized country, it's really reassuring to know that there's people like you working behind the scenes who are willing to go beyond the soundbites, and echo chambers, and the slogans, and really have thoughtful discussions about how to protect us all.

And, you know, you've clearly heard about the health consequences of these kinds of emissions, you know, heart and lung disease, and how these public health issues are increasingly borne or borne disproportionately by people of color and people in
poverty. And I also support the concern about greenhouse gas emissions and how the Federal Government really should be leading the way on this issue, enacting even more stringent things that are even in this law.

But I'm here primarily is an ophthalmologist, and, in particular, I'm a retina specialist, okay, which means I treat diseases that cause irreversible blindness, like macular degeneration or diabetic retinopathy. These are -- these are diseases you can't fix with new glasses, or Lasik, or cataract surgery. When the retina is damaged, it's gone forever because the retina has these very tiny blood vessels that are a marker for early damage when you can't even see it elsewhere in the body. And recent research clearly shows that the type of emissions produced by these vehicles can worsen retina health in a way that risks permanent vision loss, okay? There are actual measurable effects on the retina that can be seen in people with even relatively low levels of exposure. I'm just going to offer some references in the chat for the panelists, and you can also -- anyone interested
can just Google "air pollution and retinal damage."

It's rather striking.

So, again, you know, you all are doing important work to protect us from threats to the planet, to our overall health, and even vision loss. And we also know that industry representatives have a duty to provide reasons to weaken this law, okay, and you're charged with balancing that. But as I finish, I just would remind you of what the tobacco industry did back in the 1950s when it was clear that smoking caused cancer, yet their lobby sowed doubt and uncertainty when there was no doubt and uncertainty. And that caused untold harm, you know, as people kept smoking, resonating even now.

So, please, as others have begged you, you know, work to keep our air clean by making this law strong, maybe even more stringent than the way it is right now. So I thank you for the opportunity to testify and for your dedication to solving these difficult problems.

MS. THOMPSON: Thank you for your comment. The next speaker will be Rich Kassel. Rich, you may now unmute, and please state your name and affiliation for the record.
MR. KASSEL: Thank you very much. I'm just getting my video going. My name is Rich Kassel, and I am testifying today is director of policy and a member of the Advisory Board of ClearFlame Engine Technologies. Thank you for the opportunity to testify in support of EPA's Clean Trucks Plan. We strongly urge you to include Option 1 in your final rule.

Further, we strongly urge you to adapt EPA's fuel-neutral, technology-neutral systems approach to reduce greenhouse gas emissions from all of the Nation's heavy-duty engines and vehicles as you implement the two rules that will together comprise the Clean Trucks Plan.

Founded in 2016 is a black- and women-founded and led business, ClearFlame is developing technology to cost effectively decarbonize hard-to-electrify segments of the transportation sector at scale, this decade. By using homegrown, low-carbon, renewable fuel that are naturally low in particulate matter and NOx, such as ethanol, instead of high-carbon petroleum diesel fuel, we aim to decarbonize engines used in long-haul trucking, agriculture, and other non-road diesel engine
If you remember just one sentence from my testimony today, it's this: even in a moment of accelerating electrification in the transportation sector, the fuel-neutral, technology-neutral, performance-based approach is still critically necessary. Here's three reasons why a systems approach makes sense. First, EPA has had more than 50 years of success using this approach, which rewards innovation and the ability to scale quickly and cost-effectively. Indeed, EPA's heavy-duty highway and non-road diesel rules of 2000 and 2004 showed that such a systems approach reduced emissions and related health harms at scale faster and more cost-effectively than any other approach that treated the fuel and vehicle separately, or that picked specific technology winners. If it ain't broke, don't fix it. And as we evolve towards a market that includes vehicles powered by batteries, fuel cells, biofuels, and, yes, even some petroleum, evaluating and integrating the full life cycle emissions impacts of our full vehicle systems will become even more important to ensuring that real-world
emissions meet our environmental goals.

Second, diesel engines will continue to emit a significant portion of the transportation sector's NOx and greenhouse emissions in 2050. Even in states that have adopted California's Advanced Clean Truck Rule, up to 60 percent of the truck tractor sales market can still be diesel in 2035. These engines are likely to remain on the road for decades. Third, the Biden administration's net-zero plan assumes roughly a gigaton of greenhouse emissions reductions by decarbonizing liquid fuels that will still be used in 2050 as a complementary strategy to its ambitious and necessary electrification goals. EPA's clean trucks plan can help ensure that the White House's net zero plan is successful in the long run.

WE look forward to working with the Agency towards a successful Clean Trucks Plan that improves health in disadvantaged and other communities across the country, and that decarbonizes all heavy-duty engines and vehicles, not just those that are relatively easier to electrify. Thank you very much for the opportunity to testify today.
MS. THOMPSON: Thank you for your comment. The next speaker will be Marguerite Pennoyer. You may now unmute, and please state your name and affiliation for the record.

MR. PENNOYER: Hello. My name is Marguerite Pennoyer. I'm a physician specializing in allergy, asthma, and immunology, and I live in Scarborough, Maine. I also volunteer as board chair of the American Lung Association here in Maine and as vice board chair of the ALA in the Northeast Mid-Atlantic. I'm presenting my testimony in solid support of stronger standards to limit emissions of nitrogen oxides and greenhouse gases from heavy-duty vehicles. I urge you to finalize these standards into law this very year, in 2022, and to select Option 1 from the proposal when setting the final rules to maximize the benefits for public health.

As physicians, we see far too often the toll that asthma and other lung conditions take on our patients and their families. Asthma attacks are very stressful and can even be fatal, but the good news is that many asthma attacks could be prevented simply by reducing...
pollution and making our air healthier to breathe. I live in Maine, and my coastal county has an "A" grade for particle pollution and a "B" grade for ozone pollution on the ALA "State of the Air" report of the American Lung Association. So why should I worry about my patients' health with these seemingly encouraging numbers? We look like we're doing okay. However, I know that many of our economically-disadvantaged Mainers must and do live closest to the highway truck routes that pass through our state. I know that the burden of living with unhealthy air is not shared equally. People of color in my state and Maine's tribal communities may be greater than three times more likely to be living and breathing in more polluted air.

We know EPA has passed rules for heavy-duty trucks have already reduced nitrogen oxides by as much as 60 percent, but we need more to better protect public health. EPA Option 1 is the stronger option for public health benefit. It's predicted to result in 18,000 fewer cases of asthma onset in children, 3.1 million fewer cases of asthma symptoms and allergic rhinitis, and 1.1 million fewer lost school days for children.
The EPA has already determined the heavy-duty engine industry is capable of attaining the proposed standards. EPA needs to finalize these standards and finalize this proposal by the end of 2022. We need to avoid missing a crucial full year of new truck manufacturing. The American Lung Association's new report, Zeroing in on Healthy Air, has predicted that there would be $1.2 trillion in health benefits for our Nation and 110,000 premature deaths prevented by a nationwide transition to zero-emission, light-, medium- and heavy-duty vehicles.

Watching child struggle through an asthma attack is something that no parent wants to see and that no doctor can ever forget. Strengthening the EPA standards will be of enormous benefit, not just for children who struggle with asthma but for the health of our Nation as a whole. Thank you for allowing me to present testimony.

MS. THOMPSON: Thank you for your comment. The next speaker will be Peggy Ann Berry. Peggy, you may now unmute, and please state your name and affiliation for the record.
MS. BERRY: Good morning. My name is Peggy Ann Barry, and I am a member of the Alliance of Nurses for Healthy Environments. I'm also a Sierra Club member as well as a Mom Clean Air Force member. Thank you for allowing me to testify regarding controls of air pollution, especially with new motor vehicles, heavy-duty engines and vehicles standards. First, I'm a registered nurse, and second, I'm a certified occupational health nurse specialist, as well as a fellow with the American Association Of Occupational Health Nurses. I have -- I live in the crossroads of America -- I-75 and I-70. A lot of truck traffic comes through our 'burg. I also had to drive the I-75 corridor into Cincinnati almost six years daily while doing my masters and my Ph.D. The haze driving down into that Ohio River Valley was -- you could almost, like, touch. It was just on the horizon as I drove into it on a daily basis.

I am testifying for the fact that 190,000 Ohio children have been diagnosed with asthma. A disproportionate percentage of black and poor children are affected by asthma, with black children visiting
the emergency room at a rate four times greater than that of white children. I have the statistics, and I can push that forward with my testimony, but they are directly from the Ohio Department of Health, their 2019 report on the "Burden of Asthma in Ohio." As the Ohio Department of Health points out, asthma is the most common chronic disease in children, imposing a consistent burden on the Ohio healthcare system, and a significant impact on overall quality of health and healthcare costs and health. Just multiply that for the Nation.

In addition, Ohio has a higher incident rate over the rest of the United States, and the county that I live in, Montgomery County, is a priority area given the amounts of asthma that are in the area. No doubt it's the car and truck traffic in and around these inner states where the poor and the black, indigenous, and people of color live, and it affects everyone. My ask is for stronger rules and a rapid transition to electrical vehicles beginning with school buses. I mean, why put a kid in a diesel bus and let it sit there? And then all mass transit needs to go electric
or zero-based diesel or gas fuel.

Let's lessen the burden healthcare-wise and absence-rights in our communities. Thank you.

MS. THOMPSON: Thank you for your comment. The next speaker will be Mary Greene. Mary, you may now unmute, and please state your name and affiliation for the record.

MS. GREENE: Thank you. I don't know if my video is working, but I hope you can hear me.

MS. THOMPSON: We can, and we can see you as well.

MS. GREENE: Oh, perfect. Great. Thank you. So thank you. My name is Mary Greene, and I am the senior policy counsel for sustainability at Consumer Reports. Thank you for listening to my testimony today.

CR is very encouraged to see EPA strengthening emission standards for new heavy-duty vehicle beginning in 2027. While this rule is a good start, the Agency should go further and use this opportunity to make transformative changes in the transportation industry, requiring more stringent standards for both NOx pollution and greenhouse gas emissions that negatively impact communities across America. Such reductions
will help the administration to achieve its own goal of reducing NOx emissions and reducing greenhouse gas emission economy-wide by 50 percent by 2030.

Heavy-duty vehicles are the main vehicles used for transporting and delivering consumer goods across the country. As e-commerce rapidly expands and as companies promise consumers faster and faster delivery, utilization of these vehicles is likely to grow. However, this reliance has costs in the form of increased air pollution and global warming emissions. Although heavy-duty vehicles make up a small portion of vehicles on U.S. roads, they disproportionately contribute to greenhouse gases and NOx emissions, which cause serious and costly health and environmental risks. As my colleague, Dr. Quinta Warren, will discuss, these impacts disproportionately impact low-income communities and communities of color.

As demand for consumer goods grows, so will the impact of heavy-duty vehicle emissions. For this reason, EPA must enact the strongest standards possible to reduce NOx and greenhouse gas emissions. Consumer Reports has the following recommendations. First, for
the NOx portion of the rule, EPA should, at the very least, adopt Option 1. Option 2 simply does not go far enough to reduce NOx pollution. However, we believe Option 1 should be strengthened to more closely align with California's Heavy-Duty Omnibus Rule. To do so, standards should achieve a 90-percent reduction in NOx emissions over 2010 standards by 2027. These more stringent standards more accurately reflect the greatest degree of emission reduction achievable through the application of technology available for the model year as required by the Clean Air Act.

Second, the proposed greenhouse gas emission standards must be strengthened so as to accelerate the deployment of zero-emission electric trucks. Zero-emission technology will be key to achieving a 50-percent reduction in greenhouse gas emissions by 2030, and is the best route -- solution to reducing both NOx and climate pollution. Importantly, technology already exists to electrify many forms of heavy-duty vehicles. For example, delivery vehicles that follow local roots and operating ranges are ideal candidates for electrification. Currently, the rule would do little,
if anything, to accelerate heavy-duty EV adoption.

Already states are leading the charge and implementing policies that would result in three times the number of heavy-duty electric vehicles as the EPA rule. EPA should follow suit.

EPA should also eliminate credits and multipliers to both the NOx and greenhouse gas portions of the rule as they will severely limit the effectiveness of this proposed rule. Finally, EPA should ensure that this rule is finalized by this year so that it can go into effect as soon as possible.

Thank you very much for your time.

MS. THOMPSON: Thank you for your comment. The next speaker will be Quinta Warren. You may now unmute, and please state your name and affiliation for the record.

MS. WARREN: Dr. Quinta Warren, Consumer Reports. Thank you for the opportunity to testify on the Environmental Protection Agency Heavy-Duty Vehicle Standards. My name is Dr. Quinta Warren, and I am the associate director of sustainability policy at Consumer Reports. CR is encouraged to see that the EPA is
1 updating its emission standards for heavy-duty vehicles
2 sold beginning in 2027. We believe that this proposal
3 is a good start but that the EPA can and should do more
4 to limit NOx and greenhouse gas emissions from these
5 vehicles and limit their negative impacts on
6 communities and the environment.

Low-income communities and communities of color
8 are disproportionately impacted by heavy-duty vehicle
9 emissions due to a national legacy of racist policies
10 that have kept cities across the country segregated for
11 generations. These policies have kept these
12 overburdened communities proximal to roads,
13 transportation corridors, and vehicular traffic. The
14 Biden administration has previously stated its
15 commitment to environmental justice, and this is an
16 opportunity for it to demonstrate this commitment by
17 addressing discriminatory transportation related
18 impacts.

Heavy-duty vehicles make up less than 5 percent of
20 vehicles on the road, yet they account for 25 percent
21 of greenhouse gas emissions and 60 percent of tailpipe
22 NOx and particulate matter emissions. These pollutants
dramatically contribute to poor health outcomes, including preterm births, lung cancer, cardiovascular disease, and respiratory diseases, such as asthma. People living in low-income neighborhoods and communities of color are exposed to 28-percent higher nitrogen dioxide concentration on average than people in higher-income and majority-white neighborhoods. This pattern is repeated in communities throughout the country.

African Americans and Latinos are exposed to 34 percent and 23 percent higher levels, respectively, of particulate matter pollution from the transportation sector. Shifting to low- and zero-emissions vehicles would improve air quality in impacted communities and yield significant avoided costs from public health and climate damage. For these reasons, we urge the EPA to adopt Option 1 and strengthen it to accelerate the deployment of zero-emission, heavy-duty vehicles, and achieve a 90-percent reduction in NOx emissions over 2010 standards by 2027. We also urge the EPA to eliminate NOx and greenhouse gas-related credits and multipliers to automakers, which would allow polluting
vehicles to continue to be sold and severely limit the effectiveness of this proposed rule. We need this heavy-duty rule to be as stringent as possible and to be put in place this year in order to protect communities across the country, especially the vulnerable among us.

Thank you for the opportunity to testify.

MS. THOMPSON: Thank you for your comment. The next speaker will be Wayne Nastri. You may now unmute, and please state your name and affiliation for the record.

MR. NASTRI: Thank you. Good morning. Good morning, Bill Bryan, Christie, Andrea. My name is Wayne Nastri. I'm the executive officer for the South Coast Air Quality Management District. We're the local air agency responsible for air quality in the Greater Los Angeles Area.

Over 17 million people reside in South Coast Air Bain, breathing some of the most polluted air in the Nation. We've failed to meet multiple Federal air quality standards and face hard deadlines to meet ozone standards in the short term. And we estimate that the
air pollution our residents face causes 1,600 premature deaths a year along with thousands of excess emergency room visits, and hundreds of excess hospital admissions annually. NOx is a primary pollutant that must be controlled in our region to reduce ozone. Heavy-duty trucks are currently our top source of NOx, and we project that need a 45-percent reduction in NOx emissions beyond existing regulations by 2023, a 55-percent reduction by 2031, and a 73-percent reduction by 2037, truly a breathtaking amount. And as a local area agency, we have limited authority to control truck emissions. That authority instead falls squarely on EPA and CARB, and while CARB has taken action to address truck NOx emissions through their omnibus regulation, that regulation does not reach trucks that come into California from out of state.

We believe we will not meet the clean air standards absent significant Federal action, and the truth of the matter is South Coast is not alone. EPA actions are needed to help a significant number of other areas across the Nation that are either in non-attainment or quickly going into non-attainment for...
ozone. And the body of evidence growing of a lower standard has only grown since 2016 when we petitioned EPA for a new truck rule. Our preference, therefore, is for EPA to finalize a rule in line with the alternative approach that includes a .02 grams per brake horsepower-hour our standard that's outlined in the proposal. This approach provides earlier and greater emission reductions in the two options in the proposal in a shorter time frame. This will help deliver cleaner air sooner to communities throughout our air basin and the Nation.

We're concerned, however, that an alternative approach may take additional time to finalize as EPA is requesting more data to support it. A revised standard is needed as soon as possible, and our paramount concern is that EPA finalize the standard by the end of this year. And if EPA's pursuit of the alternative approach would jeopardize that timeline, we would instead support Option 1. Option 1 is not ideal as it allows for more emissions than the option standard equivalent to CARB's regulation, especially in the early years of the program. We're also concerned that
the flexibilities built into option could result in a
strong standard on paper that, in reality, is watered
down, and caution EPA to be mindful of that potential
outcome. An example, allowing manufacturers to
generate NOx credits from sales of zero-emission
ingines could disincentivize investments in clean
technologies to internal combustion engines, delaying
needed emission reductions.

And in closing, we urge EPA to finalize the rule
that prioritizes achieving maximum emission reductions
as soon as feasible. And finally, I'd like to thank
EPA staff and leadership, and the Biden administration
for getting us this far, and let's make sure that we
finish the rule this year because, as we all know, we
have a lot more work to do and a lot more sources to
deal with. Thank you again.

MS. THOMPSON: Thank you for your comment. At
this time, we will begin a brief recess. EPA, when
would you like to reconvene?

MR. CHARMLEY: I apologize, Kayla. I hadn't
thought about how long of a break. How about 10
minutes? Will that work? Christy and Bryan, that seem
okay? Well, let me -- let me round it up until noon to
make -- yeah. Why don't we do that? So a 12-minute
break, and we can reconvene at 12:00 Eastern.

(Break.)

MS. PHILLIPS-THORYN: Hello, everyone. This is
Lauren Phillips-Thoryn from Abt Associates, EPA's
contractor. It is noon Eastern Time, and we are now
rejoining EPA's public hearing about the Control of Air
Pollution from New Motor Vehicles: Heavy-Duty Engine
and Vehicle Standards proposal.

In order to accommodate testimony in both Spanish
and English throughout this hearing, all attendees must
select their preferred language via the interpretation
icon at the bottom of your screen. If you are
providing testimony today, please make sure that you
are speaking the language of the channel you are
listening to. For example, listening to English while
speaking in Spanish could prevent other participants
from hearing your statement in their language of
choice. As a reminder, if you are speaking today, you
will receive a notification on your screen that you are
being promoted to the role of panelist shortly prior to
your speaking time. You must accept that invitation to
be able to unmute when you are called to testify. This
will also allow you to turn on your camera, which we
encourage you to do. Speakers connected by telephone
should unmute their phones when called to testify.

If you are having technical difficulties, send an
e-mail to public_hearing@abtassoc.com, or call (919)
294-7712. If you are not registered to speak, but you
would like to, please send an e-mail to
public_hearing@abtassoc.com, or call (919) 294-7712. I
will be introducing each speaker in turn. Please speak
slowly and clearly so that our court reporter can
record these proceedings accurately.

The first speaker is Diana Van Vleet. Please
state your name and affiliation for the record.

MS. VAN VLEET: Good morning. My name is Diana
Van Vleet, and I am the national director of outreach
and engagement for the American Lung Association's
Healthier Campaign. Thank you for conducting this
hearing, providing more time for the public to sign up
prior to the hearing, and adding an additional day to
hear public testimony.
1. The American Lung Association strongly supports
2. the cleanup of pollution from heavy-duty engines and
3. vehicles. We urge EPA to finalize this rule this year
4. and to choose Option Number 1 from the proposal when
5. promulgating the final rules to maximize the benefits
6. for public health. This rule isn't just about reducing
7. air pollution. It's also about advancing environmental
8. justice.

9. Seventy-two million people are estimated to live
10. near truck freight routes, and this puts their health
11. at risk. They are more likely to be people of color
12. and those with lower incomes, as you've heard from
13. others today. These overburdened communities are
14. directly exposed to pollution that causes respiratory
15. and cardiovascular problems among other serious and
16. costly health effects. We know that air pollution from
17. shipping has gotten -- has likely gotten worse in
18. recent years. The COVID-19 pandemic accelerated the
19. shift from in-store shopping to ordering more items
20. online. More, fast, personalized delivery service
21. means more delivery trucks and vans on neighborhood
22. streets supported by rising number of warehouses,
distribution centers, and long haul -- long-distance haulers on highways often located in or near already highly-polluted communities. Increased traffic in and out of these areas brings increased levels of unhealthy air pollution to communities where this traffic is concentrated. Exposure to traffic-related pollution is a serious health hazard for those living in freight-impacted communities.

The mixture of emissions -- this mixture of emissions have been linked to poor birth outcomes, reduced lung and cognitive development, development and worsening of chronic respiratory and cardiovascular diseases, increased risk of dementia, cancer, and early death. Thankfully, the EPA has the opportunity to do something about this right now. Please strengthen limits of NOx emissions as well as greenhouse gases from heavy-duty engines and heavy-duty vehicles. The Agency must finalize for this proposal by 2022 and maximize the health benefits it offers by selecting Option Number 1 and strengthening it, including extending the warranty requirements and useful life provisions in the rules.
Every American deserves to breathe clean, healthy air regardless of their zip code or their skin color. Thank you for your leadership and work to reduce dangerous air pollution from trucks, and thank you for your time.

MS. PHILLIPS-THORYN: Thank you for your comment. The next speaker will be Josh Nassar. You may now unmute, and please state your name and affiliation for the record.

MR. NASSAR: Hello. My name is Josh Nassar. I'm with United Auto Workers, legislative director, and it's an honor to be here today to speak on behalf of the one million members and retirees of UAW, our executive board president, Ray Curry, and really appreciate the EPA's transparent process here and having an opportunity to offer our views.

I want to start by saying a few things. First of all, you know, we think the choice that's often framed as things being good for the environment or for workers is a false choice. We know that it's possible to do both. We've been involved firsthand in the -- in Phase 1 and 2 of heavy-duty and the recently-finalized light-
duty standards. We know it's possible if there's the will there.

Also, you know, the disproportionate impacts of, you know, emissions on low-income and underserved communities is a problem, and absolutely, you know, not dismissing that in any way. I think the question is how do we get there. How do we -- how do we get to a place where we have you, you know, more, you know, clean air to breathe and basically, you know, cleaner trucks on the road? A concern -- the concern we have is, you know, Proposal 1 seems, from all we've studied and understand, it seems deeply problematic because we're concerned that it would inadvertently lead to a pre-by-no-by situation. We've had this happen before where, you know, when facing a difficult standard, the purchasers, you know, the companies buying the trucks will rush for the cheaper product. And we've seen this where they buy grandfathered products -- in other words, trucks that don't meet the new standards. And then there's a precipitous drop-off in purchases of the new standard vehicles because of the cost difference.

So we have to look very, very carefully and be
realistic about the cost that we're talking about here. It doesn't do anyone any good if what ends up happening from a rule is that, you know, you have a massive amount of buys of the grandfathered vehicle. That's very disruptive to the workforce because what happens is there's a -- there's a real hiring boom, and that's followed by a bust, and people can be laid off and have been laid off for years when regulations are structured this way. This has happened before. So, and, of course, you know, the environmental benefit is not there if, you know, we're not having those new cleaner vehicles on the road. So we really have to, you know, be realistic about the market realities. We're not -- we need to be aggressive. We're arguing against that. Industry itself has been willing to adopt pretty tough standards here, as you've heard and you will hear.

The other thing I would just encourage EPA to keep doing is to, you know, look at other sources, I mean, you know when it comes to ships, when it comes to airplanes, when it comes to other areas not related to the transportation sector. You know, this is a sector
that actually has, you know, gone along with
regulation. That's not -- that can't be said for a lot
of other sectors. So at the end of the day, we think
it's important to have a consensus-driven process that
pushes for aggressive standards but is also realistic.

We have tens of thousands of members who build,
you know, the trucks that are on the road and the
trucks of the future, proud of their work, and we want
to make sure they can continue to do that work. So
that's very, very important to us, but we also, you
know, obviously understand the need for -- you know,
for more regulations here when it comes to NOx, and
ultimate CAFE THG.

So thanks for your time. Really appreciate the
opportunity to testify. We stand willing -- willing
and able to work with everyone. We think that a -- you
know, we really can have a win-win, but, you know, it's
going to take a lot of hard work, and we're all going
to have to roll up our sleeves. So thanks again.

Really appreciate the opportunity, and look forward to
working with everyone as this process continues. Thank
you.
MS. PHILLIPS-THORYN: Thank you for your comment.

The next speaker will be Mitchell Hescox. You may now unmute, and please state your name and affiliation for the record.

MR. HESCOX: Good afternoon. I'm the Reverend Mitchell C. Hescox, president of the Evangelical Environmental Network, and I live in New Freedom, Pennsylvania. As evangelical pro-life Christians, we believe in the sacredness of life from conception until natural death, and as such, our faith demands care for the whole person at every life stage, and to do otherwise contradicts the totality of our scripture, the Bible. Because we care about life, our ministry remains dedicated to defending life, both born and unborn, from pollution's threat to human health.

Over the past decade or so, we have generated the support of over two million pro-life Christians in support of regulations designed to improve the quality of life and to reduce premature death for all children.

We strongly support new standards for control of air pollution from heavy duty trucks. The transportation sector-emitted pollution is a major source of air
pollution-related death and disease and recently became
the number one source of global warming pollution in
the United States. Heavy-duty trucks are a leading
source of lung-damaging air pollutants, including smog-
forming NOx, particle pollution, and it’s estimated
that in 2020, nationwide, trucks consumed 55.3
gallons of fuel and emitted 561 metric tons of
greenhouse gases, 1.5 million metric tons of nitrogen,
and 38,000 metric tons of PM2.5. The largest single
source of these solutions are heavy duty trucks
representing 57 percent. Almost 60 percent of the NOx
and PM exhaust emissions from trucks and buses were in
urban areas, and 45 million people in the United States
live, work, or attend school within 300 feet of a major
road, airport, or railroad, and 45 percent of U.S.
residents live in counties with unhealthy levels of
smog or soot.

Medical experts have labeled these areas diesel
death zones and link exposure to diesel exhaust to more
than four dozen toxic air pollutants that cause birth
defects, lung damage, dementia, and cancer. PM2.5
alone results in least 200 premature deaths annually in
the U.S., nine and actually 10 separate causes, including cardiovascular disease, cerebral -- cerebrovascular disease, chronic kidney disease, chronic obstructive pulmonary disease, dementia, type 2 diabetes, hypertension, lung cancer, and pneumonia. And the 10th cause, over 15,000 preterm births are linked to PM2.5, with one-third of these early births resulting in deaths.

With so many lives and so much of our future dependent on heavy-duty truck pollution reduction, we strongly urge EPA to require minimum maximum NOx and PM standards in a single phase rulemaking to be in effect Model Year 2027. Secondly, we urge 100-percent zero-emission medium- and heavy-duty trucks by 2035. These standards are achievable and readily available today, and will deliver cost savings for operators and drivers. Dozens of trucks are already coming in the market, zero-emission trucks, within a couple of years. Today, electric buses are already capable of supporting most freight delivery and transit needs, and across nearly every vehicle class, the zero-emission trucks and buses are projected to be cheaper to own and
operate than combustion engine counterparts within five years. In fact, a recent DOE study predicts that by 2030, zero-emission trucks could grow to 42 percent of sales just based on the fact that they will be cheaper to own and buy.

But we need strong policies to incentivize this reality. Our children's lives, and health, and future will be decided by reducing all forms of air pollution, including climate-change-causing carbon. Addressing heavy-duty trucks now will go a long way in deciding our children's future. We ask EPA to promulgate the strongest possible standards to save our kids, display our technical abilities to the world, and create a sustainable future with family-supporting jobs for all.

Thank you very much for allowing me to testify today.

MS. PHILLIPS-THORYN: Thank you for your comment. The next speaker will be Dave Cooke. You may now unmute, and please state your name and affiliation for the record.

(No response.)

MR. CHARMLEY: Dave, we can see you, but we cannot hear you. And, Dave, it doesn't look like you're on
mute, so there might be some -- oh, now you are on mute.

(Pause.)

MR. COOKE: Can you hear me now?

MR. CHARMLEY: Yes, we can.

MR. COOKE: Okay. I'm Dr. Dave Cooke, senior vehicles analyst with the Union Of Concerned Scientists. On behalf of the Union Of Concerned Scientists' more than half a million supporters, I appreciate the opportunity to speak with you today.

The heavy-duty truck rules proposed by EPA are the first step the Agency has taken and over 20 years to limit the harmful particulate and smog-forming emissions from heavy-duty trucks. USCIS is concerned that even after so much time, EPA's proposal matches neither the need nor the technical capacity to reduce these harmful emissions. Today, we have the opportunity to eliminate the harmful truck emissions that plague local communities. Unfortunately, EPA's rule chooses to treat these zero-emission vehicles as a curiosity, and yet even as the Agency ignores the market readiness and technical potential of such zero-
emission vehicles, its proposal also fails to propose a
standard for diesel trucks that reflects the best
available conventional technologies.

UCS is an advocate for science-based policy. As
such, we simply ask EPA to look at the data. Together
with the California Air Resources Board, EPA has funded
millions of dollars of research at the Southwest
Research Institute, yet it has inexplicably deviated
from what that data supports, which is the omnibus
regulations. EPA must align its standards, beginning in
2027, with the omnibus. The Agency has already chosen
to adopt the structure of the omnibus, which UCS
supports, including the addition of a low load cycle, a
more robust in-use testing program, and extended full
useful lifetimes and warranties.

The omnibus was adopted by California and now
other states after a successful multi-year process, and
the Agency's own data supports the diesel emission
reductions required under the omnibus, so it's unclear
why EPA has chosen to adopt these structural elements
while not also proposing stringencies in line with that
program.
With regards to electric vehicles, EPA's proposal has unfortunately adopted the worst of all options. It has chosen to credit these vehicles under the NOx Program while ignoring them as a NOx solution in setting the standard. This means that every electric truck sold, including those already required under state policies, will lead to a dirtier diesel truck being sold. This is untenable for communities dealing with truck pollution. EPA must make a choice: either fully recognized zero-emission vehicles and set a NOx standard predicated on the sale of such vehicles, or it should exclude credits for electric trucks entirely to guarantee emissions reductions from the dirty diesel trucks driving through freight-impacted communities.

UCS can provide technical and economic data to support our various asks regarding EPA's policy, and we will continue to engage with EPA to strengthen the rule. If EPA is to uphold its technology-forcing mandate under the Clean Air Act, we expect a final rule that will reduce emissions from diesel trucks in line with the omnibus regulation and for EPA to ensure 50 percent of new trucks sold in 2030 are zero-emission.
vehicles. Thank you for your time.

MS. PHILLIPS-THORYN: Thank you for your comment.

The next speaker will be Lewie Pugh. Unfortunately, we do not see you in the attendee list. If you have joined the hearing under another name, please click the raise hand button. If you have called in, please press star-9 to raise your hand.

(Virtual hand raised.)

MS. PHILLIPS-THORYN: All right. I see you. You have now been promoted to panelist, and you can unmute and state your name and affiliation for the record.

MR. PUGH: Yes, ma'am. Can you hear me now?

MS. PHILLIPS-THORYN: Yes, we can.

MR. PUGH: I'm Lewie Pugh, and thanks for having me. I'm with the Owner-Operator Independent Drivers Association, and I've been in the trucking industry my entire career. Most of that I've spent as a driver and an owner/operator. Here at OIDA, we represent over 150,000 small business truckers and drivers all across the United States that deliver the food and goods that everyone here in the United States and those listening uses and orders every day.
In 2028, I met with EPA leadership when the Cleaner Trucks Initiative was in the initial stages of development. I will say today what I said then: clean air is a priority for everyone, but the technology used in heavy-duty trucks to accomplish this has to be affordable and reliable. The currently-proposed timelines to achieve NOx emission reductions leave us wondering if the same mistakes from the previous rulemaking will be repeated. Again, all truckers are supporters of clean air. Our industry wants to leave the environment better and healthier for those to come, but we have to use common sense and not use the end consumer as a guinea pig.

The new regulations that the EPA has put forward are very concerning to myself and many others in our industry. My 2012 truck had all the latest EPA compliant technology, but it's spent more of time in the shop for repairs than the other four trucks I owned prior combined. In a period of 250,000 miles, or approximately two-and--and-a-half years, I had to have the entire DPF system completely replaced at a cost of $6,000 each time, not to mention this truck was $25,000
more expensive than any other truck I had prior to that with this technology. As you can see, this technology was not economical in any sense of the imagination. To add insult to injury, there was no way I could properly diagnose these problems or repair them myself. I would note that all these problems were not from a lack of preventive maintenance either. I had my system serviced and cleaned just as directed by the manufacturer.

Another troubling issue was the truck would go into a limp mode of 25 miles per hour. Semi-trucks just can't pull over anywhere, and wreckers to tow them are very expensive, not to mention there's lots of safety concern for the motoring public with trucks disabled along the side of the highway or on an exit ramp. Many truckers have told EPA similar issues they've experienced and how the Agency could work to address these problems. I do want to commend the Agency for listening to those comments and including provisions in the proposal regarding serviceability, inducement, and self-diagnosing tools that will help drivers better assess these emissions and equipment.
We also welcome improvement to vehicle warranties and believe all these provisions must be included in the final rulemaking.

While these policies will be helpful, we feel that the currently proposed implementation periods will likely force drivers to use them more often because of insufficient time and to ensure vehicle reliability. We encourage the Agency to further look at sufficient phased-in implementation timelines that will allow manufacturers to comprehensively test engines and other equipment to guarantee performance and reliability.

This would help eliminate higher purchase and maintenance costs for the drivers and owner-operators and help keep their trucks on the road instead of in a repair shop.

OIDA believes that small-business truckers and owner-operators will be an invaluable resource for EPA as the Agency continues to finalize the NOx commission rulemaking. I hope that the industry and the end users of this technology are listened to this time and not once again just victims of rushed technology. Thank you.
MS. PHILLIPS-THORYN: Thank you for your comment.

As a reminder, if you are speaking today, you will receive a notification on your screen that you are being promoted to the role of panelist shortly prior to your speaking time. You must accept that invitation to be able to unmute when you are called to testify. This will also allow you to turn on your camera, which we encourage you to do so. Speakers connected by telephone should unmute their phones when called to testify. We ask that speakers slowly and clearly so that our court reporter and interpreters can capture these proceedings accurately. Again, please keep your comments to three minutes. If you are having technical difficulties, please send an email to public_hearing@abtassoc.com, or call (919) 294-7712.

If you are not registered to speak, but you would like to speak tomorrow, please send an email with your name and phone number to public_hearing@abtassoc.com, or call (919) 294-7712.

The next speaker will be Steven Poss.

Unfortunately, we do not see you in the attendee list.

If you have joined the hearing under another name,
please click the raise hand button. If you have called
in, please press star-9 to raise your hand.

(Pause.)

MS. PHILLIPS-THORYN: The next speaker will be
Brian Urbaszewski. Please unmute and state your name
and affiliation for the record.

MR. URBASZEWSKI: My name is Brian Urbaszewski. I
am director of environmental health programs for
Respiratory Health Association, a nonprofit founded in
1906 with the mission to prevent lung disease, promote
clean air, and help people live better through
research, education, and policy change.

I want to thank the Ay for addressing a number of
issues that have evolved since the last time emissions
standards for larger vehicles were updated, but this
proposal does not -- doesn't do nearly enough to --
given the enormity of the challenge in front of us. In
places like Metropolitan Chicago, too many people are
still breathing unhealthy air quality, even based on
outdated health standards that are currently being
reevaluated based on more recent science so that they
comply with the Clean Air Act requirements to safeguard
human health. Air in the Chicago Region still fails to meet those old health standards, and Illinois has missed several Clean Air Act deadlines for our region.

Communities of color are much more exposed to major sources of diesel engine pollution. The combination of asthma, poverty, higher exposure to air pollution, and historic discrimination has led to the fact that a black child in Chicago is over four times more likely to wind up in the emergency room for an asthma attack than a white child. We also know climate change exacerbates direct air pollution health impacts while also being a human health threat independent of any NAAQs impacts. We are seeing worst floods, bigger wildfires, hotter and longer heatwaves. Those impacts disproportionately fall on people with the fewest resources to deal with the threats, and as the most recent IPCC report shows, we are on the brink of running out of time. EPA needs to do more to reduce emissions -- excuse me. Pardon me. EPA needs to do more to reduce emissions from fuel consumption fast. It must seize the opportunity now and address the multiple threats to health, long-term climate change
instability, and environmental justice.

We believe the proposed rule needs to be strengthened in three basic ways. First, the Federal standard must at least be as stringent as the Heavy-Duty Omnibus Rule. EPA's rule needs to align with and be no less strict than California's emission limits when a Federal rule goes into effect. If California approved through its seven-year process to develop the HDO Rule, the technology required to meet the new requirements is feasible and cost-effective. So far, California, Oregon, Massachusetts, with over 50 million have already adopted the HDO Rule, which applies in the 2024 Model Year. The Federal rule must at least match, if not exceed, the 90-percent NOx reduction the omnibus rule would bring.

Second, EPA's proposed rule allows manufacturers to make dirty or diesel trucks if they offset their impacts by making electric zero-emission trucks. Yet EPA assumes electric trucks are only being sold in California due to state requirements there and limits that amount from allowing an equivalent amount of dirtier diesel trucks to be sold. That's good, but six
states already require zero-emission sales targets, and EPA needs to ensure sales of electric trucks and other states do not create a loophole for manufacturers to make even more dirtier diesel trucks. EPA must account for electric truck sales that are being driven by such requirements in multiple states, and credit should only be given if manufacturers go above and beyond what they must already do.

Lastly, EPA needs to set a zero-emission standard in this medium- and heavy-duty rule, and set a date by which zero mission is the default requirement. In short, EPA should require increasing sales of electric trucks and make sure that all new truck sales are zero emission by 2035. As of today, six states with over a quarter of the U.S. population have already adopted California's Advanced Clean Truck Standard that sets zero emissions sales targets for medium- and heavy-duty vehicles. Manufacturers, including those in Illinois, are producing medium and heavy-duty electric vehicles in larger numbers this year. Those vehicles can have a lower lifetime cost to operate, much lower fueling costs, and lower maintenance cost. With rapidly-
growing generation of renewable -- clean renewable electricity, such vehicles will reduce more emissions every year going forward. This is the path we must follow.

I want to thank you for opportunity to speak today, and I look forward to a final robust rule that addresses these critical needs. Thank you.

MS. PHILLIPS-THORYN: Thank you for your comment. The next speaker will be William Becket. You may now unmute, and please state your name and affiliation for the record.

MR. BECKETT: My name is Dr. William Beckett. I'm a member of the Science Network of the Union of Concerned Scientists, and for identification purposes, I'm also a member of the faculty of Harvard Medical School. I speak as a certified lung doctor who has spent many years both treating patients with lung diseases, including many with asthma, and also doing research on the health effects of air pollution, including effects of NOx.

By further strengthening air pollution standards for heavy-duty vehicles now, we can improve the health
of impacted children and adults, and here's how we know this is true. As you may know, the Los Angeles Air Basin has had serious air pollution problems, and California has worked very hard to clean this up over the last 70 years. During decades of cleanup through California's stricter air pollution standards, researchers at the UCLA School of Medicine followed children in the community, both asthmatic and healthy children, as the air got cleaner, and they found that the size of the children's lungs and the level of bronchitis symptoms in those children got better as the pollution went down. One of the pollutants that was reduced by 53 percent was NOx, which was strongly associated with the health benefits.

So we now know that reducing air pollution does make a huge difference in health, and that's why Option 1 is the preferable option in the proposed standards. But Option 1 does not go far enough as it will not prevent all the health harms of heavy-duty vehicle pollution. A further step that is warranted by the health data is to move faster away from fuel-burning trucks to zero-emissions heavy-duty vehicles, which are
already available on the market.

Thank you for your attention.

MS. PHILLIPS-THORYN: Thank you for your comment.

The next speaker will be Dorothea Van Leeuwen.

Unfortunately, we do not see you in the attendee list.

If you have joined the hearing under another name, please raise your hand. If you have called in, please press star-9 to raise your hand.

(No response.)

MS. PHILLIPS-THORYN: The next speaker will be Kim Gaddy. Please unmute and state your name and affiliation for the record.

MS. GADDY: Good afternoon. My name is Kim Gaddy.

I am the executive director of the South Ward Environmental Alliance located in the South Ward of the City of Newark in New Jersey. The South Ward Environmental Alliance mission is to cultivate healthy and vibrant neighborhoods by ensuring residents' voices are heard and they are active participants in decision-making policies that impact their neighborhood. I want to thank you for the opportunity to voice our concerns in response to the EPA's heavy-duty truck rule.
I know how important clean air is to all children in the City of Newark and in the United States. The backyard of the South Ward Community is the second-largest port; that is, Port Newark. Twenty-five thousand daily truck trips come in and out of that port on a daily basis. Forty-five hundred of those trucks stay on our local road, spewing toxic pollutants into our air. The Port of Newark is the economic engine for the region, but it is the diesel death zone for South Ward residents and North residents.

The South Ward Environmental Alliance is a member of the Moving Forward, and I am the regional representative for New York and New Jersey. MFN will be submitting comments that we totally support. SWEA is seeking solutions that guarantee protection of our health. We are calling for EPA to pass the stringent and -- the most stringent and protective emission standards that require mandatory
emission reductions in the environmental justice communities as well as a sales mandate. SWEA is called an EPA to have 100 percent zero emissions across the freight sector by 2035 at the latest. The heavy-duty truck rule must not include false solutions, like natural gas, which only further environmental and public health harms in the environmental justice communities. Newark residents' lives are on the line. EPA must move a zero-emission agenda now. EPA last set emission standards more than 20 years ago, and even those standards have not yielded the improvements promised. It is time today for EPA to prioritize the health of frontline communities and reduce the emissions from heavy-duty vehicles fleet through the most protective emission standards.

Lastly, in the creation of zero-emission infrastructure and zero-emission solutions, we must prioritize environmental justice communities. The implementation of these regulations must take into account the life cycle of pollution from source to manufacturing, to tailpipe to waste, and all of the potential impacts throughout that system. We need
innovative and comprehensive policy from the EPA that
ensures that reduction and harms and in our EJ and
frontline communities. Thank you, and have a great
day.

MS. PHILLIPS-THORYN: Thank you for your comment.
The next speaker will be Steven Sondheim. You may now
unmute, and please state your name and affiliation for
the record.

(No response.)

MS. PHILLIPS-THORYN: As a reminder, you will
receive a message asking you to be -- to accept the
promotion to panelist. We do see you. You have a
raised hand. Do you see the request to accept the role
of panelist?

MR. SONDHEIM: All right. Can you hear me?

MS. PHILLIPS-THORYN: Yes, we can.

MR. SONDHEIM: Okay. Good. My name is Steven
Sondheim. I'm a member of the Sierra Club. I've been
to three of the U.N. climate conferences, the last one,
Paris, and apparently, we're in real trouble right now
both as far as pollutants, air quality, asthma, as well
as climate change. And transportation is the most
contributor to this, and certainly trucks using diesel are. So we need to move as quickly as possible to electric power. And I understand that there's already a lot of these electric trucks available, and there's a lot of manufacturing going on of that. I think that's a good job opportunity. And I'm very, very concerned about the communities that these trucks go through as well as the truckers. There's a lot of illness. So as soon as we can move, the sooner the better; the higher the standards the better.

I'd also like to see this rule imposed for heavy utility vehicles: garbage trucks, construction trucks. There's no reason why we can't electrify this and reduce pollution to a tremendous degree. So please do this as soon as possible. Thank you.

MS. PHILLIPS-THORYN: Thank you for your comment. As a reminder if you are speaking today, you will receive a notification on your screen that you are being promoted to the role of panelist shortly prior to your speaking time. You must accept that invitation to be able to unmute when you are called to testify. This will also allow you to turn on your camera, which we
encourage you to do.

Speakers connected by telephone should unmute their phones when called to testify. We ask that speakers speak slowly and clearly so our court reporter and interpreters can capture these proceedings accurately. Please keep your comments to three minutes. If you are having technical difficulties, please send an email to public_hearing@abtassoc.com, or call (919) 294-7712. If you are not registered to speak, but you would like to, please send an email with your name and phone number to public_hearing@abtassoc.com, or call (919) 294-7712.

The next speaker will be Danny Schnautz.

Unfortunately, we do not see when the attendee list.

If you have joined the hearing under another name, please click the raise hand button.

(Virtual hands raised.)

MS. PHILLIPS-THORYN: It looks like we have two folks with their hands raised. I'm lowering hands. If you could now raise your hand. All right. You have been promoted to panelist. You can unmute and speak.

MR. SCHNAUTZ: Good morning. Can you hear me?
MS. PHILLIPS-THORYN: Yep.

MR. SCHNAUTZ: Okay. My name is Danny Schnautz. I'm the president of Clark Freight Lines in Pasadena, Texas. Good day, and thank you for hearing me. We operate over 50 company-owned trucks as well as 150 more owner-operators in local, regional, and long-haul trucking. We move long haul, and local intermodal, and also general freight, and we have for over 35 years.

We are a company full of people who all have families, and we want to know that freight movement matters to everyone, not just to truckers.

The prior years of over-ambitious emission standards have already created unreliable equipment for many years and even driven one of the primary engine manufacturers out of the on-road industry. These ongoing emission systems failures are devastating, especially with the current parts shortages. I want to cover five separate areas of problems that may not all be considered by industry outsiders when considering these type of EPA standards. The first area is the money. I'll keep these comments brief.

We make payments on trucks that are sitting,
waiting for repairs. We keep spare trucks sitting around to be used as breakdown replacement trucks, and usually these are older trucks that don't meet the current emission standards. We pay for repairs that are not covered by warranty, even on trucks that are still under warranty. We have driver down time to get the truck to the shop and into a different truck, causing more trips by more different vehicles. We have wrecker bills. We have higher-priced trucks that we buy because of the emissions equipment on the trucks. We pay EPA fees on our trucks whenever we buy them in addition to Federal excise tax. All of this money goes out and ultimately is billed back to the consumer, but it's a long process. Meanwhile, other needs in the company suffer, such as safety and driver pay.

The second area to consider is the family and personal issues. Driver in a broke-down truck are stuck away from home because the truck isn't reliable or isn't running. This may not seem like a big deal if you're listening to me now and you've never lived life on the highways. Drivers' income is usually affected by breakdowns, even when the company pays break down
pay. For owner-operators, the family budget is directly impacted by these breakdowns and repairs. Scaled-back family vacations, kids' activities may be skipped, and eating out, it all takes money, and these unreliable trucks take a lot of money.

The third area is the supply chain which is on everybody's mind today. We have gridlock in the supply chain, and the public interest is not served by trucks with big payments sitting broken down on the side of the highway. Trucking is called essential and crucial to American society, so the engine makers need to be allowed to build reliable engines. Of the many reasons that trucks might be late on a load, breakdowns due to emission systems is avoidable. The breakdowns happen because the engines suddenly derate, or stop completely, because the engine thinks it is polluting, which many times is not the case. The sensors give faulty readings, and the truck is suddenly down on the side of the road.

The fourth area is the danger. I mentioned these roadside breakdowns because they are so common and so extreme. We have to make wrecker calls, and we're
parked on the shoulder or sometimes driving slowly on the shoulder as the engine has derated. This is a severe traffic hazard and is shown in the accidents caused when trucks are on the roadside.

The third part of safety is the emission system itself which operates at temperatures up to 1,300 degrees Fahrenheit. We see more crash and burn scenarios than we ever have seen before. The broken diesel lines spew diesel onto these extremely hot systems and cause bigger, hotter fires with little time for lifesaving action. Even at truck stops, we see extreme fires because these emission systems ignite diesel on the ground underneath them.

And my fifth and final area is environment. All of these issues I’ve spoken about before -- the breakdowns, the tow trucks, the driving back and forth to the shop -- that's not green. The new diesel engines provide lower mile-per-gallon than older diesel engines, and the DEF fluid that we have to use for diesels is an environmental problem. It has a short shelf life. It has to be made, packaged, and delivered, and protected from the sun. This is around
$2 per gallon now along with an additional environmental compliance fee. There are always add-on fees like this. Expensive trucks that break down are not trucks that we look to buy. We'll run our older trucks longer as has already been mentioned. It's simply a matter of staying in business.

In conclusion, I will say the prior diesel emissions pushes have had a high cost to society that are mostly hidden and were not successful on a cost-benefit measure. We need for the government to listen to industry on what is technologically possible and available, and stop building unreliable vehicles that will be used to carry America's goods. Thank you.

MS. PHILLIPS-THORYN: Thank you for your comment. The next speaker will be Laura Haider. You may now unmute, and please state your name and affiliation for the record.

MS. HAIDER: Hello. My name is Laura Rosenberger Haider. I'm secretary of Fresnans Against Fracking.

A study found that 50 meters of a major roadway 10 times higher than background found that people are 12 percent more likely to develop dementia. Also, women
who lived in areas of high pollution were 81 percent more likely to experience cognitive decline and 92 percent more likely to develop Alzheimer's disease than those who live in less-polluted areas. This is from scientists Kakio Tolo M&L on particulate air pollution. And also, I think we should not ship food long distances. It should be grown by low-income people in their yards.

Other studies I've noticed, this is from NIEHS. Well, they said that heavy metals in diesel fuel are associated with autism spectrum disorders and are bad for children's developing brain, resulting in many negative mental conditions. And then lead in diesel fuel was associated with early onset dementia in a 2020 NIH study of 40-year-olds who had childhood lead poisoning. The joint effects of PM2.5 exposure and economic deprivation had a stronger association with risk for Alzheimer's -- no, sorry -- autism. Autism. There's also occurrence of other -- co-occurrence of other health conditions and Alzheimer's disease later with children who had autism spectrum disorder.

So I think we should increase the stringency of
your standards. Sadly, 11 years of bicycling and polluting -- polluted Fresno in traffic -- Fresno, California, I was diagnosed with brain shrinkage. When I applied for a job for air pollution inspector, the exam, I only finished a third of the exam but there also was a fire smoke in the air that day. So I knew how to do -- solve 90 percent of the questions. I've been struggling. Thank you very much.

MS. PHILLIPS-THORYN: Thank you for your comment.

The next speaker is Matt Holmes. Unfortunately, we do not see you in the attendee list. If you have joined the hearing under another name, please the raise hand button. If you called in, please press star-9 to raise your hand.

(No response.)

MS. PHILLIPS-THORYN: The speaker will be Rebecca O'Brien. You may now unmute, and please state your name and affiliation for the record.

(No response.)

MS. PHILLIPS-THORYN: Rebecca, we do see you. If you can -- there you go.

MS. O'BRIEN: Hi. Sorry. Thanks for giving me
the chance to talk today my name is Rebecca O'Brien, and I am testifying just as a citizen who lives near a major thoroughfare in Southwest Virginia. We have the technology to switch to zero-emissions vehicles and need to encourage the industry to make the transition. So I'm really excited that the EPA is increasing the restrictions on truck emissions, and I hope that you'll put forward the strong as possible standards on limiting emissions. Thank you.

MS. PHILLIPS-THORYN: Thank you for your comment. The next speaker is Karl Aldinger. You may now unmute, and please state your name and affiliation for the record.

MR. ALDINGER: Thank you. Hello. My name Karl
Aldinger, and I'm speaking today as an organizer representing more than 15,000 members of the Sierra Club in San Diego County in California. I work every day with our volunteers and community members to help reverse our dirty air epidemic and mitigate our climate crisis.

San Diego has been ranked the fifth most populated large metro region in the United States. We have a major port in the City of San Diego, and it should be no surprise to anyone that it is also where our most toxic air is concentrated and where our communities of concern face the worst effects of pollution, largely from trucks serving the poor. We are heavily congested -- we have heavily-congested freeways that were routed decades ago through the center of our redlined city sections, and disastrous emissions from trucks create systemic, chronic adverse health effects. Modern next-day, same-day shipping has significantly increased our regional truck traffic.

While we wish this rule went much, much further towards fully decarbonizing our trucking and buses to address our serious air pollution and the climate
crisis, we support this rule change as another incremental step to reverse this problem. We ask that you please accelerate these efforts to change our transportation emissions and put everyone on a path for a sustainable future. We are failing this challenge, and we must do better.

Finally, on a personal note, as a Sierra Club staffer, I'm a member of the Progressive Workers Union. We support our Teamster brothers and sisters and operate -- who operate our trucks and the workers of the Amalgamated Transit Union, who operate our buses, and all the workers who are exposed to truck and bus exhaust. They also bear the harmful effects of dirty air and should not have to sacrifice their health to serve our community. Thank you.

MS. PHILLIPS-THORYN: Thank you for your comment. The next speaker is Ann Cantrell. Unfortunately, we do not see you in the attendee list. Please raise your hand if you have joined under another name, or if you have called in, please press star-9 to raise your hand. (No response.)

MS. PHILLIPS-THORYN: At this time, we would like
to begin a brief recess. EPA, when would you like to
reconvene?

MR. CHARMLEY: We'd like to begin again, so take
approximately a 35-minute break, and we will begin
again at 1:30 P.M., Eastern Time. Thank you, everyone.

(Break.)

MS. PHILLIPS-THORYN: Are we ready to begin?

MR. CHARMLEY: Yes, that would be great.

MS. PHILLIPS-THORYN: Wonderful. This is Lauren
Phillips-Thoryn from Abt Associates, EPA's contractor.

It is now 1:30 p.m. Eastern Time, and we are rejoining
EPA's public hearing about the Control of Air Pollution
from New Motor Vehicles: Heavy-Duty Engine and Vehicle
Standard Proposal.

In order to accommodate testimony in both Spanish
and English throughout this hearing, all attendees must
select their preferred language via the interpretation
icon at the bottom of your screen. If you are
providing testimony today, please make sure that you
are speaking the language of the channel you are
listening to. For example, listening to English while
speaking in Spanish could prevent other participants
from hearing your statement in the language of choice.

As a reminder, if you are speaking today, you will receive a notification on your screen that you are being promoted to the role of panelist shortly prior to your speaking time. You must accept that invitation to be able to unmute when you are called to testify. This will also allow you to turn on your camera, which we encourage you to do. Speakers connected by telephone should unmute their phones when called to testify.

If you are having technical difficulties, send an email to public_hearing@abtassoc.com, or call (919) 294-7712. If you are not registered to speak, but you would like to, please send an email to public_hearing@abtassoc.com, or call (919) 294-7712. I will be introducing each speaker in turn. Please speak slowly and clearly so our court reporter can record these proceedings accurately. Please remember to keep your comments to three minutes.

The first speaker will be Liane Randolph. Please state your name and affiliation for the record.

MS. RANDOLPH: Good afternoon. I'm Liane Randolph, chair of the California Air Resource Board.
Thank you for this opportunity to present CARB's perspective on EPA's proposed Clean Trucks Plan. We urgently need to cut truck pollution, and we know we can do it. California has the most stringent rules in the country, and we would be delighted to see EPA adopt consistent standards. California needs Federal action on trucks that drive through our state as we move the nation's freight, and the country needs this action to protect all Americans.

CARB has worked closely with EPA to prove heavy-duty engines can meet significantly more stringent criteria pollutant standards, such as those established by CARB's Heavy-Duty Omnibus Regulation. CARB is pleased that the Clean Truck Plan Option 1 incorporates many elements that are generally aligned with the Omnibus Regulation, albeit on a delayed timetable, but we support it and would welcome even more stringent or accelerated standards.

Reducing NOx from heavy-duty trucks is critically important for public health, and we need this rule to make sure emissions fall in real-world conditions. The proposal can be improved in several ways to make it
happen. First, it is concerning that the proposal contains an Option 2 that would stall progress far short of what we can do. A weaker rule like Option 2 could significantly jeopardize the benefits California expects out of this rulemaking, and adversely impact the health and welfare of our most vulnerable communities. Option 1 is much better, although the proposal contains some provisions that, although intended for flexibility, would actually delay or weaken controls. These flexibility provisions must not be included in the final rule. We want to make sure the emissions controls are real, durable, and in line with what California has shown that we can do.

On a related front, I'm concerned that EPA is proposing to dramatically weaken selective catalytic reduction inducements that discourage emission system tampering. We agree the improve -- that improvements can be made to minimize unnecessary disruption to truck operators, but we request that EPA management direct staff to work with CARB to develop a unified national approach that would alleviate fleet concerns but also ensure emission control systems function properly and
1 are resistant to tampering.
2
3 We all agree that more needs to be done to transition heavy-duty vehicles to zero-emission. CARB has taken a lead with the adoption of the Advanced Clean Truck rules, and five other states have opted in. EPA needs to act more aggressively on the transition to zero-emission vehicles. We support greenhouse gas improvements in this rule and urge swift progress to nationwide zero-emission vehicle standards. We need a strong program at least astringent as Option 1 and without unnecessary flexibilities to protect our most heavily-impacted communities. Communities along freight corridors literally live and die by EPA's decisions on how to regulate diesel trucks, and EPA must put their needs first.

16 Thank you, and we look forward to working with you towards a more stringent EPA final rule.

18 MS. PHILLIPS-THORYN: Thank you for your comment.

19 The next speaker will be Jenna Riemenschneider.

20 Please unmute and state your name and your affiliation.

21 MS. RIEMENSCHNEIDER: Hi, and thank you for the opportunity to testify. I'm Jenna Riemenschneider, the
director of advocacy at the Asthma and Allergy Foundation of America, also known as AAFA. Founded in 1953, AAFA is the oldest and largest patient advocacy organization for those with asthma and allergies. AAFA strongly supports stronger standards to limit emissions of NOx and greenhouse gases from heavy-duty vehicles. We urge you to finalize these standards into law this year and to choose Option 1 from the proposal to maximize benefits for public health.

The transportation sector is the largest source of greenhouse gas emissions in the United States and a leading contributor to climate change, and heavy-duty vehicles are a leading source of harmful air pollution that threatens the health of the public, and especially those who live near roads, ports, and freight hubs. We know that climate change poses an immense threat to public health. We're already experiencing increased levels of ozone and particulate air pollution that contribute to asthma attacks, cardiovascular disease, and premature death, extreme weather patterns, such as heat and severe storms, wildfires, and dangerous smoke that spreads for
thousands of miles aggravating heart and lung
conditions, and longer and more intense allergy
seasons.

People with asthma and allergies are particularly
at risk from these health harms. In the United States,
25 million people have asthma, including over five
million children, and over 4,100 people died from
asthma in 2020, which was about 11 people a day. It's
a chronic disease that causes your airways to become
inflamed, making it hard to breathe. Poor air quality
and exposure to air pollution worsened by climate
change and the transportation sector are very
significant risk factors both for developing asthma and
for those who already have an asthma diagnosis.

Exposure to particulate matter and ozone pollution
can diminish lung function, trigger asthma episodes,
and cause greater use of asthma medications. It also
causes increased rates of emergency room visits,
hospital admissions, and school absenteeism related to
asthma. In fact, asthma is the most chronic illness in
children and the number one cause of missed school
days. And in the United States, the burden of asthma
falls disproportionately on black, Hispanic, American Indian, and Alaska Native people. These groups have disproportionately high rates of poor asthma outcomes, including hospitalizations and deaths. For example, black individuals are five times more likely to be treated in an emergency room for asthma and three times more likely to die from asthma than white individuals. Puerto Rican Americans also have the highest rate of asthma prevalence compared to any other racial or ethnic group in the United States.

EPA must finalize Option 1 now as it is the stronger option to protect human health. In fact, it is estimated to result in 18,000 fewer cases of asthma onset in children, and 3.1 fewer cases of asthma symptoms and allergic rhinitis symptoms in addition to the other public health benefits. AAFA urges EPA to prioritize human health and to move quickly to strengthen NOx emissions as well greenhouse gases from heavy-duty engines and heavy-duty vehicles, and to do it by the end of the year to avoid missing a full year of new truck manufacturing. Thank you for your time.

MS. PHILLIPS-THORYN: Thank you for your comment.
The next speaker will be William Barrett.

Unfortunately, we do not see you in the attendee list.

If you have joined the hearing under another name, please click the raise hand button. If you have called in, please press star-9 to raise your hand. All right. You have been promoted to panelist. You must accept the request to be promoted to panelist in order to speak.

(No response.)

MS. PHILLIPS-THORYN: Okay. We will move on to the next speaker, who is Sasan Saadat. Please unmute and state your name and your affiliation for the record.

MR. SAADAT: Thank you. My name Sasan Saadat with Earthjustice. Thank you so much for the time to provide comment.

Over the course of President Biden's campaign, he repeatedly and forcefully promised to deliver on a sweeping climate agenda that puts environmental justice at its center. And accelerating the transition from diesel to zero-emission trucks is tailor-made for delivering on that commitment. Diesel trucks are the
That pollution is concentrated in low-income black and brown zip codes. And at a time when greenhouse gas emissions need to be in unprecedented decline to avoid our trajectory for an unlivable future, emissions from freight are soaring in the wrong direction.

Thankfully, in the last 20 years since EPA updated these standards, the advances in zero-emission technology mean that we have a new super-effective tool for slashing these emissions at an even faster pace than we previously thought.

For the past two years, a steady flow of reports and analysis have repeatedly underscored zero-emission trucks are primed to be a centerpiece in tackling pollution from freight. And far from a niche solution, they are, starting today, suitable for the vast majority of duty cycles, proving themselves on roads in multiple applications. And every credible analysis finds that zero-emission trucks save businesses and drivers money, even faster than electric cars, yet EPA completely neglects to incorporate them into their rule. And almost as if to highlight how out of step
EPA was, on the same day the rule was released, your own peer agency, the Department of Energy, released a study finding that zero-emission trucks are ripe for rapid electrification, and that if economics alone were to drive the adoption, over 40 percent of sales would be zero emission by 2030.

The sensible thing to do with all this positive information by any agency that isn't meant to safeguard public health and the environment, would be to not only see the potential for a transition to zero-emission trucks, but to catalyze it, to accelerate it so that it delivers on the time frames demanded by climate science and environmental justice. But EPA did not choose to step into that leadership. In fact, it did just the opposite. It woefully underestimated any reasonable assessment of zero-emission sales, and then instead of incorporating requirements, it offers credits for additional EVs sold. And in doing so, the proposed standard actually risks relaxing stringency for diesel engines because business-as-usual sales are expected to dilute the need for them to sell cleaner diesels.

Every independent analysis that we have seen
1 confirms that zero-emission trucks will be cheaper to
2 own than diesels by 2035, if not already. At that
3 point, there's no reason why the lifesaving, climate-
4 protecting technology should not be required for every
5 sale. And even if that weren't true, even if there
6 were higher costs, the cost for industry to transition
7 to zero emissions are certain to be only a minuscule
8 fraction of the benefits that would flow to communities
9 in the form of fewer asthma attacks, fewer
10 hospitalizations, and fewer premature deaths. How can
11 an agency devoted to public health turn down that
12 trade? It is a textbook definition of environmental
13 injustice that the hesitations or preferences of
14 industry are given more weight than the lives of
15 frontline freight communities.
16
17 For the sake of public and planetary health, we
18 urge EPA to lead boldly and to correct course. Thank
19 you.
20
21 MS. PHILLIPS-THORYN: Thank you for your comment.
22
23 The next speaker will be Pedro Hernandez. Please
MR. HERNANDEZ: Hello. My name is Pedro Hernandez, and I'm the deputy director for the Central Valley Air Quality Coalition. CVAC is an organization of over 70 environmental and public health organizations with two decades of experience working on the San Joaquin Valley's most pressing air quality and climate priorities. CVAC urges the EPA to strengthen its mobile source pollution requirements to meet the demands set by the climate crisis and the longstanding solution in frontline communities.

Due to the geography, reliance on fossil fuel discriminatory land use planning, California's San Joaquin valley has frontline communities with the highest pollution burdens in all of California. Moreover, this air quality pollution impacts first and hardest in the communities, but overall, the impact of air pollution is so great that nearly every community in the region is affected by this pollution. The San Joaquin Valley has also traditionally served as a good movement corridor for over -- and over the last decade, there's been a drastic increase in the siting of distribution warehouses in these frontline communities,
resulting in long-term exposure to toxic emissions on the scale of thousands of trucks per day.

EPA's rulemaking provides a critical opportunity to restore clean air to places like California's San Joaquin valley if the final rule affirmatively advances zero-emission heavy-duty trucks as fast and as equitably as possible to protect public health.

Currently, the proposal misses major opportunities to advance zero emissions. Moreover, the San Joaquin Valley Air Pollution Control District currently assumes the most stringent measures will be adopted in the Federal level in order to -- for our air bases to reach attainment for our air quality goals. Anything less than a robust multi-sector effort to advance our emission heavy-duty trucks as fast as possible will disrupt these foundational goals. Additionally, California's Air Resource Control Board's goal of reaching 90 percent emissions -- truck is emissions is set for 2027, a full four years before the proposed Federal goal of 2031.

So in conclusion, EPA must accelerate its proposed timeline and provide the most stringent protection
possible by 2027 so that all residents in California and beyond will breathe clean air. Thank you.

MS. PHILLIPS-THORYN: Thank you for your comment.

The next speaker will be Avery Lamb. Please state your name and your affiliation for the record.

MR. LAMB: Hi. Good afternoon. My name is Avery Davis Lamb. I'm a co-executive director of Creation Justice Ministries. Our mission at Creation Justice Ministries is to educate, equip, and mobilize Christians to protect, restore, and rightly share God's creation. Through our 38 denominational and communion members, Creation Justice Ministries serves about 100,000 churches and 45 million people in the United States. And in our sacred scripture found in the Book of Psalms, Chapter 121, the psalmist sings, "The lord will keep your going out and your coming in from this time on and forever more." And as Christians, we believe that God is watching over and blessing our travels, our going out and our coming. However, what we know is that, right now, our travels are polluting our world and impacting the people in the places we love and care for.
We know that the going out and coming in of people and products moved by heavy-duty trucks is harming our world, and even though these trucks only account for four percent of vehicles on the road, they're responsible for 25 percent of total transportation-sector greenhouse gas emissions. Those emissions are destroying our climate and our communities, degrading God's planet and God's people, with a disproportionate and absolutely unjust impact on communities of color.

But it doesn't have to be this way. The movement of people and goods can be a good thing. It can be a blessing from God and a blessing to our world, but that's only if it's powered by clean and renewable energy. That's why I'm here on behalf of the Creation Justice Community and the millions of caring Christians in this country. Together, we are asking the EPA to create the strongest possible limits on heavy-duty vehicle pollution, and to put our national bus and truck fleet on a clear path to 100-percent zero-emission, all-electric vehicles by 2035. Thank you and blessings on your work.

MS. PHILLIPS-THORYN: Thank you for your comment.
As a reminder, if you are speaking today, you will receive a notification on your screen that you are being promoted to the role of panelist shortly prior to your speaking time. You must accept that invitation to be able to unmute when you are called to testify. This will also allow you to turn on your camera, which we encourage you to do. Speakers connected by telephone should unmute their phones when called to testify. If you are having technical difficulties, please send an email to public_hearing@abtassoc.com, or call (919) 294-7712. If you are not registered to speak, but you would like to, please send an email with your name and phone number to public_hearing@abtassoc.com, or call (919) 294-7712.

The next speaker will be Nicole Marcot. Please state your name and your affiliation for the record.

MS. MARCOT: Hi. My name is Nicole Marcot, and I am a volunteer with Moms Clean Air Force. Thanks for taking time to listen to me.

As a mother of three young children as well as an educator in a predominantly low-income section of the City of Detroit, I am deeply concerned about the...
effects air pollution and climate change have on the health of my community and on our children's future. EPA's proposal is a step in the right direction, but it doesn't go far enough. The proposal must be strengthened to better protect children, people with asthma, older adults, and other vulnerable groups from the health harms of air pollution. Parents and grandparents across the country want to see a swift transition to zero-emitting trucks, and we need cleaner air for our children and our communities.

My community in Detroit, Michigan is a low-wealth community near a major highway system. Redacted for PII suffer from asthma as do many other people in my neighborhood. As many as 15 percent of adults and 11 percent of children in Detroit suffer from asthma. As an educator, I frequently witness how children missing school because of asthma. In addition to asthma, heart disease is a major health concern and has been linked to air pollution. In the past couple of years, three of my neighbors have passed away from health issues related to heart disease. Residents of my community are predominantly people of
color, and studies have shown that low-wealth and 
black, indigenous, people of color communities 
experience disproportionate harm from dirty vehicle 
pollution, leading to racial disparities in rates of 
asthma and heart disease.

Air pollution from trucks is a major public health 
problem. According to EPA, more than 45 million people 
in the U.S. live within 300 feet of a major roadway or 
transportation facility, and 72 million people live 
within 200 meters of a truck freight route. As I 
mentioned, people of color and those with lower incomes 
are more likely to live near truck routes. Freight 
corridors, such as ports and rail yards, warehouses, 
distribution centers, and truck stops, are 
predominantly located in low-income communities and 
communities of color that are affected by the 
cumulative impact air pollution from multiple mobile, 
commercial, and industrial sources. Eliminating 
émissions from heavy-duty vehicles, especially through 
a rapid transition to zero-emissions vehicles, is 
esential for making strides towards desperately-needed 
cleaner air in these communities and a safer climate.
Aside from the direct impacts of air pollution, we have been hit with drastically-increasing amounts of extreme weather over here in Southeast Michigan. Last summer, we were without electricity for six days due to a storm that swept through and left close to a million customers without power. Please know that once again it is a low-income community that suffers the most from extreme weather. Wealthy communities in the suburbs had their electricity restored much sooner. This extreme weather is a direct result of climate change and will only grow worse if immediate and strong action is not taken. The future of my three young daughters is at stake along with the lives of children across Detroit, Michigan, the U.S., and the world.

In conclusion, I am asking that EPA please strengthen the final standards to better protect children, people with asthma, older adults, and other vulnerable groups from the health harms of air pollution. Everyone has the right to breathe clean air. Thanks for this opportunity to testify.

MS. PHILLIPS-THORYN: Thank you your comment. The next speaker will be Manijeh Berenji. Please unmute
and state your name and your affiliation for the record.

MS. BERENJI: Thank you. My name is Dr. Manijeh Berenji, a Board-certified occupational and environmental medicine physician. I am chief of occupational health at B.A. Long Beach Healthcare System. I am also a clinical assistant professor of occupational and environmental health at UC-Irvine School of Public Health, as well as clinical assistant professor of medicine at the UC-Irvine School of Medicine. I am speaking on behalf of myself today as a subject matter expert on environmental health as well as a physician advocate. My views are my own and do not represent those of my employers.

As a child, I grew up in a semi-rural community in Southern California. My elementary school was right off the 118 Highway, a busy transit corridor where 18-wheeler trucks and other large vehicles traveled from the coast to the mountains. I remember playing in the fields watching those trucks whiz on by, and those tracks at the time were emitting a significant amount of exhaust. I could see that dark cloud of black smoke
every single time. My classmates and I were breathing
in those chemicals and particulates day in and day out.
A few of my classmates, who were primarily Hispanic,
had asthma, and I remember them using their inhalers
consistently daily.

At the time, I didn't realize what an impact this
pollution would have on us as young children, but the
data that we have now makes it crystal clear how such
air pollutants can impact a child's development. As a
physician who specializes in environmental exposures
and impacts on human health, I see firsthand how adults
and children, especially those from vulnerable
communities, are most impacted by these air pollutants.
I take care of many of these patients in industrial
clinics across Los Angeles.

Trucks and large vehicles are a leading source of
air pollutants that affect human health. Emissions
from these trucks and large vehicles contain chemicals,
such as nitrogen oxides and benzene, which can trigger
health problems, such as aggravated asthma, reduced
lung capacity, and increased susceptibility to
respiratory illnesses, including pneumonia bronchitis.
Exposures to air pollutants can also cause neurological, cardiovascular, reproductive, and immune system effects as well as lead to cancer down the line. These motor vehicles are also a major source of fine particulate matter of different sizes and compositions. According to the EPA, diesel-powered vehicles, vessels, locomotives, and equipment account for over 60 percent of all nitrogen oxides and more than 70 percent of all fine particulate matter emissions from U.S. transportation sources. Heavy-duty diesel vehicles alone account for 20 percent of all nitrogen oxide and 25 percent of PM2.5 pollution emitted by vehicles in the country. And according to the Union Of Concerned Scientists, in communities of color and socioeconomically disadvantaged communities, there are disproportionately higher exposures to PM2.5 pollution. Yet despite significant reductions in ambient concentrations over the past 40 years, these communities remain exposed at similarly proportioned higher levels, according to researchers at the University of Virginia. The proposed standards would reduce emissions of
smog- and soot-forming nitrogen oxides from heavy-duty gasoline and diesel engines. Option 1 is the clear choice for public health, but more stringent greenhouse gas emissions standards are necessary with an accelerated timeline for implementation. The framework proposed can be improved significantly to protect vulnerable communities and workers, with the ultimate goal to be net zero emissions. EPA should work with CARB and state agencies for optimal implementation practice. There also needs to be a systematic approach to address -- to address emission standards for light-duty vehicles and other non-road vehicles. Only then can we truly achieve cleaner air for all.

I want those kids who now go to my elementary school not to be exposed to what I was exposed to as a child. Thank you.

MS. PHILLIPS-THORYN: Thank you for your comment. The next person is Anne Mellinger-Birdsong. Please unmute and introduce your name and your affiliation for the record.

MS. MELLINGER-BIRDSONG: Hi. I'm sorry. I'm having camera trouble. My name is Anne Mellinger-

I'm a pediatrician who specializes in environmental public health. I'm speaking on behalf of Mothers and Others for Clean Air. We support EPA's proposal to strengthen emission standards for heavy-duty vehicles and urge EPA to make it as strong as possible, Option 1 or better.

I live in Atlanta, which is a trucking hub. We are the intersection of three busy interstates with many warehouses and multimodal facilities. Trucks bring items here, they hey leave with different items, and they carry away items brought up from the ports by rail. This heavy-duty vehicle traffic creates a lot of air pollution, which I and my family breathe. A recent study found that nitrogen oxides are higher in areas that were formerly redlined. Because redlining was in effect when we designed the interstate highway system, we built our highways and warehouses in the middle of black and brown communities. Even though redlining was outlawed decades ago, the structural inequities built into our country back then continue to cause exposure and health disparities to this day.
Almost one-third of the nitrogen oxide air pollution comes from heavy-duty vehicles. Nitrogen oxides damage airways and cause asthma attacks. They worsen emphysema and COPD and can also trigger preexisting heart disease, leading to premature death.

Nitrogen oxides also serve as a substrate for ozone formation, and it combines with other air pollutants to make fine particular matter. Both ozone and particulates damage health and cause deaths. A recent study in BMJ found that nitrogen dioxide causes 1.6 percent of all deaths in the U.S. This study found a no-threshold correlation between NO2 and death, meaning there are excess deaths at every level of NO2 above zero. This shows that nitrogen oxides are deadly.

Children are especially vulnerable to air pollution. Children have a higher minute ventilation, spend more time running and playing outside, and they're still growing and developing. Nitrogen oxides can cause asthma attacks in children and stunt teens' lung growth. Air pollution from trucks is especially harmful for black and brown children because of the legacy of where we built our highways. Children do not
choose where they live, where they go to school, or whether the air they breathe is healthy or polluted. Adults decide all these things for them. We have the responsibility to be sure they breathe clean, healthy air.

At Mothers and Others for Clean Air, we say healthy air is healthcare. Stronger emission standards for heavy-duty vehicles will create cleaner, healthier air and will reduce hospitalizations and deaths. We support this proposed rule and urge EPA to make it as strong as possible. Thank you.

MS. PHILLIPS-THORYN: Thank you for your comment. The next speaker is Susan Pate. Unfortunately, we do not see you in the attendee list. If you have joined from another name, please click the raise hand button. 

(Virtual hand raised.)

MS. PHILLIPS-THORYN: All right. I'm moving you to panelist. Please unmute and state your name and your affiliation.

MS. PATE: Sorry. You probably didn't hear my beginning, which was my name, Susan Pate. I live near St. Louis, Missouri, and I'm speaking for not only the
14 percent of people who live within 300 yards of a highly-used interstate, but also for the 86 percent of us who don't live quite so close but are still impacted by the pollution that these trucks emit. The 14 percent include my -- two of my three grandchildren, who are not yet in their double digits, but they're getting close and looking forward to it, and they live within that 300-yard limit. And the school they go to is just on the other side of the interstate, again, within 300 yards. So they are breathing 24/7 that polluted air.

I consider the pollution to be life threatening or live shortening, or both, and I want it to stop, of course. So I would like you to introduce the stricter air standards that you have already proposed. We also must reduce the number of pollutants -- not only reduce the number of pollutants but also cease destroying our natural air cleaners, like the trees -- and to quit destroying our natural air cleaners, the trees. So let us set much stricter regulatory standards. And as a final note, I would like to point out that I have purchased a solar car due -- towards the end of this
year, which means I will not be polluting at all. And the price of that car was quite reasonable, under $30,000.

So please continue with stricter air pollution standards for our trucks, well, and cars, too, but that's not today's. And thank you very much. Take care now.

MS. PHILLIPS-THORYN: Thank you for your comment. The next person is Gerald Pyle. Unfortunately, we do not see you in the attendee list. If you have joined the hearing under another name, please click the raise hand button. If you have called in, please press star-9 to raise your hand.

(No response.)

MS. PHILLIPS-THORYN: The next speaker will be Jason O'Dell. Unfortunately, we do not see you in the attendee list. If you have joined the hearing under another name, please click the raise hand button. If you have called in, please press star-9 to raise your hand.

(Virtual hand raised.)

MS. PHILLIPS-THORYN: Okay. I'm promoting you.
Jason O'Dell, if you have now joined, please state your name and your affiliation for the record.

MR. O'DELL: Hello.

MS. PHILLIPS-THORYN: We can hear you.

MR. O'DELL: Oh, hi. I just wanted to speak in support of strong EPA regulation on trucks. My name is Elliott. I'm calling from Long Beach, California, where we deal with some of the worst air quality in the Nation. But, honestly, I don't even like to talk about air quality like a competitive thing. It's a human right that we don't have here in Long Beach that it sounds like so many of our folks throughout the country are experiencing poor air quality.

I just want to just say to the EPA that there's a lot of pressure on this Agency at -- especially at moments like this with the severity of the climate crisis, to modernize the economy, that electrification is simply modernization. The transition away from fossil fuel is simply the leadership necessary for us to obtain a healthy and habitable future. And so all agencies -- all government agencies in charge of regulating the air are looking for the EPA's leadership
on this. This is something that is past due. This is the reason why we have such poor air quality is, frankly, the Environmental Protection Agency has not been able to protect our environment. And there is a lot of optimism in this room and in various organizations that with this one truck regulation, we can begin to see the EPA move in a direction that advances our country and our economy towards modernization.

So I want to thank you. Thank you all for your time today, and I hope that you will pass a strong rule. Thank you.

MS. PHILLIPS-THORYN: Thank you for your comment. As a reminder, if you are speaking today, you will receive a notification on your screen that you're being promoted to the role of panelist shortly prior to your speaking time. You must accept that invitation to be able to unmute when you are called to testify. You will also be able to turn on your camera, which we would encourage you to do. Speakers connected by telephone should unmute their phones when called to testify. If you are having technical difficulties,
please send an email to public_hearing@abtassoc.com, or call (919) 294-7712. If you are not registered to speak, but you would like to, please send an email with your name and phone number to public_hearing@abtassoc.com, or call (919) 294-7712.

The next speaker is Louise Mehler. Please unmute and state your name and your affiliation for the record.

MS. MEHLER: My name is Louise Mehler, and I'm a U.S. citizen and a retired epidemiologist in Sacramento, California. I haven't been able to hear the speakers after -- the allergy speaker, and so just the past one. I will ask you please to confirm that you can hear me.

MS. PHILLIPS-THORYN: We can hear you.

MS. MEHLER: Okay. Thank you. Thank you for giving us all this opportunity to speak. I'm here to encourage you to strengthen the proposals further so that they require a definitive path towards sustainability in our transportation sector. But rest assured that I'm deeply grateful to you for opening this conversation and creating this opportunity.
In my professional capacity, I used to attend meetings of the Environmental Health Committee of the California Conference of Local Health Officers, which is where I learned that diesel exhaust are one of the two environmental pollutants most immediately hazardous to public health. The other, in case you're wondering, was polybrominated biphenyl fire retardants, which are now considered to be restricted. I also live about 100 yards from Interstate 80. You don't need me to tell you about all the noxious stuff and diesel exhaust, the numbers of cancer cases and premature deaths attributable to exposure. You know two of the recent World Health Organization assessments that 99 percent of the world's people breathe air that contains harmful levels of pollutants, specifically those produced by burning fossil fuels.

You've probably seen the studies that link proximity to highways with prevalence of respiratory disease. Any of these would be sufficient reason for maximum regulation of exhaust emissions, but none of it really matters if we don't get a handle on greenhouse gases and climate change. We're headed for a worldwide
mess that will put chronic lung disease well down our grandchildren's (inaudible). Here in California, we've tried a number of ways to clean the air, and whatever else they've done, they don't seem to have tanked our economy. I hope you can make use of our experience to devise regulations that disrupt the status quo and put us on track for a livable future world for myself, for all the people who have no choice but to live here on heavily-traveled roads, and for the entire planet and generations to come.

I ask you to adopt the most stringent and ambitious regulations possible. Damage has accumulated on all levels while we ceded time to a simulated controversy and questionable economic threat. The technology exists. We can enjoy the benefits of transportation without damaging our lungs and our environment. Please make it happen now.

MS. PHILLIPS-THORYN: Thank you for your comment. The next speaker is Gerald -- is George Agortsas. Unfortunately, we do not see you in the attendee list. If you have joined the hearing under another name, please click the raise hand button. If you have called
in, please press star-9 to raise your hand.

(No response.)

MS. PHILLIPS-THORYN: The next speaker is Rene St. Julien. Unfortunately, we do not see you in the attendee list. If you have joined the hearing under another name, please click the raise hand button.

Okay. I am promoting you. Please unmute and state your name and your affiliation.

(No response.)

MS. PHILLIPS-THORYN: That is Rene. Please unmute and state your name and your affiliation.

MR. ST. JULIEN: Okay. I'm trying to get my screen size a little bit smaller since it was minimized before, and now I can't see my speech. That's it.

That's better.

Thank you for the opportunity to testify today.

My name is Rene St. Julien, and I'm here as a private citizen. I support this administration's swift action on clean trucks, and I urge the EPA to adopt the strongest emission standards possible. The standards being discussed in this meeting or not stretch goals for big rig and large bus manufacturers. There are a
few companies already producing all-electric big rig, short-haul tractor trailers and full-size electric city buses, which can be purchased right now. If you've ever waited at a bus stop to catch a city bus or stop behind a school bus at a red light, then you know how overwhelming the diesel exhaust fumes can get. These fumes not only smell bad, but are bad for both your lungs and the environment.

The world has seen some incredible technological innovations over the past 40 years, many things changing at a speed which is almost hard to keep up with. Who would have thought even a couple of years ago that we could have a huge virtual meeting like this on Zoom? Meanwhile, the long haul, big-rig tractor trailer industry is producing trucks using engine ignition technology that can't stand up to the reliability requirements necessary for the amount of miles that tracks are expected to be driven. While hybrid and electric passenger cars have gained increased popularity, hybrid and electric long-haul big rig trucks are still in the early stages of development and testing. For the most part improvements in the
area of safety or the environment are never made by the
diesel truck industry voluntarily, but only when the
Federal Government mandates it.

The EPA must set the strongest diesel engine
standards possible, requiring diesel electric hybrids
for long-haul tractor-trailer rigs and all electric for
short-haul rigs, city buses, school buses, and delivery
trucks. This will help slash air pollution and
increase the number of zero-emission vehicles on the
road, which will benefit the entire Nation. I hope the
EPA will continue to be the voice of the people setting
stringent standards to reduce nitrogen oxide and
greenhouse emissions. At a very minimum, the EPA
should choose Option 1 in the rule. Option 2 simply
does not go far enough to protect our communities and
our future from the high impact of heavy-duty vehicle
emissions.

Thank you for the opportunity to testify today.

MS. PHILLIPS-THORYN: Thank you for your comment.

The next speaker is Kim Anderson. You may now unmute,
and please state your name and affiliation for the
record.
MS. ANDERSON: Hello. My name is Kim Anderson with the Evangelical Environmental Network, and I thank you for the opportunity to testify today.

I live in a small Pennsylvania town which has a state route running right through the center of it. I used to live one block from the street where delivery trucks, box trucks, semis, and coal trucks drive through by the dozens each day. While living there, I noticed a dark grey film would appear on my car. I've lived several places, including in a city that falls within the 50th largest cities in the United States. I've never experienced anything like this before. I tried everything to get this film off my cars. Finally, I found a special cleaner and a strong brush that got it out, but even with that, I had to scrub just one of my cars for a couple of hours, during which time I began to wonder what is this doing to my children's lungs. We lived in that house for six years during formative years of their lives. I can't help but wonder if there's a black film on their lungs from breathing, playing, biking, running, and sleeping in this highly-contaminated air.
As a person of faith, I believe in what the Bible says about life. Jeremiah 29:11 says, "For I know the plans I have for you," declares the Lord, "plans to prosper you and not to harm you, plans to give you a hope and a future." In essence, God wants us and our children to have a bright hope and a future. I believe this extends from our long-term life plans to our daily health. I'm fortunate that my children do not suffer from asthma or severe allergies, but many children do, and lung-damaging pollution is a big contributor to those very real health issues.

Trucks and buses are only four percent of the vehicles on the road, but they are responsible for 25 percent total transportation sector greenhouse gas emissions. If it is not bad enough already, the miles trucks travel on roads is only expected to increase in the coming decades as we rely more and more on online shopping. In other words, if we continue moving in the direction we seem to be, my children's young lungs and those of the 73 million children living in the United States are not safe.

Trucks are a leading source of these air
pollutants with an estimated consumption of 55.3
billion gallons of fuel and an admitted 561 million
metric tons of greenhouse gases in 2020 alone. There
are dozens of zero-emission medium- and heavy-duty
trucks and buses already available or coming on the
market within a couple of years, including the electric
Mack truck produced right here in Pennsylvania. These
electric vehicles are already capable of supporting the
majority of freight delivery and transit needs.

Electrifying medium- and heavy-duty trucks and
buses across our country is essential to improve air
quality, and defending the health of my children and
the other 73 million children in the country today.
Let's make the right choices to give them a bright hope
and a future that God wants for them and us. Thank
you.

MS. PHILLIPS-THORYN: Thank you for your comment.
As a reminder, if you are speaking today, you will
receive a notification on your screen that you are
being promoted to the role of panelist shortly prior to
your speaking time. You must accept that invitation to
be able to unmute when you are called to testify. This
will also allow you to turn on your camera, which we encourage you to do. Speakers connected by telephone should unmute their phones when called to testify. If you are having technical difficulties, please send an email to public_hearing@abtassoc.com, or call (919) 294-7712. If you are not registered to speak, but you would like to, please send an email with your name and phone number to public_hearing@abtassoc.com, or call (919) 294-7712.

The next speaker is Sean Waters. You may now unmute, and please state your name and affiliation for the record.

MR. WATERS: Thank you for the opportunity to offer these brief remarks on EPA's proposed Clean Truck Program. My name is Sean Waters. I'm the vice president of product compliance and regulatory affairs for Daimler Trucks North America.

With our affiliated brands -- Freightliner, Western Star, Thomas Built, and Detroit Diesel -- DTNA is the largest commercial vehicle manufacturer in the United States and North America, and we have a significant interest in this rulemaking. Our
headquarters are in Portland, Oregon, and we have
assembly plants in Oregon, North and South Carolina,
and a large powertrain facility in Michigan operated by
Detroit Diesel Corporation. DTNA employs 16,000 people
in the United States. This includes nearly 3,000
people in Michigan, over which 1,800 are union jobs;
3,000 people in Oregon and over 8,000 employees in
North and South Carolina.

We support the development of feasible and cost-
effective regulations. We have a long history of
working collaboratively with EPA on past rules to
ensure that the end product of the regulatory process
is practical and implementable. DTNA supported
greenhouse gas Phase 1 rulemaking by the EPA, we
supported greenhouse gas Phase 2 regulations, and we
work with the EPA to keep the Phase 2 regulations in
place when challenged under the prior administration.
I personally met with both prior EPA administrators
during the -- during the prior administration and
requested that the greenhouse gas Phase 2 regulations
not be rolled back, that they be maintained in place.

Our goal is always to work with EPA to develop new
rules in a transparent manner that benefits all stakeholders, public and private, and we share EPA's goal of reducing emissions from the heavy-duty transportation sector in a manner that does not compromise quality, safety, or affordability. We the leading developer of advanced technologies to reduce emissions in the heavy-duty sector, and we are fully committed to a zero-emission vehicle future. We're heavily invested in the development of zero-emission vehicles, which includes battery electric and hydrogen fuel cell platform and their infrastructure.

Despite our strong support for zero-emission technologies of the future and our historic support of EPA's mission reduction programs, we do have significant concerns about the feasibility of the rule EPA has proposed, and we do not believe EPA has demonstrated technical feasibility as required under the Clean Air Act. We will provide significant written comments and data during the rulemaking process to further expand upon our concerns. EPA also proposes to add expensive requirements to zero-emission vehicles without adequately evaluating their feasibility. These
rules will add to the --


MR. CHARMLEY: Sean, you went on mute.

MR. WATERS: I see that. Okay. Thank you. EPA also proposes to add some expensive requirements to ZEVs, and I would just say that any rule that increases the cost of a zero-emission vehicle should be recognized as counterproductive. Adding significant cost to zero-emission vehicles could delay their adoption, especially in communities affected by the regulated emissions. EPA needs to help remove old diesel vehicles from the roads as fast as possible. We stand ready to work with EPA on a practical and aggressive rule that delivers real-world NOx reductions and does so in a way that doesn't exacerbate existing inflation and supply chain challenges. We believe any should be drafted with a focus on maintaining equity and maintaining or increasing jobs rather than putting them at risk. We have a history of cooperation with the Agency working on emission rules, and hope EPA will take the time to work with us on addressing important issues of air quality, climate change, and social
And as a final note, we want to stress that the greenhouse gas Phase 2 portion of the rule should remain the same and not be reopened. As manufacturers, we rely on regulatory certainty for our product development. Greenhouse gas Phase 2 in its current form is technology is he forcing, but it's attainable thanks to the long-term investments that we've made. It's a highly-effective regulation that fulfilled its intended purpose. We asked, like we asked the last administration, that greenhouse gas Phase 2 regulations remain the same. Thank you.

MS. PHILLIPS-THORYN: Thank you for your comment. The next speaker is Ray Pingle. Please unmute and state your name and affiliation for the record.

MR. PINGLE: Hi, all. My name is Ray Pingle, and I'm the lead volunteer for transportation electrification for Sierra Club California.

The transition from combustion engine, heavy-duty vehicles to 100-percent zero-emission vehicles is the ultimate end goal to reducing toxic air pollution and GHGs. The EPA must do everything it can now to achieve
this objective. A fundamental assumption that EPA will use in crafting its final rule is the forecast number of ZEVs feasible in the coming years. It must increase dramatically from its current outdated forecast with only 1.5 percent of medium heavy-duty vehicle sales being ZEVs by 2027. Five additional states have adopted California's act rule, representing 20 percent of medium-, heavy-duty vehicles nationally. This rule requires 15 to 20 percent of sales to be ZEVs in 2027. This will have a dramatic impact nationally, and momentum is growing in additional states as they adopt policies, incentives, and support structures to promote increasing medium-, heavy-duty vehicles.

A March 2022 NREL study entitled, "Decarbonizing Medium-, Heavy-Duty On-Road Vehicles Cost Analysis," states, "Assuming economics drive adoption, ZEV sales could reach 42 percent of all medium-, heavy-duty trucks by 2030, reflecting lower combined vehicle purchase and operating costs." We would encourage the EPA also to consider the recommendations from the International Council for Clean Transportation in its February 2022 briefing paper, entitled: "Adapting U.S.
Heavy-Duty Vehicle Emission Standards to Support a Zero-Emission Commercial Truck and Bus Fleet." Zero-emission vehicles are technically and economically ready today in the use cases where the majority of vehicles are currently deployed. In California, the HVIP Financial Incentive Program has approved over 160 zero-emission vehicles with multiple vendors in each class, from Class 2b to Class 8 semi-tractors.

ZEV truck demand is significant and growing. Many companies have announced commitments to transition their fleets to zero-emission vehicles, including Amazon, American Airlines, Best Buy, DHL, IKEA, Walmart, and many, many more. We cannot wait for the Phase 3 GHG rulemaking until 2030 to seriously address how to increase the ZEV fleet. We need to begin now in the Phase 2 GHG part of the rule to boldly drive the necessary and feasible significant transition possess.

Thank you very much.

MS. PHILLIPS-THORYN: Thank you for your comment.

The next speaker is Jessie Parks. Unfortunately, I do not see you in the attendee list. If you are here under a different name, please raise your hand, or if
you have called in, please press star-9 to raise your hand.

(No response.)

MS. PHILLIPS-THORYN: The next speaker is Sandra Purohit. Please unmute, and introduce yourself and your affiliation for the record.

MS. PUROHIT: Good afternoon. I'm Sandra Purohit. I am director of Federal advocacy for E2, Environmental Entrepreneurs. E2 is a national nonpartisan group of more than 11,000 business leaders, investors, and other professionals from every sector of the economy, who advocate for smart policies that are good for the economy and good for the environment. Our members have founded or funded more than 2,500 companies and have created more than 600,000 jobs here in the U.S. On their behalf, I urge the EPA to finalize a heavy-duty trucks rule this year that is stronger than both Option 1 and Option 2, as currently proposed.

Just last week, in two new reports on climate, the Biden-Harris administration's Office Of Management And Budget and the United Nations International

www.trustpoint.one 800.FOR.DEPO
www.aldersonreporting.com 800.367.3376
Intergovernmental Panel on Climate change made clear we simply do not have time for incremental change. Business leaders agree. Climate-driven floods, wildfires, hurricanes, and droughts already threaten businesses directly, disrupt supply chains, and drive up input costs by destroying raw materials from produce to lumber. In 2021, climate-related disasters cost our economy $145 billion, the highest in any -- of any country. Along with the critical climate need, the EPA must do more to address the air pollution that is driving workers, customers, and community members into hospitals. In particular, aggressive action is needed to make a long-overdue difference on the disproportionate impact of these emissions on workers, and communities of color, and low-income communities.

A few key points to make. Heavy-duty trucks are only 10 percent of on-road --

MR. CHARMLEY: Sandra, for some reason your voice stopped, and your screen froze.

(No response.)

MR. CHARMLEY: Lauren, do you want to go ahead and ask if any of the previous speakers from this group
that weren't available are available, and maybe in the meantime, our last speaker, Sandra, might be able to rejoin us.

MS. PHILLIPS-THORYN: I sure can. She had one minute left in her testimony. These are the speakers that we unfortunately had to skip because they were not in the attendee list. I will read their names. If you are here in the hearing, please press your -- the raise hand button, or if you've called in, you can press star-9: William Barrett.

(No response.)

MS. PHILLIPS-THORYN: Gerald Pyle?

(No response.)

MS. PHILLIPS-THORYN: Jason O'Dell?

(No response.)

MS. PHILLIPS-THORYN: George Agortsas?

(No response.)

MS. PHILLIPS-THORYN: And Jessie Parks?

(No response.)

(Pause.)

MS. PHILLIPS-THORYN: It looks like Sandra has dropped from the hearing. She may return. In the
meantime, should we take a brief recess?

MR. CHARMLEY: I think that would be fine. Why don't we go ahead and take a brief break until 2:45, and if we can check and see if Sandra was able to rejoin us, and, if not, we can continue with the rest.

MS. PHILLIPS-THORYN: All right.

(Break.)

MS. PHILLIPS-THORYN: This is Lauren Phillips-Thoryn from Abt Associates, EPA's contractor. It is now 2:45 p.m., Eastern Time, and we are rejoining EPA's public hearing about the Control of Air Pollution from New Motor Vehicles: Heavy-Duty Engine and Vehicle Standards proposal.

In order to accommodate testimony in both Spanish and English throughout this hearing, all attendees must select their preferred language via the interpretation icon at the bottom of your screen. If you are providing testimony today, please make sure that you are speaking in the language of the channel you are listening to. For example, listening to English while speaking in Spanish could prevent other participants from hearing your statement in their language of
Before we resume the hearing, we'd like to go over some logistics. As a reminder, all attendees have -- are muted automatically. If you are speaking today, you will receive a notification on your screen that you are being promoted to the role of panelist shortly prior to your speaking time. You must accept that invitation to be able to unmute when you are called to testify. This will also allow you to turn on your camera, which we encourage you to do. Speakers connected by telephone to unmute their phones when called to testify. If you are having technical difficulties, send an email to public_hearing@abtassoc.com, or call (919) 294-7712.

If you are not registered to speak, but you would like to, please send an email to public_hearing@abtassoc.com, or call (919) 294-7712.

Now we will continue our public testimony. The expected speaking order is currently displayed on screen. We ask that each person limit their verbal testimony to three minutes. We encourage you to provide your full written testimony and any additional
comments of any length to Docket Number: EPA-HQ-OAR-2019-0055 on Regulations.gov. I will be introducing each speaker in turn. Please speak slowly and clearly so our court reporter can record these proceedings accurately.

For the first speaker, we will return to Sandra Purohit as she had technical difficulties. Sandra, if you can unmute and continue.

MS. PUROHIT: Thank you so much. I'm actually not sure where you stopped hearing, so should I start from the top or does anybody know when you stopped hearing from me?

MS. THOMPSON: You dropped with a minute left, so I'd say two-thirds of the way through.

MS. PUROHIT: Okay. I'm going to see if you heard me make a few points about heavy-duty trucks. I think that's about --

MR. CHARMLEY: Sandra, I think that's right where you were. You were doing some comparisons.

MS. PUROHIT: Right. Thank you so much, and thanks for this second opportunity. So to make a few points, again, for the record, Sandra Purohit with E2,
Environmental Entrepreneurs. Heavy-duty trucks are only 10 percent of the on-road vehicles but contribute 33 percent of mobile-source NOx emissions and are the second-largest contributor to mobile-source greenhouse gas emissions, the point being that strongest standards here can make a huge impact.

We already have commercially-available zero-emission trucks that address NOx particulate matter and climate emissions. These trucks also lower fleet operating and maintenance costs. With a strong market signal from the EPA to help drive production, they will become even more affordable to make and buy. What we don't have is the luxury of time. EPA cannot lag behind the market or fail to advance the deployment of zero-emission trucks at the pace needed to address the urgent public health and climate crisis. As such, we urge EPA to disregard Option 2 as wholly inadequate and to strengthen Option 1 in three ways: to align with heavy-duty omnibus rules stringency in Model Year 2027; eliminate the credit mechanism better roads standard; and to adopt a zero-emission vehicle sales mandate. The greenhouse gas standards should be updated to
reflect existing state requirements that will lead to higher penetration rates in Model Year 2027 and the 1.5 percent assumed by the Agency.

The EPA has the mandate and the authority to set standards that more assertively scale up solutions and moves the needle on climate and public health-harming emissions. On behalf of E2 business leaders, we urge you to do so, and once again, thank you for the time.

MS. PHILLIPS-THORYN: Thank you for your comment. The next speaker is David Offen-Brown. Unfortunately, we do not see you in the attendee list. If you have joined the hearing under another name, please click the raise hand button. If you have called in, please press star-9 to raise your hand.

(No response.)

MS. PHILLIPS-THORYN: The next speaker is Ada Stepleton. I have requested to promote you to panelist, if you can please unmute and state your name and your affiliation for the record.

MS. STEPLETON: Hello. My name is Ada Montague Stepleton, and I am a mother of a three-year-old, and I'm also a member of the Moms Clean Air Force. I would
like to start my testimony today by quoting from the Harvard Law Review, Volume 135, Number 6 of April 2022. And the quote begins, "The months leading up to the 2021 United Nations Climate Change Conference, or COP26, in Glasgow put the climate crisis in stark relief. Heatwaves blanketed the American Northwest, shattering temperature records as mortality rates searched. Wildfires raged across Greece, destroying over 120,000 acres of pine forests. Unexpected monsoons and dry spells disrupted weather patterns in Madagascar, resulting in famine for hundreds of thousands of people. And scarcity and freshwater sources in Asia exacerbated geopolitical tensions as China's efforts to redirect rivers caused extraterritorial droughts and floods." I quote this to you because the rulemaking that is being contemplated today has impacts that expand beyond the borders of the United States. And it is clear from the rather frustrating outcome of COP26 that more and all need to be done to address carbon emissions and greenhouse gas emissions.

In preparation for my testimony today, I read
through the RIA, or Regulation Impact Analysis, for this rulemaking. I believe it has been thoroughly vetted for its impact on other regulations, and given the dire need to address carbon emissions in every way possible right now, I believe the Option 1 stronger standards should be implemented. Thank you.

MS. PHILLIPS-THORYN: Thank you for your comment. The next speaker is Stephen Wyman. Unfortunately, we do not see you in the attendee list. If you have joined the hearing under another name, please click the raise hand button. If you have called in, please press star-9 to raise your hand.

(No response.)

MS. PHILLIPS-THORYN: The next speaker is Karen Heuer. Unfortunately, we do not see you in the attendee list. If you have joined hearing under another name, please click the raise hand button. If you have called in please, press star-9 to raise your hand.

(Hand raised virtually.)

MS. PHILLIPS-THORYN: All right. You've been promoted. Please unmute, and state your name and your
affiliation for the record.

(No response.)

MS. PHILLIPS-THORYN: I've asked you to unmute if you are able to do so and state your name and your affiliation for the record.

MS. HEUER: My name is Dr. Karen Heuer. I'm speaking as an ophthalmologist and a concerned citizen. First, I would like to thank everyone at the EPA for all the hard work you're doing to protect our environment. I'd gone on the website during the prior administration, and reading through there, I saw first handle the destruction that the former EPA was allowing to happen to our air, land, and water. I saw all of the poison that was bombarding us. And, well, I wanted to change the name of the Agency, so, thankfully, the EPA is back with this administration, and you have a big job to do to help us save the world.

I live in the Northern suburbs of Denver. Our clean air threats include wildfires, smoke, emissions from Suncor Refinery, which drift directly towards us, radon emissions from all the engines running 24/7, the worst, of course, being diesel. We've had three
neighbors within a few blocks die of lung cancer.

So last year, I got the BreezoMeter app, which measures air quality in real time. I was shocked to see that only about half of the time the air quality was good or what is considered safe to breathe. For the other half, for a good portion of the year the air was not safe. This pretty much eliminates the old saying to go outside and get some fresh air. Instead, we couldn't open windows, we couldn't take the dogs out, we couldn't go walking or jogging. In fact, we didn't feel safe to be outside at all. This is our new normal here in the Denver, Colorado area. Just again last night, we were in the moderate air quality range again.

I believe that clean air should be a right as much as any constitutional right. We can't control wildfire smoke, we can't control radon, but we can control what's spewing out of refineries, like Suncor. We can control what's spewing out of these diesel engines. If you think about it, we live in a big balloon which is our atmosphere. We're filling this balloon with poisonous gases, which will contaminate our air for
hundreds of years. We can no longer point the finger at China or others when we are one of the worst polluters. There are the lies and propaganda. We've all heard it, how the economy is the most important. We can't afford it, blah, blah, blah. You know, it's all lies.

So I've got the oil gas blues, you guys, and for smokestacks, too. I can't breathe it all as we watch the fall of air that's so true. Who said it's no crime to breathe all this grime? Why, I ask. Why, I ask you. Why can't we just get a clue? I've got the oil and gas blues. Thank you very much for letting me speak. That's all I have to say.

MS. PHILLIPS-THORYN: Thank you for your comment. The next speaker is Emily Kent. You may now unmute, and state your name and your affiliation for the public record.

MS. KENT: Good afternoon, and thank you for holding this hearing on such an important topic. My name is Emily Kent, and I'm the policy manager for zero carbon fuels and transportation decarbonization at Clean Air Task Force. CRTF is a global nonprofit
organization working to safeguard against the worst impacts of climate change by catalyzing the rapid development and deployment of low-carbon energy and other climate-protecting technologies.

Emissions from heavy-duty vehicles cause significant negative health impacts and contribute to climate change. In particular, diesel trucks and other diesel-fueled equipment are significant contributors to particulate matter air pollution. This air pollution often occurs along highways and in industrial or urban hubs, and it causes health disparities that further inequitable harms to historically-marginalized communities. CATF strongly supports the objectives of EPA's rulemaking and urges the Agency to finalize a rule that mitigates the negative health and climate impacts of emissions from heavy-duty engines and vehicles to the fullest extent possible.

I would like to bring EPA's pays attention to a new CATF and data visualization tool called Deaths by Dirty Diesel, which highlights the price that communities in the United States pay in negative health impacts from diesel-powered vehicles. Deaths by Dirty
Diesel makes data on health impacts from diesel pollution easily accessible to community members on a state, county, and metro area basis. The map can be accessed at www.CATF.us/deathsbydiesel. Diesel has been causing death and debilitating illness to communities across the United States for generations. This does not have to be the case. There are steps that we can take, both in government and in industry, that can push dirty diesel burning engines out of the marketplace and out of our neighborhoods.

The Clean Air Act requires EPA to reduce emissions as much as possible from these dirty engines to mitigate dangers to public health and the environment. This rulemaking is an opportunity to accelerate that transition toward zero-emitting, heavy-duty vehicles. The Deaths by Dirty Diesel map shows in stark detail just how important this transition is. The map informs and motivates CATF's efforts to push for the development of better policies and cleaner technologies.

This newly-proposed heavy-duty engine and vehicle standard will play an important role in minimizing
climate-warming pollutants from heavy-duty gasoline and diesel vehicles, improving air quality and human health and rectifying some of the harms that have burdened communities for decades. Clean Air Task Force looks forward to continued engagement with EPA, and community members, and other stakeholders on this important issue. Thank you for your time today.

MS. PHILLIPS-THORYN: Thank you for your comment. The next speaker is Michael Walsh. Unfortunately, I do not see you in the attendee list. If you've joined the hearing under another name, please click the raise hand button.

(Virtual hand raised.)

MS. PHILLIPS-THORYN: Okay. I am promoting you now.

MR. CHARMLEY: Everyone, this is Bill Charmley with the EPA. I just want to make sure I had the chance to introduce Mike. Mike is -- in addition to a member of the Environmental Protection Network is a -- also a former director of our office many years before I joined, and, Mike, really happy to have you join today. Hopefully, you're able to use the electronic
system that we're using.

MR. WALSH: Can you hear me?

MS. PHILLIPS-THORYN: Yep.

MR. WALSH: Good. As Bill said, my name is Michael Walsh, and I had the privilege about 40 years ago -- a little over 40 years --

MR. CHARMLEY: Mike, your voice, at least for me, is very, very quiet.

MS. PHILLIPS-THORYN: A quick pause. Do we hear the Spanish interpreter on the English channel?

MR. WALSH: I do.

MS. PHILLIPS-THORYN: Okay. Jesus, are you able to check that you are speaking into the Spanish channel? Thank you. All right, Michael, please begin.

(No response.)

MR. CHARMLEY: You're still on mute, Mike.

MR. WALSH: I'll figure this out eventually. Can you hear me now?

MR. CHARMLEY: Yeah.

MR. WALSH: Okay. Again, my name is Michael Walsh, and as Bill mentioned, I had the privilege a little over 40 years ago to be the DAA for Mobile
Sources, and it was a great privilege in my life. I'm testifying today, though, on behalf of the Environmental Protection Network, a volunteer organization of about 550 former EPA employees and others that are concerned about public health and the environment.

During my years at EPA, I was very proud to be associated with laying the groundwork for what has become and remains, in my opinion, the strongest and most effective motor vehicle pollution control program in the world. I and others often point to the structure and historical practice of EPA's Mobile Source Program as a primary model for other countries.

Let me first address EPA's NOx proposal.

EPN recommends that EPA's decision on NOx be guided by the demonstrated need for very large NOx reductions from the heavy-duty sector, especially for those populations living near major traffic areas. The goal should be to achieve the lowest feasible NOx standard, which will provide California, other states, and disadvantaged communities the NOx reductions that they desperately need. EVs are clearly an important
1 component of a multi-pollutant emission control strategy. The heavy-duty sector is transitioning to EVs on its own, and progress is sure to accelerate given the immense public and private investments taking place. It is highly likely that most, if not all, of the EVs would still be produced without the proposed NOx credits.

EPA's proposed ZEV NOx credits could cause a substantial increase in diesel emissions compared to what could and should be achieved, and EPN, therefore, opposes them. EPN also recommends that the greenhouse gas proposal be significantly tightened. The proposal lacks any ambition whatsoever and reinforces that EPA is now the laggard in reducing heavy-duty greenhouse gases rather than the leader. The recent IPCC report makes clear that now is the time for strong action to address the climate crisis. EPA's proposal fails to step up to this challenge and is an important lost opportunity.

EPA properly includes EVs in its technology basis for setting the level of the revised greenhouse gas standards. The problem is EPA appears to aim at a
level that does no more than merely codify business as usual and, in fact, likely underestimates near-term EV sales. EPA should set standards that aim for very high ZEV penetration for school buses and urban transit buses by 2029. For delivery vans and short-haul tractors, EPA should aim for an aggressive, but practical, penetration rate, again, by Model Year 2029, much more than proposed. More ambitious greenhouse gas standards will accelerate the introduction of zero-emission technologies, which impact on all of the pollutants. Our written comments will provide more detailed information, such as highlighting recent government-funded NREL report that ZEV sales could reach 42 percent of all medium-duty/heavy-duty trucks by 2030, reflecting lower combined vehicle purchase and operating costs.

In closing, EPN strongly recommends that EPA strengthen both the NOx and the greenhouse gas requirements in the rule to maintain EPA's leadership in improving air quality and public health, and addressing the global climate crisis. Thank you very much.
1 MS. PHILLIPS-THORYN: Thank you for your comment.
2 The next speaker is Karen Campbell. Please unmute yourself. State your name and affiliation for the record.
3 MS. CAMPBELL: Hi. My name is Karen Campbell. I'm a veterinarian, and I'm a member of the Sierra Club. I live in Epsom, New Hampshire. I'm testifying advocating for the EPA to set the cleanest emissions standards possible, as soon as possible, for medium- and heavy-duty trucks. What I have in mind is a very ambitious transition to 100-percent electric trucks as soon as possible, and I'm encouraging the EPA to set a very high standard in a short time frame to spur industry to be innovative and to move quickly.
4 Why? Simply put, because our planet can't wait. The IPCC has released three reports in the past year, and the results are both heartening and very scary. It's too late for us to prevent climate change, but we can still avert its worst effects, but only if we act robustly and act now. According to IPCC, we have to reach our peak in planetary carbon emissions in just three years. Then we have to decrease emissions by 43
percent by 2030. The new emission rules put in effect for new truck models won't even go into effect until 2027. We can't get to a 43-percent decline in carbon emissions in 2030 with a bunch of diesel trucks still operating on America's roads. We need to convert our entire transportation system to electric vehicles.

That tells you a lot about Los Angeles' air. I knew air pollution affected conditions like asthma, but not as starkly as that. Asthma rates are very high in L.A.,
which is the only place I've ever lived where soot from 
the air accumulated on my car and my windowsills.

I applaud your published goals of decreasing 
nitrogen oxide emissions by 60 percent by 2045, but I 
want you to do better. The people of L.A. and all 
Americans living in so-called diesel death zones have 
suffered long enough. They can't wait until 2045 to 
have soot and smog emitted, so please strengthen your 
medium- and heavy-duty truck emissions rules to demand 
50 percent zero-emission trucks by 2030. Thank you.

MS. PHILLIPS-THORYN: Thank you for your comment.

As a reminder, if you are speaking today, you will 
receive a notification on your screen that you are 
being promoted to the role of panelist shortly prior to 
your speaking time. You must accept that invitation to 
be able to unmute when you are called to testify. This 
will also allow you to turn on your camera, which we 
encourage you to do. Speakers connected by telephone 
should unmute their phones when called to testify. If 
you are having technical difficulties, please send an 
email to public_hearing@abtassoc.com, or call (919) 
294-7712. If you are not registered to speak, but you
would like to, please send an email with your name and phone number to public_hearing@abtassoc.com, or call (919) 294-7712.

The next speaker is Karla C. Unfortunately, we do not see you in the attendee list. If you've have joined the hearing under another name, please click the raise hand button. If you have called in, please press star-9 to raise your hand.

(No response.)

MS. PHILLIPS-THORYN: The next speaker is Janet McGarry. You may now unmute, and please state your name and affiliation for the record.

MS. MCGARRY: Thank you. My name is Janet McGarry, and I'm here today as a private citizen. Thank you very much for allowing me to testify. I live in San Francisco in the State of California, which is an amazing state with incredible natural resources -- the redwoods, sequoias, Death Valley, so many national parks -- and amazing coastline, and also incredible agricultural land. It also has the largest population of any state in the country, and, as a result, many, many vehicles on the roads, including heavy trucks and
heavy-duty vehicles, which emit emissions which damage
the air and contribute to climate change. I'm here
today to urge you to try to reduce the negative impacts
of these vehicles by adopting strong rules and
standards.

In California, we are already suffering from
climate change. We have the worst droughts -- the most
severe drought in 1,200 years. Because of the dry,
parched landscape and extreme heat events, we have had
a series of catastrophic wildfires. They have resulted
in terribly toxic smoke, which, because, you know, in
the Bay Area we're close to many of these fires, there
have been times when we haven't been able to go outside
for days or even weeks. And the worst day was
September 9th of 2020 when the skies of San Francisco
turned an eerie blood orange. We had no sunlight for
the entire day, 24 hours of night. It was absolutely
terrifying.

My husband and I were so frightened about the air
quality, the worst in the world, that we decided that
we needed to flee the city. And that was a very
difficult decision to make because it was in the early
days of the pandemic before we had a vaccine, so we were deeply concerned that if we traveled, if we left our home, we might catch the virus. However, the threat of the smoke seemed to pose an even greater health risk, so we -- so we left. We had to drive to New Mexico to get clean air because the entire Western part of the country was choking with toxic smoke.

Millions of people, as well as other living creatures, suffered terribly during that time. The drought has also had a huge impact on farmers in California. I'm sure you probably all know that California has the state with the largest agriculture. I write articles about agriculture, and I've interviewed farmers who -- and some of them are young farmers with small farms who have had to fallow land because of the drought. Other farmers have been impacted by extreme weather events like freakish late frosts, or they haven't had enough chill hours. You know, you need cold hours to produce good fruit, or they've had floods. And, of course, during the last several years, California farm workers have worked during intense heat and had to breathe smoke to
continue to feed us during the pandemic.

Finally, the climate -- the impact of climate and -- has had a huge impact on biodiversity in the state. California is one of the biodiversity hotspots of the world, but we are suffering a biodiversity crisis. The state is on the Pacific Flyway, which is a main migration for birds, and due to the drought, wetland areas have shrunk, and there have been outbreaks of disease in Federal refuges because they just have limited water. Actually, in the news today, there was an announcement that the refuges near the Oregon and California border once again won't be receiving water.

We must stop damaging life on our planet, and we have the technology to do so. I urge the EPA to set the strongest standards possible to set us on a path of 100-percent zero-emission electric vehicles by 2035 and a reduction of -- 90-percent reduction of NOx pollution by 2027. Thank you very much for allowing me to speak today.

MS. PHILLIPS-THORYN: Thank you for your comment.

The next speaker is Joel Schroeder. You may now unmute, and state your name and affiliation for the
MR. SCHROEDER: Hi. My name is Dr. Joel Schroeder. I am a pastor, and I'm with the Evangelical Environment Network. You know, as I talk this afternoon, there's really probably not much I could tell you about protecting the environment that you don't know a lot more about than I do. I would like to think that you guys are much, much better at it than me. So what I'd just like to express to you guys this afternoon is, I'd just like to encourage you to have courage, you know. Doing the right thing is really hard, and people sometimes really hate you for it.

And in the history of Christianity, we've done a lot of things that are really bad and really shameful, and we look back -- you know, we look back with sadness and shame. And I just want to -- I just want to encourage you guys today that as you make difficult decisions about things that you know a lot about, that you have courage and that you don't have to look back at what you've done with the same shame that I have to sometimes look back at some of the things that we've done in my little world. And so you guys have a
horrible job. No matter what you do, people will tell you you're idiots, and I just want to encourage you to have courage. Thank you.

MS. PHILLIPS-THORYN: Thank you for your comment.

The next speaker is Scott Fenwick. You may now unmute, and state your name and your affiliation for the record.

MR. FENWICK: Good afternoon. My name is Scott Fenwick, technical director for Clean Fuels Alliance America, formerly the National Bodies Award. On behalf of our member organizations, thank you for the opportunity to testify in this open hearing. We'd like to first thank you for recognizing the progress in fuel quality made by the biomass-based diesel industry and producers. With advancements in production technology, a greater understanding of fuel performance issues, and the BQ-9000 Quality Management System, we believe that the industry is now a leading example of how biofuels can offer performance benefits beyond just the reduction in greenhouse gas emissions.

Over the last five years, the BQ-9000 accredited bodies and producers have willingly submitted sample
analysis results that have been compiled and statistically analyzed into annual quality reports. In addition to the recognition from the EPA and other regulatory agencies, Clean Fuels is also discussing higher blend approvals and support from several engine manufacturers based upon this same data. We realize not every OEM supports biodiesel at higher levels, but those that do recognize its ability to support their fleet customers and users in their commitments toward climate change and immediate decarbonization when compared to longer-term solutions.

These new proposed heavy-duty engine and vehicle standards are an important part of our country's continued push for cleaner air and a cleaner environment, and we support those. The new ultra-low emission diesel engines produced under these regulations will be substantially cleaner, the new technology diesel engines in the market today, and will approach near-zero-regulated emissions of particulate matter, NOx, unburned hydrocarbons, and carbon monoxide levels. Longer full-use-for-life requirements will create value and overall reduce cost for U.S. customers.
that use diesel fuel, biodiesel, or renewable diesel. Utilization of increasing volumes of ultra-low carbon liquid fuels, like those mentioned, will provide the one important environmental aspect that these new regulations do not directly address: reduction of GHG emissions from the existing fuel supply.

Biomass-based diesel is helping companies drive decarbonization in their supply chains, and it should be viewed as a primary tool of the administration to reduce GHG emissions now and to meet President Biden's near- and long-term climate goals. The immediate reductions achieved by using biodiesel and renewable diesel are crucial to reach these goals. The importance of increasing biomass-based diesel and reducing carbon cannot be understated as the Intergovernmental Panel on Climate Change clearly reaffirmed in their sixth assessment report that carbon reductions today are more important than carbon reductions in the future.

Our organization has a long history of working with users, fleets, and the OEM community to conduct technically-credible research that validates the
performance and positive impacts of biodiesel when used in existing diesel engines. Part of that effort has been to conduct testing, evaluate fuel specifications, and implement changes needed to ensure the fuels we support not only work in existing engines but will also work in all future new diesel engines as those regulations and technologies change. Our cooperative efforts with our OEM partners in technical community to conduct the testing and research needed continues. As such, we also agree with the proposal to allow vehicles to be tested for compliance with available biodiesel blends meeting the ASTM D7467 specifications. This change not only validates the quality of these blends in the marketplace but also the standards development process within ASTM in which the global fuel community participates.

As mentioned previously, we appreciate the opportunity to provide this testimony and are always happy to help answer questions. Thank you.

MS. PHILLIPS-THORYN: Thank you for your comment. The next speaker is Andrea Vidaurre. You may now unmute, and please state your name and affiliation for
the record.

MS. VIDAURRE: Hi. My name is Andrea Vidaurre. I'm with People's Collective for Environmental Justice, Moving Forward Network. We are a community-based collective that is fighting environmental racism in the Inland Empire of Southern California.

On any given day out here, we have around 20,000 heavy-duty trucks driving through each of our freeways coming from the ports of L.A. and Long Beach to the hundreds of warehouses that have popped up in our neighborhoods over the last decade. Structural racism that continues to permeate our land use decisions have brought giant diesel big rigs as close as 60 feet from our homes, across the street from our schools, and are regularly seen driving next to our families walking or running on their sidewalks. This has made it incredibly dangerous for both the workers that are the backbone of so much of our economy and for the families that have to live with the constant stream of soot in their homes and lungs.

In California, we have pushed for a just transition off of fossil fuels to emission in trucking,
and we're seeing the benefits of acting quickly and swiftly to get there. But some lessons learned -- some lessons learned are that we cannot waste time on false solutions and so-called bridge fuels, such as natural gas and clean diesel. Our communities need zero emissions and a comprehensive approach to move our goods in a way that is efficient and safe and eliminates the documented cancer clusters that we have in our neighborhoods. And the only way to do that is to be strong in our rulemaking, mandate zero emissions, and mandate the retirement of dirty trucks -- mandate the retirement of dirty trucks that are choking our communities.

And trucks do not -- they go from ports or railyards to warehouses. They drive anywhere from across the street to across the country. Our strategies must tackle the entire system. We need the EPA to tackle trucks but to also regulate warehouses and push them to create the charging infrastructure we need. We need them to invest in emissions reductions of the ports and railyards because without these measures, we're not tackling environmental racism.
because in our communities of the Inland Empire (inaudible), we don't just deal with truck. We deal with warehouses, ports, freeways, energy debt, misclassifications at our workplaces, and so much more that we refuse to be ignored any longer.

Climate change is the product of a really unjust and skewed system rooted in racism, and if we're come -- if we are to come slightly close to the vision of achieving environmental justice, then we need the EPA to strengthen this rule on trucks and continue to tackle the rest of the goods movement system. Trying to tiptoe around and not interrupt a system that is so clearly harmful is a disservice, and we have to take bold moves that redirect our systems and move us forward. Thank you.

MS. PHILLIPS-THORYN: Thank you for your comment.

The next speaker is Nadine Young. You may now unmute, and please state your name and affiliation for the record.

MS. YOUNG: My name is Nadine Young. I'm a member of Elders Climate Action, which is a national organization of senior climate activists. I'm in
Philadelphia, Pennsylvania. Thank you for hearing my comment today.

I am an attorney, but, more importantly, I'm a grandmother of two very young little girls. I live in the oldest neighborhood in Philadelphia near the river. It's leafy with plenty of parks for young families and walking trails near the river. Philly's first community garden is here just across the street from a large public housing project, home to lots of little children, but it's not all green here. Interstates 95 and 76 meet here. It's a rail hub. There are container ships coming up to ports along the river.

I've been coming to understand the scale of our air pollution problem here in Philadelphia, how it damages not just our lungs and hearts but every organ of the body. Our Air Quality Index here in Philadelphia is rarely better than moderate. Recently, I came across the new map tool from Clean Air Task Force that was shown on the screen behind Emily Kent when she just gave her testimony. The title of the map is "Deaths by Dirty Diesel." It shows the data from diesel pollution by county in 49 states. Philadelphia
County ranked seventh in deaths per capita. Our color on that map is purple, as dark as you can get. Seventy-two million Americans live as I do near freight truck routes. More than 40 percent of us live in places with unhealthy levels of air pollution. Somehow I had come to think that the air we breathe was better protected. And then there's the existential threat of climate change. Twenty-nine percent of U.S. greenhouse gas emissions come from transportation, nearly one-third of that from heavy-duty vehicles. But despite availability of zero-emissions technology for heavy-duty trucks, the proposed rule does not set ambitious emission standards for these vehicles. New vehicles covered by this rule -- by this rule will be on the road well beyond 2050, but that's the year by which we must zero out greenhouse gas emissions in order to stabilize the climate.

So my request to you, the incentive program under this rule must be strengthened. It must include explicit standards now, not just for NOx, but also for greenhouse gases, to promote the ramp up in production of zero-emission vehicles. We need a zero-emissions
standard now to cut both vehicular air pollution and greenhouse gases to put the bus and truck fleet on a path to 100-percent zero emissions as quickly as possible. Thank you for taking my comment.

MS. PHILLIPS-THORYN: Thank you for your comment. The next speaker is Joel Levin. Unfortunately, we do not see you in the attendee list. If you have joined the hearing under another name, please click the raise hand button. If you have called in, please press star-9 to raise your hand, and that name again is Joel Levin.

(No response.)

MS. PHILLIPS-THORYN: The next speaker is Kaz Thea. Unfortunately, we do not see you in the attendee list. If you have joined the hearing under another name, please click the raised hand button. If you have called in, please press star-9 to raise your hand. Kaz Thea?

(No response.)

MS. PHILLIPS-THORYN: The next speaker is Patricia Duncan. You may now unmute, and state your name and your affiliation for the record.
MS. DUNCAN: Hi. My name's Patricia Duncan. I'm a volunteer with Citizens Climate Lobby, which has been trying for many years to establish a policy nationwide that would help with the transition to clean energy. We still don't have such a policy. Given that so little has been done to reduce greenhouse gas emissions decades after scientists have warned us of the dangers of climate change, we now have to make up for lost time and do everything we can to reduce global warming driven by greenhouse gas emissions. I ask the EPA to strengthen its proposed rule. Thank you.

MS. PHILLIPS-THORYN: Thank you for your comment. The next speaker is Anjuli Ramos. You may now unmute, and state your name and affiliation for the record.

MS. RAMOS: Hello. My name is Anjuli Ramos-Pusat, New Jersey state director of the Sierra Club. Thank you, EPA, for the opportunity to speak today.

This his proposed rule has monumental implications. It sets the stage for the trucks and buses that will be on the road for the next 20 years. To put that into a clearer perspective, that is after 2050. We all know the immediate and drastic action
required by all of us on a national, state, and local scale in order to tackle climate change, and to try to mitigate as much as possible of the already incoming disastrous environmental and community impacts. Thus, clean buses and trucks policy, which has not seen a change since 20 years ago, will have a massive impact on this necessary climate action.

EPA's proposed rule has requirements that do not come into effect until 2031 in order for technology to be fully available. Plenty of data shows, however, that this technology is all -- it's already here and ready for use. Currently, there are over 100 models of zero-emission trucks and buses available and more coming in the future. The technology is here. Now we just need the policy and standards to match it. As further evidence of this, there are already six states in the country that have adopted clean truck policies that go above and beyond the EPA's proposal. These states, my state being one of them, to name them -- California, Oregon, Washington, New York, New Jersey, and Massachusetts -- account for 20 percent of the truck market. However, the proposed EPA rule would
only yield 1.5 percent of zero-emission new truck sales by 2027. To be specific, these six state policies will yield 40 to 75 percent of new zero-emission truck sales by 2035.

The U.S. EPA can and must do more because of three main reasons. Number one, the technology is available. Number two, other states are already doing it. And number three, and most importantly, so all communities in the country, not just the ones from states with adequate cooling truck policies, and especially those communities that are overburdened with pollution and economically disadvantaged, benefit from the same targets towards cleaner air. It is what is fair: equal clean air.

New Jersey's transportation sector accounts for 42 percent of greenhouse gas emissions, the largest contributor to which medium duty and heavy-duty vehicles, a/k/a buses and trucks, account for a significant portion. Of course that equally means a huge contribution of co-pollutants, NOx particulate matter, black carbon, a subset of particulate matter, and other air toxics like benzene. The latest
available data by the New Jersey State Department of Environmental Protection indicates that the highest carcinogenic risk driver in our state is diesel PM, or diesel particulate matter, with a maximum predicted risk of 1,447 in a million, and a range of 100 to 300 in a million risk in the heavily-trafficked areas, like those surrounding Interstate 95. These risk estimates are based on EPA's NATA, or National Air Toxics Assessment Data, your own data.

Although New Jersey will benefit from the Clean Truck Rule recently adopted in our state, Federal action is absolutely necessary in order to move the manufacturers into a zero-emissions market. When we holistically move the market, everything else follows. Climate action cannot wait, and this proposed rule, if done correctly and fast enough, will significantly deliver to the effort. Thank you.

MS. PHILLIPS-THORYN: Thank you for your comment. The next speaker is Perry Spring. You may now unmute, and please state your name and affiliation for the record.

MR. SPRING: Hello. This is Perry Spring, City of
Tacoma resource conservation manager, fourth generation Washingtonian, immigrant, testifying in my own words from the ancestral lands of the Puyallup Tribe and the shores of the Salish Sea.

Last Monday, April 4th, the Intergovernmental Panel on Climate Change has released the third working group portion of their sixth assessment report. It assessed the current state of greenhouse gas emission mitigation progress and related governmental pledges, as well as examining the sources of global emissions. The United Nations Secretary-General Antonio Guterres, responded to this report by insisting that unless governments everywhere reassess their energy policies, the world will be uninhabitable -- uninhabitable, as in the inability to support life. IPCC Chair Hoesung Lee, in response to the report, stated, "I am encouraged by climate action being taken in many countries. Policies, regulations, and market instruments are proving effective, and, too, if these are scaled up and applied more widely and equitably, then they can support deep emission reductions and stimulate innovation." It is in this context that I testify.
today in support of the cleanest version of the proposed rule by EPA to strengthen vehicle emission standards for the heavy-duty vehicles.

In my 30-plus years of my sustainability career, I've collaborated with many, many others to transform our energy systems to zero emissions, renewable, and carbon neutral. Creating a living, sustainable world has been my guiding principle. As a business owner, nonprofit staff, and governmental employee, I've witnessed a transformation in the willingness, technological capability, and policy initiatives to rapidly draw down our use of fossil fuels and its associated pollution. As a participant in the Green Transportation Summit and Expo that is hosted by Tacoma, I've witnessed the lightning speed expansion of medium- and heavy-duty vehicles that run on renewable fuels and electricity. We have the technology and manufacturing capacity to meet the transportation climate goals set by our U.S. Federal Government. My household uses two battery electric cars and three electric assist bicycles for transportation.

Tacoma, Washington, a diverse, midsized city where
I live and work, is ranked 14th nationally for short-term particulate air pollution out of 217 metropolitan areas, according to the American Lung Association. I remind you of the related and excellent personal testimony we heard today by Elizabeth Brandt in Speaker Block 2. The City of Tacoma's 2030 Climate Action Plan adopted last fall plus -- it puts front and center eliminating greenhouse gas emissions from the activities carried out in our city. Transportation is 40 percent of the city. It is the highest source of emission in our city.

Heavy-duty vehicles contribute disproportionately to the emissions. The EPA's website reports that heavy-duty vehicles make up only five percent of the number of vehicles on American roads but produce 24 percent of the transportation greenhouse gas emissions. Cleaning up the emissions associated with heavy-duty vehicles as proposed in this rule will be especially beneficial for many urban communities like Tacoma, whose neighborhoods are bifurcated by major highways.

We owe it to ourselves, our children, and all of life to meet this moment. Please adopt and enforce the
strongest version of this proposed rule.

Thanks to the EPA and staff for your vital work and for this opportunity to testify.

MS. PHILLIPS-THORYN: Thank you for your comment.

The next speaker is Rachel Cywinski. You may now unmute, and please state your name and affiliation for the record.

MS. CYWINSKI: I'd like to thank all of you for serving the people of the United States of America. My name is Rachel Cywinski -- R-A-C-H-E-L, C-Y-W-I-N-S-K-I. I'm a member of United Women in Faith tuning in from San Antonio, Texas. I live in the original city of Mission San Antonio. Three hundred and four years ago, the City of San Antonio was formally established with a group of Spaniards, Native Americans, and Canary Island immigrants, the descendants of whom are quite frequently referred to as Hispanic today.

San Antonio remains the largest predominantly Hispanic city in the United States. In the original city limits, our life expectancy is 20 years less on average than those who live in the annexed areas of town. Here, we have -- we're clobbered with pollution
from three interstate highways, two municipal airports, three military airports, and the densest rail traffic anywhere in our region. The children have schools that are accredited by the NAEYC standards, can no longer go outside to play during recess on air quality alert days. In the inner city, we have many children who are at risk of death from the poor air quality. And when a car gets sold in another part of town, a few years later it end up in our neighborhood, so there's not a day or night that goes by that at some point we don't breathe just exhaust spewing out of one single vehicle that is just overwhelming and will nearly choke anyone.

And the people who are living so sustainably in the inner city and who can catch public transit on a bus that uses liquefied natural gas are the very ones who are exposed the most to all of these trucks that are stopped there at the intersection. For too long -- well, in fact, any time would be too long -- we have not only all paid monetary subsidies by not asking for manufacturers to take on the full cost of what it costs us when they create polluting vehicles that we are
paying with our very lives.

I adjure you to make the standards as strict as possible and stop the pollution for the love of all life on this earth.

MS. PHILLIPS-THORYN: Thank you for your comment.

The next speakers are Omega and Brenda Wilson.

Unfortunately, I do not see your name in the attendee list. If you have joined under another name, please click the raise hand button. If you've called in, please press star-9 to raise your hand. Again, that is Omega and Brenda Wilson.

(No response.)

MS. PHILLIPS-THORYN: As we are ahead of schedule, I'm going to re-call a few names of folks that were not here when we called them earlier. If you are here, please raise your hand. If you are in the hearing or if you have called in, please press star-9.

David Offen-Brown?

(No response.)

MS. PHILLIPS-THORYN: Stephen Wyman?

(No response.)

MS. PHILLIPS-THORYN: Karla C?
(No response.)

MS. PHILLIPS-THORYN: Joel Levin?
(No response.)

MS. PHILLIPS-THORYN: Kaz Thea?
(No response.)

MS. PHILLIPS-THORYN: And Omega and Brenda Wilson.
(No response.)

MS. PHILLIPS-THORYN: At this time, we will begin a brief recess. EPA, when would you like to reconvene?

MR. CHARMLEY: Lauren, we'd like -- we'd like to begin again at 4:00 p.m. Eastern, which is in about -- well, 16 -- 15? Fifteen minutes, 4:00 p.m. Eastern Time. Thanks, everyone.

(Break.)

MS. PHILLIPS-THORYN: Hello, everyone. This is Lauren Phillips-Thoryn from Abt Associates, EPA's contractor. It is now 4:00 p.m., Eastern Time, and we are rejoining EPA's public hearing about the Control of Air Pollution for New Motor Vehicles: Heavy-Duty Engine and Vehicle Standards proposal.

In order to accommodate testimony in both Spanish and English throughout this hearing, all attendees must
select their preferred language via the interpretation icon at the bottom of your screen. If you are providing testimony today, please make sure that you are speaking in the language of the channel you are listening to. For example, listening to English while speaking in Spanish could prevent other participants from hearing your statement in the language of choice.

As a reminder, if you are speaking today, you will receive a notification on your screen that you are being promoted to the role of panelist shortly prior to your speaking time. You must accept that invitation to be able to unmute when you are called to testify. This also allow you to turn on your camera, which we encourage you to do. Speakers connected by telephone should unmute their phones when called to testify. If you are having technical difficulties, send an email to public_hearing@abtassoc.com, or call (919) 294-7712.

If you are not registered to speak, but you would like to, please send an email to public_hearing@abtassoc.com, or call (919) 294-7712. I will be introducing each speaker in turn. Please speak slowly and clearly so our court reporter can record
these proceedings accurately. Please remember to keep
your comments to three minutes.

The first speaker will be Alex Schay. Alex, I am
promoting you to panelist. Once you have accepted, you
can unmute and state your name and your affiliation for
the record.

(No response.)

MS. PHILLIPS-THORYN: Alexa, please unmute.

MR. SCHAY: I should be unmuted now. I just hit
ALT-A.

MS. PHILLIPS-THORYN: We can hear you.

MR. SCHAY: Very good. My name is Alex Schay.

over. My name is Alex Schay. That's spelled A-L-E-X,
S-C-H-A-Y. I'm with the Northwest Alliance for Clean
Transportation. We are a nonprofit advocacy group that
advocates for increased use of renewable natural gas as
transportation fuel in the medium- and heavy-duty
sectors.

I take this opportunity to point out that
renewable natural gas engine technology, or RNG
technology, is currently the only technology that, A,
meets the 0.02 grams per braking horsepower NOx requirement, the requirement that is proposed as the 90-percent reduction via this draft rule; and, B, RNG technology is the only currently commercially-available technology that enables payloads of 105,000 pounds with a range of 600 to 700 miles, thereby meeting most duty cycles for nearly all trucking fleets. With that context in mind, I suggest to those on the call and those taking testimony that RNG technology is the most appropriate technology at present both for reducing NOx emissions and for making significant near-term reductions in greenhouse gas emissions.

With that backdrop in mind, I would ask the EPA to consider providing incentives that enable fleet owners to cover the additional vehicle costs and the additional costs associated with setting up a fueling station that can fuel RNG vehicles and/or provide incentives for making alterations to maintenance bays that enable safe maintenance of vehicles that use a gaseous fuel rather than a liquid fuel. If you should have additional questions about the Northwest Alliance For Clean Transportation, please feel free to visit us.
at www.nwalliance.net, and with that, I yield my time.

Thank you for this opportunity to provide testimony.

MS. PHILLIPS-THORYN: Thank you for your comment.

The next speaker is Carolyn Keiser. You may now unmute, and state your name and affiliation for the record.

MS. KEISER: Hi. I'm Carolyn Keiser and representing citizens of the entire country. Good afternoon to all panel members and attendees.

As most of us realize, our country is in a sad state today, and this air emissions issue is just one small part of a very large situation. It requires urgent changing to bring the entire country back from a terrible catastrophe. We have allowed politicians to forget who they work for -- the American people -- and allowed greed to replace doing the right thing by corporations. So I, Carolyn Keiser, and a citizen of the United States of America, am here today to insist that you do the right thing by adopting the most stringent standards for heavy-duty vehicle emissions. I realize this is just one small step in eliminating pollution issues in the country, but we have to take
every step and opportunity to advance the best
interests of the public over the influence of the greed
by corporations and their lobby groups.

I live in a town with three large oil refineries.
I am personally, along with thousands of other people,
exposed to constant air, noise, light, and other types
of pollution from these plants. I empathize with those
in the wake of this truck and other vehicle traffic
spewing pollutants into their neighborhoods. I am
reading more and more about how toxins in the air,
water, food, consumer goods, materials, et cetera, are
having a detrimental effect on the human body, not to
mention all sentient life. This damage is insidious
and occurs not only immediately in some situations, but
also builds up in the body over time.

Studies have shown how much of the medical
afflictions experienced by people have been caused or
exacerbated these toxins. It is well known that there
are hundreds of toxins used in the personal care
products area on our -- on our store shelves. It is
also well known that while Europe has banned over 1,300
of these toxins in the products made there, the U.S.
has only banned under 100 for use here. What does that
tell us? What it tells us, as history has shown, that
corporations have been allowed to undermine emission
and other public safety standards over time, which over
time is thus causing the pollution issues and,
therefore, cleanup costs to be forced on the public.

But history has also revealed that when these
businesses have to meet more stringent standards, both
the businesses and the public have benefited. Even
though it all appears dire, it doesn't have to be, so
I'm again urging the EPA to adopt the administration's
most stringent Option 1. And even this just skims the
surface of what is needed for reducing the nitric
oxides, and greenhouse gases, and other known pollutant
emissions. The lives and health of all Americans, even
you panel members, depend on these and more. Thank
you.

MS. THOMPSON: Thank you for your comment. The
next speaker will be Allen Schaeffer. Allen, you may
now unmute, and please state your name and affiliation
for the record.

MR. SCHAEFFER: Thank you. I'm Allen Schaeffer,
executive director of the Diesel Technology Forum, which represents diesel engine vehicle and equipment manufacturers, suppliers of engine components and emissions control systems, and producers of renewable and petroleum fuels. I want to thank EPA for the opportunity to be here today and for all the great work that you've done so far.

By building off the success of today's technology, a balanced and appropriate rule will ensure continued progress on clean air in the near term while also enabling manufacturers to pursue longer-term opportunities. Today's generation of diesel technology has been a success story, having achieved over 98-percent reduction in nitrogen oxides and particulate matter over previous generations. That translates into big benefits: $20 billion gallons of fuel saved along with -- or excuse me -- 27 million fewer metric tons of NOx emissions. According to data from IHS Market, as of the end of 2021, 53 percent of trucks on the road are 2011 and newer model year vehicles. Those are achieving near zero emissions today. This means, though, that 47 percent or of an older generation, pre-
2011 models, without the benefit of particulate traps and/or selective catalytic reduction technology, are second- or third-generation older trucks operated by independent truckers and many small fleet operators.

Future emission standards must encourage and enable continued investment in -- through proper balance, and timing stringency, and other factors. The last thing anyone wants is for truckers to stop buying new trucks because they are too expensive, too unpredictable, or too complex. We support the continued development of robust technologies that have proven to meet the challenges of reducing emissions. A balanced rule will alleviate undesirable outcomes, like swings in the new truck market, including a pre-buying of current generation technology.

Reducing emissions, however, should be more about than just setting new engine standards. Much the concerns raised about pollution and health effects heard here today stems from the legacy fleet. That is the older generation of vehicles. EPA's approach to reducing NOx emissions here fails to consider the near-term opportunities to accelerate the turnover of the
oldest trucks to the new generation of diesel that is available today. The Diesel Emissions Reduction Act has played an important role in boosting turnover and delivering immediate local clean air benefits, but DERA can be used to do more.

Also, the opportunity for near-term emission reductions from expanded use of low-carbon renewable biodiesel fuels is considerable. According to EPA's own detailed analysis, the current pool of biodiesel is very high quality, and blends can function seamlessly with the next generation of after-treatment devices has developed to meet this low standard. The fuel and infrastructure to deliver it are available now. All diesel vehicles can use it now, and like compound interest, we'll be banking emission reductions every mile starting now. It's a competitive strategy, but that it's more affordable and available than mandating ZEVs or very stringent future NOx standards.

In summary, above all else, this proposed rule must enable continued investment in the next generation of diesel technology by manufacturers, suppliers, and their customers. Without that, none of the anticipated
benefits will accrue. Older trucks will stay on the road for longer, and both manufacturers and suppliers will not have the capital to invest in future fuels and technologies. In the meantime, getting more of the current generation of advanced diesel on the road and using more low-carbon biodiesel fuels will continue to deliver everything we need: air quality improvements and sustaining progress on climate change. That's something everyone should be able to get behind.

Thank you for the opportunity to submit this statement.

MS. THOMPSON: Thank you for your comment. The next speaker will be Ronn Kistler. Ro, do -- we do not currently see you listed on the list of attendees. However, if you have joined using a different name, we would ask that you raise your hand at this time, and if you have called in, you can raise your hand by dialing star-9 on your phone.

(No response.)

MS. THOMPSON: Okay. The next speaker on our list is Nancy Munro. Nancy, we do currently see you listed among the attendees. However, if you have joined using
a different name, we would invite you to raise your hand at this time, and if you have joined via phone, you can raise your hand by dialing star-9.

(No response.)

MS. THOMPSON: The next speaker is Karla McNamara. Karla, we do not currently see you listed on the list of attendees. However, if you have joined using a different name, we would invite you to raise your hand at this time, and if you have joined by dialing in, you can raise your hand by dialing star-9 on your phone.

(No response.)

MS. THOMPSON: The next speaker will be Phillip Streif. Phillip, we do not currently see you listed among the attendees. However, if you have joined using a different name, we would invite you to raise your hand at this time, and if you've called in, you can raise your hand by dialing star-9 on your phone.

(No response.)

MS. THOMPSON: The next speaker will be Levi Kamolnick. Levi, you may now unmute, and please state your name and affiliation for the record.

MR. KAMOLNICK: Hello. My name is Levi Kamolnick,
speaking on behalf of Ceres. Ceres is a nonprofit advocacy organization devoted to creating a more sustainable business world. Our Ceres policy network and the Ceres series company network bring together large consumer brands working to reduce their carbon footprints and engage with policymakers in the interest of doing so. Ceres is also the organizational founder of Climate Action 100+, an investor initiative working with 615 investors with $55 trillion dollars in assets under management, to ensure the largest emitters take necessary action on climate, as well as the Corporate Electric Vehicle Alliance, a network of large fleet owners working to electrify their vast array of commercial vehicles. We support the EPA's proposed rules to address the emissions-intensive, heavy-duty vehicle sector, and we believe this is an important step, but we strongly endorse a stronger set of standards that would have a deeper impact on our climate, public health, and would foster a more globally-competitive trucking industry.

Medium- and heavy-duty vehicles are among the largest greenhouse gas emitting sources in the
transportation sector, and their emissions are projected to materially increase in the years to come. To achieve our climate goals, experts have determined that the medium- and heavy-duty vehicle sector needs to rapidly electrify. A recently-conducted survey of Corporate Electric Vehicle Alliance members demonstrates what we are already seeing in the market: a healthy and increasing demand for zero-emission vehicles among fleet-owning businesses. Although many vehicle classes are becoming increasingly price competitive with their gas-empowered counterparts, strong policies will be necessary in ensuring availability and production of these vehicles keeps pace with demand. Stronger standards -- the stronger standard that's proposed will accelerate the transition at the necessary rate and scope, and will help address economic risks posed by climate change, while creating a more globally-competitive trucking industry.

Medium- and heavy-duty vehicles are also the largest source of nitrogen oxide, or NOx, emissions in the transportation sector, and also emit harmful concentrations of particulate matter, ozone, and other
potent toxins. The EPA can help limit exposure to these toxins through rigorous NOx standards. At-risk communities located near transportation corridors suffer disproportionately and will benefit the most from robust regulation. EPA's (inaudible) overall health benefits from reductions in ozone and PM2.5 in its proposals far exceed the costs imposed by these rules with as much as $220 billion in net benefits.

Ceres support stronger, more robust standards that will reduce the climate, public health, and economic risks posed by heavy-duty vehicles. We also support EPA's adoption of zero-emission vehicle mandate, which has been adopted by California and other states, and which will be necessary to accelerate the transition of electric trucks at the pace required to benefit public health and achieve our climate goals. Thank you for the opportunity to testify.

MS. THOMPSON: Thank you for your comment. The next speaker will be Allison Jaslow. Allison, you may not unmute, and please state your name and affiliation for the record.

MS. JASLOW: Good afternoon. Thank you for the
opportunity to testify here today. My name is Allison
Jaslow, and I'm a proud member of the National Parks
Conservation Association Veterans Council.

In the summer of 2000, I reported to the military
school. They awarded me an ROTC scholarship. I'd
wanted to serve my country in uniform since I was 13,
and my journey towards doing that was finally
beginning. A year later, the reality of what my
service would look like changed after our Nation was
attacked on 9/11, but I didn't go to Afghanistan.

After graduating in 2004, I deployed to Iraq twice,
doing my duty as I swore I would on behalf of the
country I love dearly and my fellow Americans, whether
I agree with it or not. There, of course, has been a
lot of debate about whether Iraq was a worthy fight,
but since getting out of the army, and now with the
option to choose the battles I fight, I've continued to
fight on behalf of my country and fellow countrymen,
which is why I'm here today.

If we want our country to remain America the
Beautiful, we need to be aggressive about tackling
pollution and other factors that have contributed to
our climate crisis. This is especially important as technological advances in recent decades have put us in a position to do so. Unfortunately, it feels like the private sector is leading more these days than government has been with car manufacturers announcing their bold plans for an all-electric future, but this administration has an opportunity to change that. The strongest possible emission standards will help accelerate us towards an all-electric future in the U.S., making the outdoors more breathable for hikers and children at recess alike. The sooner we achieve that goal, the sooner the 45 million of my fellow Americans who live within 300 feet of a major roadway or transportation facility will also be less likely to develop asthma or die from lung cancer.

Thankfully, it's possible to achieve 100 percent electrification of big rigs, trucks, and buses by 2035, but only if we have the courage to do what we have to do to make it a reality. So I'm asking those with the power to take action to do just that: to act aggressively to protect the health and safety of my fellow Americans and to act to protect the beauty and
inhabitability of the country I love and fought for.

And if the proposed rule doesn't help us achieve 100 percent electrification of big rigs, trucks, and buses by 2035, as some have argued, I'm asking you to do more. Please have the political courage to do what this moment requires of you.

Thank you so much for your time and the opportunity to testify here today.

MS. THOMPSON: Thank you for your comment. The next speaker will be Lionel Mares. You may now unmute, and please state your name and affiliation for the record.

MR. MARES: Hi. Good afternoon. My name is Lionel Mares, M.P.A. I'm calling from California. I'm here as a private citizen, and I would also like to point out that used to work for three people in a nonprofit environmental organization, and I also volunteer with the Sierra Club. I'm here to make a public comment about the air pollution and fossil diesel -- I mean, fossil fuels from trucks, motorized vehicles.

I'm concerned about the health effects, health
impacts of air pollution in my community because where I live in the San Fernando Valley and north of Los Angeles, we live in a valley where is heavily polluted with air pollution, dirty air. We have the LADWP generating station. I also live nearby freeways with heavy traffic, and the air pollution is insidious in California. After many decades of dependence on fossil fuels, and engines, and processes that spew nasty chemicals and chemical combinations into the atmosphere, we find ourselves wrapped in dirty air.

More than 90 percent of the state's residents live in areas where they are exposed to unhealthy air during a typical year. Two of the most polluted regions in the country are located here: the South Coast Air Basin, which includes Orange Count, and urban parts of Los Angeles, Riverside and San Bernardino, and the eight county San Joaquin Valley Air Basin. Many people where I live our -- have medical condition -- medical illnesses, and asthma, and other health issues, and makes them much more vulnerable to air pollution, chemicals, and methane, and fossil fuels. And I urge EPA to push forward with cleaner vehicles, cleaner air,
and to green energy because I am worried for the health
-- of many other fellow Americans about their health
and the future of this country.

And I would like to urge you to please move with
cleaner air and cleaner vehicles, like electric
hybrids, and -- but to move away from fossil fuels.
Thank you for your time. I appreciate your
consideration. Thank you.

MS. THOMPSON: Thank you for your comment. As a
reminder, if you are speaking today, you will receive a
notification on your screen that you are being promoted
to the role of panelist shortly prior to your speaking
time. You must accept that invitation to be able to
unmute when you are called to testify. This will also
allow you to turn on your camera, which we encourage
you to do. Speakers connected by telephone should
unmute their phones when called to testify. We ask
that speakers speak slowly and clearly so our court
reporter and interpreters can capture these proceedings
accurately. Please keep your comments to three
minutes. If you are having technical difficulties,
please send an email to public_hearing@abtassoc.com, or
call (919) 294-7712. If you are not registered to speak but would like to, please send an email with your name and phone number to public_hearing@abtassoc.com, or call (919) 294-7712.

The next speaker will be Elida Castillo. Elida, we do not currently see you listed among the attendees. However, if you have joined using a different name, we would ask that you raise your hand at this time, and if you have called in, you can raise your hand by dialing star-9 on your phone.

(No response.)

Ms. Thompson: The next speaker will be Beatriz Soto. Beatriz, you may now unmute, and please state your name and affiliation for the record.

Ms. Soto: Gracias for the opportunity to testify. My name is Beatriz Soto, and I am here today as director of Protégete for Conservation Colorado, a member of Chispa National, and a commissioner on the Environmental Justice Action Task Force, representing Congressional District 3 in Colorado. I am also the mother of an 11-year-old boy and the wife of a truck driver.
I thank this administration acting quickly on clean trucks but urge the EPA to create the strongest possible limits on heavy-duty vehicle pollution. In Colorado, these standards cannot come fast enough. They will provide much-needed relief from the burden of diesel fumes and air pollution and the associated health problems that disproportionately impact our Latino, black, indigenous, and other historically-marginalized communities, who live next to freight corridors that we call diesel death zones due to the long history of racist zoning practices, like redlining, and the intentional placement of expansion of interstate highways.

NOx and particulate matter from diesel pollution causes high rates of asthma, cardio and respiratory disease, low birth weights, increased chance of death of COVID, and cancer. In Colorado, one in every three Latino children have asthma. In 2020, COVID was the fourth leading cause of death of Latinos compared to eighth amongst our white counterparts. This is alarming, and we know it's related to the
environment surrounding our communities. In the Denver Metro Area, medium- and heavy-duty vehicles contribute 24.3 percent of on-road NOx emission despite accounting for less than two percent of vehicle miles traveled.

Transportation pollution is our number one cause of greenhouse gas emission and associated with co-pollutants, like ground-level ozone. Last year, Denver had the worst air quality in the world due to the cumulative impacts of vehicle and industrial pollution on top of multiple wildfires across the country due to climate change. For 65 days last summer, residents were warned not to go outside. However, many members in our community, especially essential workers in heavy Latino professions, like construction and landscapes, do not have that choice. Eighty-two percent of the people working in transportation in warehouses in Colorado are Latino.

Vehicle manufacturers have the technology to meet strong standards, and many recent analysis have shown that fully zero-emission trucks will be cheaper to purchase and operate than diesel truck within our time frame of these standards. These standards will
accelerate the deployment of electric trucks and aid the crucial and inevitable transition. Colorado is currently developing a clean trucking strategy that will help fleet owners purchase electric trucks and transition our workforce in a just and equitable way. Once again, I urge this administration to set the strongest standards possible because many lives depend on it. These standards must accomplish two things: reducing deadly pollution by 90 percent by 2027, and putting our national bus and truck fleet on a clean path to 100-percent zero-emission, all-electric vehicles by 2035.

Thank you for the opportunity to testify.

MS. THOMPSON: Thank you for your comment. The next speaker will be Kidest Gebre. You may now unmute, and please state your name and affiliation for the record.

MS. GEBRE: Good afternoon, and thank you for organizing this public hearing and for allowing me to speak today. My name is Kidest Gebre, and I am from Richmond, Virginia, and I am the Communicating Our Power fellow and the organizing coordinator at Virginia
Interfaith Power and Light. Virginia Interfaith Power
And Light is a value-based interfaith organization that
envisions overcoming the climate crisis, eradicating
environmental and social injustices, and thrives to
live in a just, thriving, and equitable world. We
collaborate among people of faith and consciousness to
grow perfect communities by advancing climate and
environmental justice. And I'm here representing the
various faith communities and the people of faith
across the Virginia Commonwealth that support our
vision.

As people of conscience, we believe it is our
moral obligation to cut down on carbon emission and
other pollutants, and protect our health, and the
health of our neighbors, and the health of our
communities as well as creation. We are grateful for
the EPA staff for working on this proposed rule, and we
view this rule as a good starting point but would like
to see it strengthened given the negative air pollution
impacts, particularly on the communities of color and
our most vulnerable neighbors.

Noxious exhaust from Virginians' millions of
vehicles disproportionately harm the health of people

color and low-income communities, and it is the largest
source of carbon emission in the State. Here in
Richmond, Virginia, we have already seen the impact of
air pollution as we are ranked as the third asthma
capital in the Nation in 2021 by the Asthma and Allergy
Foundation of America. Our children are dealing with
asthma, a disease suffered by the children -- children
of color and lower-income groups at much higher rates
than the rest of the population. We cannot delay
acting on this because the impacts of noxious exhaust
are being felt by the most vulnerable of our
communities.

To fix both the public health and climate
problems, we ask the EPA to set stronger heavy-duty
engine and vehicle standards that will work to limit
carbon emission from tailpipes, and move to zero-
emission heavy vehicles, and achieve zero carbon
emissions by 2035. We ask that you strengthen the
proposed rule so we can protect our communities, now
most vulnerable from the negative impacts of noxious
exhaust.
Thank you for listening to our concerns today and for, again, giving me time to speak today.

MS. THOMPSON: Thank you for your comment. The next speaker will be Faraz Rizvi. Faraz, we do not currently see you listed among the list of attendees. However, if you have joined using a different name, we invite you to raise your hand at this time, and if you have dialed in, you can raise your hand by dialing star-9 on your phone.

(No response.)

MS. THOMPSON: The next speaker will be Peter Bakken. Peter, you may now unmute, and please state your name and affiliation for the record.

MR. BAKKEN: My name is Peter Bakken. I'm the state coordinator for Wisconsin Interfaith Power and Light, and I'm speaking on its behalf. We are people of all faiths working together for a just and sustainable future. Thank you for receiving my testimony today.

Fifteen years ago, Wisconsin Interfaith Power and Light, then known as the Wisconsin Interfaith Climate and Energy Campaign, received a certificate of
recognition from the EPA for outstanding leadership in the National Clean School Bus USA Program. The award was for urging the state superintendent of schools to undertake a school bus retrofit program, which resulted in the installation of diesel oxidation catalysts in 253 Wisconsin school buses. The retrofits were needed to protect school children from breathing harmful diesel fuels -- fumes. We were concerned then about the impact of vehicle pollution on the most vulnerable members of our communities, and we are concerned now.

Back then, I'm sure we hoped, and perhaps even expected, that by 2022, we would be much further along the way to drastically reducing greenhouse gas and other pollutants from the transportation sector. But it has been far too long, and we have seen too little progress toward creating a more just and sustainable transportation sector that supports the health and well-being of everyone in our state. Especially during the pandemic, we've relied on and been grateful for the vehicles and drivers that bring groceries and goods to our stores or doorsteps, but we can't continue to purchase such convenience at the cost of the health and
the lives of our neighbors who live where the concentration of automotive pollution is the greatest. The impacts of heavy-duty vehicle pollution fall most heavily on communities of color and people living in poverty. That makes this rule not only a matter of improving environmental quality and for stalling climate disruption, but also a matter of justice, and justice and compassion, especially for the most vulnerable, are preeminent values of the religious traditions represented by Wisconsin Interfaith Power and Light.

And so we are deeply grateful to the Environmental Protection Agency and the Biden administration for making reducing pollution from trucks, buses, and other large vehicles a priority. However, for the sake of all those whose health will be harmed by continuing to breathe air filled with smog and particulates, this rule needs to be strengthened. We support the goal of making heavy-duty vehicle engines 90 percent cleaner by 2027, and for all new trucks to be 100-percent electric by at least 2035.

Thank you for your time, your attention, and the
opportunity to testify before you today.

MS. THOMPSON: Thank you for your comment. The next speaker will be Gary Ewart. Gary, you may not unmute, and please state your name and affiliation for the record.

MR. EWART: Thank you. My name is Gary Ewart, and I'm staff with the American Thoracic Society. The American Thoracic Society is a medical professional organization of over 15,000 clinicians, scientists, nurses, and respiratory therapists dedicated to the prevention, detection, treatment, and cure of critical care illness, pulmonary disease, and sleep disorder breathing. That's a fancy way of saying we're the lung docs. Members of the American Thoracic Society produce much of the science that demonstrates the known adverse health effects of exposure to air pollution, and our journals publish much of the science that documents the need for further reductions in air pollution emissions to protect all Americans from the known dangers of air pollution.

The ATS strongly supports the proposed EPA rule on heavy-duty engines and vehicle standards, and I'd like
to make a couple key points. First, heavy-duty engines
and vehicles are an important and controllable source
of air pollution emissions in the U.S. Most notably,
heavy-duty trucks and vehicles emit particulate matter,
which has a well-documented adverse health portfolio,
and NOx emissions, which also are known to both
exacerbate asthma for those impacted populations. We
think it is right and appropriate for EPA to seek
further reductions from diesel and heavy-duty trucks
for the reductions in air pollution emissions.

Second, near-highway emissions are deeply and
disproportionately found in low-income communities and
in minority communities. Addressing emissions in these
communities through the heavy-duty truck and vehicle
standards is essential to meet the administration's
goal of addressing health disparities in the U.S.
Near-highway emissions reductions that will be achieved
by the implementation of this proposed rule are an
important part of that administration's agenda to meet
that to priority.

Third, clean air takes time. I've heard others
opposed these rules saying inflation's too high, gas
prices are too high. I would respond and say that the rules that are being considered and discussed today won't be implemented until 2027, and it will take several years for the introduction of the new generation of vehicles to enter the fleet. So the proposed emissions reductions that we're talking about today will be sequenced in over long time. And while the long-term benefits of these are great, it's going to be a slow implementation process. So the time is now to start discussing these so we can have clean air in the future.

And lastly, while we fully support the proposed rule, the ATS notes that the fastest way to reach emissions reductions is to retire the current fleet of old-pollution prone diesel trucks and heavy-duty engines from the roadways. We would strongly we encourage the administration and other policymakers to consider incentives and other policy ways that can help accelerate the turnover of the existing fleet and the incorporation of new and more clean vehicles.

Thank you for your time, and I appreciate the opportunity to comment.
MS. THOMPSON: Thank you for your comment. The next speaker will be Margarita Parra. You may now unmute, and please state your name and affiliation for the record.

MS. PARRA: Good afternoon. My name is Margarita Parra. I'm the transportation director of Clean Energy Works, an NGO that is dedicated to accelerate the investments in clean energy technologies. Thank you to the EPA for providing this space to comment on this proposed rule on heavy-duty emissions, which is very needed.

I've dedicated my professional life to support the transition to a zero-emissions world because I want a future with no climate crisis, no floods, no wildfires, no climate refugees, no asthma impacts and respiratory illnesses of my kid and millions of kids around the country. This is me and my daughter. Sorry. I have to lean back out for you guys to see the picture. We love riding our bikes. We live in California, and what we don't enjoy when we ride our bikes is the fumes we have to endure behind trucks and buses. My daughter knows the smell. She constantly asks what's that
I smell. It's diesel pollution.

I'm a proud U.S. citizen, but I wasn't born here as you can tell by my accent, but I look up to my adopted country to be a leader in the world. Right now, we need that leadership assurance because we are seeing how fossil fuel dependency is creating wars, devastation, death, economic impacts, not just in the U.S. and high gas prices, but everywhere. We can change that. If we have a chance, which only happens every 20 years to update these rules, we have to take it now, and this rule has to require a transition to 100-percent clean energy. In a schedule such as the California Advanced Clean Truck Rule, we said that we can get to sales of zero-emission trucks and buses by 2035. We can do this nationwide. We can't afford the settle for halfway measures.

This is also an opportunity for the U.S. industry to scale proven technologies, to open new markets, to offer good jobs, to partner with other industries, like electric utilities, to accelerate this transformation. The proposed heavy-duty rule, both for GHGs and for NOx, needs and should be ambitious because we don't
have more chances. Kids in the U.S. and around the
glove will appreciate it.

Thank you very much for listening and for taking
our input. Buenos tardes.

MS. THOMPSON: Thank you for your comment. The
next speaker will be Laurie Anderson. Laurie, when
you're ready, you may unmute, and please state your
name and affiliation for the record.

MS. ANDERSON: Hi. Thank you for the opportunity
to -- opportunity to testify. My name is Laurie
Anderson -- it's L-A-U-R-I-E, A-N-D-E-R-S-O-N -- and
I'm a Colorado field organizer with Moms Clean Air
Force. I am from Broomfield, Colorado.

As a mom, I am concerned that our future
generations, including our own children will be
significantly more impacted by climate-change-fueled
extreme weather events in their lifetime than we are
today. I live in the Denver Metro North Front Range
ozone non-attainment zone which was recently downgraded
to severe non-attainment. Here, we contend with NOx
emissions from heavy vehicle traffic and VOC emissions
from oil and gas development. This pollution combines
in the presence of sunlight and resulted in 67 high ozone days, the most days of last summer, in which the air was unhealthy to breathe, triggers asthma, and irritates our lungs. We must reduce both of these pollution sources to bring our area into ozone attainment, including heavy-duty vehicles, which are major contributors to this air pollution.

The past couple of weeks, I have received multiple urgent red flag warning alerts for my area stating that critical fire weather conditions exist in which a combination of strong winds, low relative humidity, and warm temperatures exist, which can contribute to extreme fire behavior. We take these warnings very seriously here based on recent extreme fire events. I live near the devastating December Marshall wildfire, which destroyed more -- destroyed more than 1,000 homes and has become a sobering example of how climate change is impacting our communities and fueling more frequent and more intense wildfires, including destructive, fast-moving outbreaks, even in the dead of winter. Then just last month, the NCAR fire in Boulder Canyon, not far from the destruction of the Marshall fire, ire
forced tens of thousands to evacuate.

2020 was the hot -- second hottest year on record, and the future will likely be even hotter. Across the Nation, we are also seeing increasingly powerful hurricanes, more destructive droughts, and severe flooding. We know far too well that addressing the climate crisis just can't wait. Therefore, we need the EPA to enact the strongest possible heavy-duty truck standards to help meet this critical climate moment and protect communities that are already living with extreme and dangerous weather conditions. The transportation sector is currently the leading domestic source of the carbon pollution that is driving climate change, and the trucks manufactured under this rule will be on the road for decades, so these trucks and buses must be cleaned up as soon as possible.

EPA's proposal is a step in the right direction, but the proposal must be strengthened to better protect children, people with asthma, older adults, and other vulnerable groups from the health harms of air pollution. Moms and dads across the country want to see a rapid transition to zero-emitting trucks, and we
need cleaner air for our children and our communities. Everyone has the right to breathe clean air.

Thank you for this opportunity to testify.

MS. THOMPSON: Thank you for your comment. I will now call the names of speakers from this speaker block who were not able to speak when initially called to testify. If you have joined, please raise your hand either by using the raise hand button in Zoom or by dialing star-9 on your phone, and we will promote you to the role of panelist so you can provide your testimony. I will read the names of each speaker in order.

Ronn Kistler?

(No response.)

MS. THOMPSON: Nancy Munro?

(No response.)

MS. THOMPSON: Karla McNamara?

(No response.)

MS. THOMPSON: Phillip Streif?

(No response.)

MS. THOMPSON: Elida Castillo?

(No response.)
MS. THOMPSON: And Faraz Rizvi.

(No response.)

MS. THOMPSON: And I see that we do have one hand raised, so I will promote you. When you are ready, you may unmute, and please state your name and affiliation for the record.

MR. RIZVI: Hello. I apologize for not being able to speak earlier. I was having some issues with my Zoom. My name is Faraz Rizvi. On the screen it's the incorrect name. I'm with the Center For Community Action and Environmental Justice, and I'm here to testify about the impact that truck pollution is having in our communities.

The Center For Community Action and Environmental Justice serves communities in the Inland Valley Region. This is San Bernardino and Riverside County in California, and this is an area that has been -- considered the logistics hub of the West. We have the largest volume of warehouses in California in this region, and these warehouses are next to homes and schools, and are inundated with truck traffic. This truck traffic, which releases PM2.5, creates high --
elevated ozone, and because of which our Air Quality Management District has not attained ozone in about two years. This is a huge issue because of the impact that this pollution has on the frontline community who have to, day-to-day, breathe in this air.

We have -- in our air basin, we have some of the worst air quality across the whole country, and it's because of trucks. And this rule is a really good step in the right direction, but we really need investment in zero-emissions infrastructure. There can be no half measures. There can be no way in and out. We need to make sure that -- to protect our frontline communities, to make a change that can impact our climate in the long term, we need to invest in zero-emission vehicles and create standards that prioritize that. Anything else is a half-measure. Thank you.

MS. THOMPSON: Thank you for your comment. The next speaker will be Oscar Hauptman. Oscar, you may now unmute, and please state your name and affiliation for the record.

MR. HAUPTMAN: Hello. My name is Oscar, and I'm 11 years old. I live in Brighton, Michigan, with my
family. Diesel trucks spew carcinogenic pollution into the air. Redacted for PII

Redacted for PII, and most of the soccer fields are next to highways. That's bad because the largest source of carbon pollution and smog comes from transportation sector. Redacted for PII

Redacted for PII, The dirty air is especially bad for kids. Kids breathe more rapidly, Redacted for PII

Redacted for PII. Lots of kids in Michigan have asthma Redacted for PII, over 160,000, and we
have over seven counties with an "F" grade, according to the American Lung Association. I'd be grounded if I got that many poor grades.

That's why you need to protect our developing lungs. Michigan kids want our counties' and cities' air cleaned and our grades pulled up. The EPA can help do this. The trucks rule could help kids across Michigan and the United States for many years to come. The EPA must enact standards that put the American truck and bus fleet on a clear roadway to 100 percent zero-emission sales by 2035. There is no time to waste. Please protect my lungs, heart, and brain.

Thank you.

MS. THOMPSON: Thank you for your comment. At this time, we would like to ask anyone who has registered to speak but has not yet had an opportunity to do so, raise their hand, and we can promote you to provide your testimony.

MR. CHARMLEY: Kayla, you mean anyone up to this panel, right, because we are still doing a panel later today, correct?

MS. THOMPSON: Yes, that is correct, and the next
1 speaker will be Phillip Streif. Phillip, you may now
2 unmute, and please state your name and affiliation for
3 the record.

4 (No response.)

5 MS. THOMPSON: Phillip, if you can hear us, you
6 should have received an invitation to unmute, and it
7 looks like you're unmuted now.

8 MR. CHARMLEY: Kayla, do you want to try reading
9 the phone number and the email for Phillip to contact
10 because it looks like he's off mute, but there must be
11 an issue still going on.

12 MS. THOMPSON: Absolutely. Phillip, it appears
13 that you may be experiencing some technical
14 difficulties. If you could, please send an email to
15 public_hearing@abtassoc.com, or call (919) 294-7712,
16 and we would be happy to assist you.

17 (Pause.)

18 MS. THOMPSON: Phillip, I know that you plan to
19 call in. We do have a user who just joined via phone,
20 and so if you have joined by phone, you can raise your
21 hand by dialing star-9, and we will -- we will unmute
22 you.
(Virtual hand raised.)

MS. THOMPSON: Okay. Phillip, you may now unmute on your phone, and please state your name and affiliation for the record.

MR. STREIF: Okay. I'm so sorry about that. I'm at home. Just had a newborn at home and trying to log in from or my computer. My name is Phil Streif. I'm with a charter bus company out of St. Louis. Our company's name is Vandalia Bus Lines. We've got a motorcoach fleet, and we transport students, athletic teams, church groups, the military. We help evacuate hurricane relief. We help evacuate when there's an emergency, whether it be fire or tornado.

I just want to start out by saying we're all for reducing emissions. That's very important for us as well. My main concern is with the current inducements that diesel engines have, specifically related to our industry. So, again, we transport kids and students, and we travel all over the country. We might leave St. Louis on Friday, and we head to Washington, D.C. or New York, and that's traveling throughout the night. So when we have an inducement and we're given four hours
to fix a problem, it's not realistic to get that resolved in such a short time frame.

So our main concern is the safety aspect of this when we've got a busload of kids, 50 kids on a bus and you're reducing the speed considerably, it's an accident waiting to happen. So, you know, you got to take into consideration when you slow the vehicle down to, say, 50 miles per hour, and you're traveling at night, and there's a semi-truck driving behind you, and he's distracted and he's driving at 70 miles per hour, that's an accident waiting to happen. There's going to be a rear-end collision. So I've communicated with the EPA and CARB that we need some more leniency on the time frame to get these problems resolved to where we can get the bus back.

We will put that bus out of service. Fixing the problem is not the issue. We will fix the issue. A lot of times it's just a sensor-related problem, but we're not given enough time to change out that sensor. And some of these sensors are bus specific, so even if we do break down in the middle of Kansas in the middle of the night, getting help or getting the right parts
is not realistic. So we need to get some more time for
the inducement schedule, the derate schedule, before
our buses are slowed down.

It's just -- it's just a matter of safety for our
passengers and the well-being of our passengers. So we
simply are asking for a larger time frame to give us
the adequate resources to fix that problem. We want to
keep our passengers as safe as possible, so the main
aspect here is to give us some more time to get that
fixed before a bus is derated. Again, we are all for
reducing emissions, and I support that fully, and our
compamy is family-owned. We all support that. Most of
our motorcoach companies are family owned, and we are
always looking for ways to reduce emissions, including
no idle policies and many other things. So, again,
main concern here and my main focus is to help us with
relief in regard to the derate and inducement.

MS. THOMPSON: Thank you for your comment.

MR. STREIF: Yeah, thank you.

MS. THOMPSON: At this time, we would like to
invite anyone from the previous speaker blocks who had
registered to speak, but has not had the opportunity,
to raise their hand, and we can promote you to the role
of panelists to provide your testimony.

(No response.)

MS. THOMPSON: At this time, we will begin a
scheduled recess. EPA, when would you like to
reconvene?

MR. CHARMLEY: Thank you, everyone, who's been
with us today. We have, I think Christy. We're going
to ask you, one more -- is that right -- one more
speaker block, and we had told -- and for those
stakeholders and those members of the public that we
were going to start at 6:15, I think. Is that correct?

SPEAKER: Correct.

MR. CHARMLEY: So we're going to go on a break
until 6:15, and at 6:15, we're going to do, at least
for today, our final speaker block. Thank you,
everyone.

(Recess.)

MS. PHILLIPS-THORYN: -- accommodate testimony in
both Spanish and English throughout this hearing. All
attendees must select their preferred language via the
interpretation icon at the bottom of your screen. If
you are providing testimony today, please make sure that you are speaking in the language of the channel you are listening to. For example, listening to English while speaking in Spanish could prevent other participants from hearing your statement in the language of choice.

Before we resume the hearing, we'd like to go over some logistics. As a reminder, all attendees are muted automatically. If you are speaking today, you will receive a notification on your screen that you're being promoted to the role of panelist shortly prior to your speaking time. You must accept that invitation to be able to unmute when you are called to testify. This will also allow you to turn on your camera, which we encourage you to do. Speakers connected by telephone to unmute their phones when called to testify. If you are having technical difficulties, send an email to public_hearing@abtassoc.com, or call (919) 294-7712. If you are not registered to speak, but you would like to, please send an email to public_hearing@abtassoc.com, or call (919) 294-7712.

Now we will continue our public testimony. The
The first speaker will be Nick Torres. Nick, I'm promoting you to panelist. You will be able to unmute, and state your name and affiliation for the record.

MR. TORRES: Greetings. My name is Nick Torres -- N-I-C-K, T-O-R-R-E-S. I am an advocacy director for the American Lung Association covering Colorado, Utah, and Wyoming. I strongly support stronger standards to limit emissions of NOx and greenhouse gases from heavy-duty vehicles. I urge you to finalize these standards into law this year, in 2022, and to choose Option Number 1 from the proposal when promulgating the final rules to maximize the benefits for public health. I'd also sincerely like to thank EPA for expanding access
to these important opportunities for public input in this process by allocating additional time slots.

Here in Colorado, elected leaders and regulators are making commitments to reduce pollution from the transportation sector, but for many communities located near transportation hubs and highways, Colorado's proposed regulatory changes won't reduce the impacts of the tens of thousands of out-of-state trucks and other heavy-duty vehicles that pass through the state every day. Nationally, we know that around 72 million people are estimated to live near truck freight routes, and, of course, this puts their health at risk. People of color and those with lower incomes are more likely to live in these communities. But also reducing greenhouse gases from the transportation sector is growing more critical with every wildfire season, and local experts here in Colorado now are telling residents to be prepared for a 365-day wildfire season.

Limiting emissions of NOx and greenhouse gases from heavy-duty vehicles is one of many steps that are both appropriate and urgently necessary. The effects
of greenhouse gases on climate change are, of course, well-established, and the climate-warming effects and resulting conditions for wildfires are having a severe impact here. In under a year as a Coloradan, I have experienced three wildfires within just a few miles of my home. I'll never forget the night of the Marshall fire here. It was our second night home with my newborn son. We had not even unpacked our bags from the hospital, and here we were scrambling to watch the path of the fire, pack baby clothes, diapers, bottles, worried about COVID exposures at shelters, answer frantic calls and texts from our family out of state.

Fortunately, the one-mile buffer between us and the evacuation zone held, but many families were not so lucky. I kept thinking about how I just been jogging on the trails that were now engulfed in flames. In fact, the picture my background was taken just a couple of weeks before the Marshall fires and on a trail very close to the Marshall fires.

In short, now is the time for EPA to strengthen limits of NOx emissions as well as greenhouse gases from heavy-duty engines and heavy-duty vehicles. The
Agency must finalize its proposal in 2022 and maximize the health benefits it offers by selecting Option 1 and extending the warranty requirements and useful life provision in the rules. Thank you again for this opportunity.

MS. PHILLIPS-THORYN: Thank you for your comment. The next speaker is Bob Yuhnke. You may now unmute, and state your name and affiliation for the record.

MR. YUHNKE: My name is Bob Yuhnke. I am representing Elders Climate Action. Elders Climate Action is an organization of mostly grandparents who are committed to trying to preserve a sustainable planet for our grandkids. We hope to leave a legacy of a beautiful planet rather than one where our kids are struggling to survive. And we join all of the other organizations today who have asked you to adopt more protective standards than the standards that you have currently proposed.

We specifically ask that you set zero-emission standards for those classes of heavy-duty vehicles that are in short-haul service; in other words, those kinds of vehicles that are currently commercially available
and that will certainly be available in 2027. That can significantly reduce greenhouse gas emissions.

And I want to focus for a moment on some of the numbers here. What you've proposed would only reduce greenhouse gas emissions from the 2027 Model Year by 221,000 metric tons. That sounds like a lot, but when you put it in perspective, you're estimating that that model year of vehicles will emit 29 million metric tons of CO2, so that what you're proposing is only three-fourths of one percent reduction in emissions compared to what the current standard would allow. The consequences for that for the next three years is 86.6 million metric tons that your rule would allow the industry to produce vehicles that would emit that much that much pollution.

And over the lifetime of those vehicles, assuming a 20-year useful life, we're talking about 1.7 billion -- "billion" with a "B" -- metric tons of CO2 that three model years would emit. And given the fact that the Clean Air Act would prohibit you -- prohibit the Agency from adopting more protective standards for the Model Years 2027, 2028, and 2029 once you issue these
standards, we would actually urge you not to finalize these standards and to instead propose -- re-propose a zero-emission standard for the vehicles that would be in short-haul service and that are now commercially available.

We think that those changes in the rule are particularly important because of the nature of the climate crisis. The impacts report that the IPCC released in February made it clear that the impacts are more severe and more frequent with regard to climate changes than was anticipated by the IPCC itself in its prior report, and that we are facing some pretty extreme environmental consequences in this decade. We need to take every opportunity to reduce emissions as soon as possible, and giving up these three years to allow an extra 1.7 billion metric tons of CO2 into the atmosphere does not represent a commitment to addressing the urgency that the climate crisis calls for. In addition, those three model years are going to emit millions of tons of NOx and particulate matter that otherwise would be eliminated if those vehicles were zero-emission technologies, so that you're going
to be perpetuating the ozone non-attainment problem in cities longer than it needs to be and contributing to the adverse health effects the communities adjacent to highways suffer now from elevated exposure to PM emitted from highways.

So the last point we want to make is that we think that the Clean Air Act actually requires you to do better. The language of the act requires you to set standards at the level that represents the greatest emission reduction achievable with technology that's currently available technology. The technology that's currently available is the technology that --

MS. PHILLIPS-THORYN: Thank you so much for your comment, and I am sorry for interrupting, but we do need to keep the statements --

MR. YUHNKE: Thank you, Lauren. I appreciate --

MS. PHILLIPS-THORYN: Thank you.

MR. YUHNKE: -- your time check, and I appreciate the opportunity to speak. Thank you.

MS. PHILLIPS-THORYN: Thank you for your comment.

The next speaker is Douglas Gruenau. Unfortunately, we do not see you in the attendee list. If you have
joined us and you're joined by another name, please
press the raise hand button, and I will promote you to
panelist. If you have called in, you can press star-9,
and I can promote you to panelist.
(No response.)

MS. PHILLIPS-THORYN: The next speaker is Leigh
Kauffman. Unfortunately, we do not see in the attendee
list. If you have joined the hearing under another
name, please click the raise hand button. If you have
called in, please press star-9 to raise your hand.
(Virtual hand raised.)

MS. PHILLIPS-THORYN: Okay. I will promote you
now. Leigh, please state your name and your
affiliation.

MS. KAUFFMAN: HI. I'm Leigh Kauffman. I'm just
a resident. So I'm from Pendleton, Indiana, and I'm a
single mother to a three-year-old daughter. I'm
testifying today because I live on a main road in my
town that's used as a delivery route, which trucks and
commercial vehicles use to pass through on a daily
basis. These trucks release NOx into the air mere feet
away from the windows to my apartment. Currently,
these heavy-duty vehicles pollute my communities and increase our health negative outcomes.

I support the EPA in setting the strongest engine standards possible. The EPA should include a national zero-emissions truck requirement and a sales mandate by 2035 to protect people who live directly on high-traffic shipping roads. Apparently -- I mean, recently Amazon opened a distribution center a few towns over, which has increased the usage of delivery trucks, Redacted for PII Redacted for PII

Additionally, I urge the panel to adopt stringency levels for greenhouse gas emissions that more accurately reflect the electric vehicle market for the Model Year 2027 and will actually incentivize the transition to electric vehicles so that Redacted for PII may have the chance to see the four seasons that the Midwest goes through during these months, the months that they are supposed to happen. Thank you for your time and I do hope that you consider this -- the health and environmental impacts of your decision on young
families like mine.

MS. PHILLIPS-THORYN: Thank you for your comment. The next speaker is Mark Rose. You may unmute, and state your name and affiliation for the record.

MR. ROSE: Good evening, and thank you for this opportunity to comment. My name is Mark Rose -- M-A-R-K, R-O-S-E -- and I'm the Sierra Nevada program manager for National Parks Conservation Association, America's leading voice to protect and preserve our national parks.

I'm testifying today because the dual threats of air pollution and climate change, caused in part by heavy-duty vehicles, pose some of the greatest challenges to our national parks and local communities, especially here where I live in California. Nearly all 423 national park units are now at risk due to climate change. Climate impacts of vehicle greenhouse gas emissions are leading to runaway heatwaves, drought, sea-level rise, coastal front flooding, and the all-too-common mega wildfires near where I live here in California. If we do not act quickly, we may lose some of our national parks' namesake features, such as the
glaciers in Glacier National Park, the Joshua trees in Joshua Tree National Park, and the sequoias on the park I work on, Sequoia National Park. Heavy-duty truck air pollution also severely limits visibility in national parks with haze pollution cutting down by as much 90 miles of visibility and parks like Kings Canyon. It also significantly harms the health and well-being of park visitors, wildlife, and treasured ecosystems.

Beyond my role at NPCA, I also recently spent numerous years living in Fresno, working on air quality issues in California's San Joaquin Valley, one of the most polluted regions in the Nation for PM2.5 and ozone pollution, the majority of which is formed by NOx pollution from these heavy-duty trucks traveling on highways next to where I lived. I've seen firsthand the impact vehicle pollution have on the health of my neighbors and friends. We must do more to protect these citizens, especially persons of color and low-income communities living in the many environmental justice communities across the Nation who are impacted by this air pollution and climate instability.

While I thank the administration for acting
quickly and hope -- and hopefully addressing this pollution source this year, the proposal EPA has put forth does not go nearly far enough to reduce both greenhouse gas and NOx emissions, meet our national climate goals, protect the health of communities, and preserve our beloved national parks for generations to come. NPCA firmly believes that we must move forward with the strongest possible standards. Specific to the greenhouse gas portion of the rule, the minor adjustments proposed in Phase 2 -- proposed for Phase 2 standards are far too weak and do not do enough to encourage the adoption of zero-emission trucks and buses, especially considering the progress already made in numerous states, which would deliver nearly three times the number of zero-emission vehicles as the proposed rule calls for nationally.

As it relates to the NOx reduction portion, Option 1 is the best option proposed and far better than the Option 2, but it still does not go nearly far enough and contains credits that erode the standard. The 2031 date for achieving 90-percent NOx adoption is a full four years after the 2027 date that California's
omnibus rule already has in place. This will result in unnecessary levels of air pollution across the Nation and will be especially harmful to California's South Coast and San Joaquin Valley Control Districts where strong standards for out-of-state trucks are sorely needed to help meet attainment finally with nearly all existing ozone and PM2.5 standards.

We thus request you to strengthen Option 1 to achieve 90-percent NOx reductions from heavy-duty trucks by no later than 2027. Thank you.

MS. PHILLIPS-THORYN: Thank you for your comment. The next speaker is Eleanor Farber. Unfortunately, we do not see you in the attendee list. If you have joined the hearing under another name, please click the raise hand button. If you've called in, please press star-9 to raise your hand.

(No response.)

MS. PHILLIPS-THORYN: The next speaker is Dave Arndt. You may now unmute, and state your name and your affiliation for the record.

MR. ARNDT: Hello. My name is Dave Arndt, spelled A-R-N-D-T. I'm a Baltimore, Maryland, resident and a
climate, environmental, and social justice advocate. These are -- three areas have a lot of overlap, and I'm going to focus on topics at the intersection of these areas.

Unfortunately, by plan, all of the injustice is burden on black, brown, and low-income areas. Let me repeat that. This was and is all by design. I'm sorry to say just five years ago, I did not know this. Sure I knew that air pollution and environmental and social justice was bad, but I never saw the design. My eyes have been opened. However, we need to open everyone's eyes. This hearing is a good start in doing that.

Thank you for your work and this opportunity.

Let's take a look at the Brooklyn, Cherry Hill, and Curtis Bay neighborhoods of Baltimore where I live. There are two incinerators within five miles. Now, let's add a few more layers. There's three RMP facilities, a chemical factory which is a large emitter of carcinogens. That's just a start. There is a working port, which drives heavy-duty truck traffic through the neighborhoods, plus several very large distribution centers, which amplify the truck traffic.
Next, add in diesel emissions from trains and the large ships themselves, and for convenience, several major interstates cut through the neighborhoods, transporting thousands of trucks through the I-95 corridor. This would be a good design if was isolated. However, it was all placed in a black, brown, and low-income neighborhood by design, all having cumulative effects.

The Baltimore Region ranks among the worst in the U.S. for air pollution. A study by the Chesapeake Bay Foundation in 2017 found air quality in the region ranked moderate or worse one out of every three days, according to EPA's own Air Quality Index. Little wonder that the children of Baltimore City have asthma at twice the rate of the country. I would recommend you go to your own EPA's Environmental Justice Screening and Mapping Tool to see how bad it really is. We need to tackle all the pollution sources one by one. We have the technology today. Electric trucks are a good start.

Oh, by the way, I forgot to mention the climate crisis. Most of these neighborhoods are on the water.
and are not prepared for sea-level rise caused by burning fossil fuels. Pass at least Option 1 this year. However, please have it go into effect in 2024. We don't have time to wait. Please put health of our citizens and the climate over the profits of companies. Thank you very much for the opportunity to present.

MS. PHILLIPS-THORYN: Thank you for your comment.

As a reminder if you are speaking today, you will receive a notification on your screen that you are being promoted to the role of panelist shortly prior to your speaking time. You must accept that invitation to be able to unmute when you are called to testify. This will also allow you to turn on your camera, which we encourage you to do. Speakers connected by telephone should unmute their phones when called to testify. If you are having technical difficulties, please send email to public_hearing@abtassoc.com, or call (919) 294-7712. If you are not registered to speak, but you would like to, please send an email with your name and phone number to public_hearing@abtassoc.com, or call (919) 294-7712.

The next speaker is Maggie Segal. You can unmute,
and state your name and affiliation for the public record.

MS. SEGAL: All right. Hello, and thank you for the opportunity to speak. My name is Maggie Segal. I'm 15 years old, and I'm a high school student from Atlanta, Georgia. From where I live, I can see Interstate 75 and 85 from my window. I've lived in Georgia my entire life, and what you may have heard about the traffic is true.

Atlanta traffic is heavy, and it's getting worse. In fact, Georgia is building 40 miles of truck-only lanes to deal with some of the congestion. Many people here think this is an excellent idea, for trucks coming through is a sign of a strong economy and less worry over the supply chain issues that have made recent headlines. However, I have serious concerns about all this truck traffic because of what it means in terms of air quality and increasing airports. It is estimated that 8,500 heavy-duty trucks pass through Atlanta every day and make up only 10 percent of overall transportation on the roads, but are responsible for 60 percent of the particle pollution from vehicles.
NIH research shows that poor air quality due to air pollution causes lung and heart disease. It also triggers asthma. Now, about 12 percent of school-aged children in Georgia have asthma according to the Georgia Department of Public Health. Students with asthma miss, on average, five days of school per year just due to their condition. That means it's hard to keep up in school, and grades are more likely to drop. Kids with asthma also don't really sleep as well at night, and if you ask any teacher how they feel about a kid sleeping in class, they'll tell you that it's not good for anyone.

I've read about science-based climate solutions that reduce pollution, and I know that breathing clean air improves overall health. I'm sure others will offer reasons why improving the standards would be too expensive, but the fact is that by improving air quality, we will actually save money and improve quality of life for everyone. Imagine, fewer days that kids miss school, fewer emergency room visits, happier parents who don't have to miss work to take those kids in for care, and happier teachers who feel better.
themselves and have healthier kids in their classroom. Healthy children are more likely to grow into healthy adults, and these healthy adults can then make up a strong healthy workforce in the future.

Every kid knows that when you are in the direct path of a truck, you can avoid harm by simply moving out of the way, but we can’t move out of the way of the air we breathe. And because of body size, the fact that we are more likely to be outside and active as children, and because we are still growing, we are at more risk of being harmed from breathing in dirty air. And it is a fact the opportunity is here for the EPA to improve air quality by setting and enforcing the strongest possible emission standards for trucks.

Kids watch and listen to what adults do and not just what they say. The science is clear that breathing clean air matters for good health. These are my reasons for asking the adults in charge at the EPA to stand up for what is right and set the strongest possible pollution standards for trucks. Thank you for your time.

MS. PHILLIPS-THORYN: Thank you for your comment.
The next speaker will be Sarah Mostafa. Unfortunately, we do not see you in the attendance list. If you joined the hearing from another name, please click the raise hand button. If you have called in, please press star-9 to raise your hand.

(No response.)

MS. PHILLIPS-THORYN: The next speaker is Kathryn Dorn. You may now unmute, and please state your name and affiliation for the record.

(No response.)

MS. PHILLIPS-THORYN: Kathryn, it looks like you are muted. You can press star-6 from your phone if you have called in.

MS. DORN: I'm so sorry. Can you hear me now?

MS. PHILLIPS-THORYN: We can.


MS. PHILLIPS-THORYN: That's okay.

MS. DORN: I am glad that the EPA is proposing limits on Redacted for PII

Redacted for PII

Redacted for PII

I am glad that the EPA is proposing limits on Redacted for PII
nitrogen oxide emissions. Unfortunately, none of your current proposals are strong enough to adequately protect the public health and our economy. On behalf of my city, I asked the EPA to please instead institute emissions limits that will reduce nitrogen oxide emissions by at least 90 percent by 2027, which will encourage the swift and complete adoption of electric heavy-duty vehicles.

Phoenix has dangerously poor air quality much of the year. In 2020, for example, a report by the Environment Arizona Research And Policy Center found that Phoenix suffered 149 days of especially elevated air pollution, in large part, due to vehicle emissions. Even on days without unusually high levels of air pollution, [Redacted for PII] often wakes up with a series wet, hacking coughs as she tries to clear her lungs, then spends the rest of the day feeling weak and unable to walk more than a half mile at a time. And we live in a neighborhood without much through traffic by diesel-burning vehicles. Many Phoenix neighborhoods have even worse air quality than ours, especially low-income communities which are often burdened by nearby truck
and bus depots and routes. As a result, people die prematurely and very avoidably from air pollution-exacerbated cardiopulmonary diseases.

Without stronger emissions limits, the threat to human health and life will only get worse, especially as greenhouse gas emissions increase our summer temperatures to perilously high pulse. Stronger emission limits would also protect our economy by encouraging vehicle makers to ship their production to electric vehicles, freeing us from our deadly self-threatening reliance on fossil fuels, and as we are seeing right now, they're extremely volatile prices. Once our electric grid is powered by renewable energy sources and our vehicles, including trucks are all electric, U.S. consumers and companies won't need to worry about high fossil fuel prices, in addition to the economic boost of not having people stay home from work sick or die prematurely of cardiopulmonary diseases.

So for all of these reasons and everything else that other speakers have told you or will tell you, I ask the EPA to please reduce nitrogen oxide emissions by 90 percent or more by 2027, and do whatever else you
can to encourage our country to transition as swiftly as physically possible to an entirely electric vehicle system. Thank you so much.

MS. PHILLIPS-THORYN: Thank you for your comment. The next speaker is Ray Minjares. You may now unmute, and please state your name and affiliation for the record.

MR. MINJARES: Thank you. My name is Ray Minjares, and I direct the heavy-duty vehicles program at the International Council on Clean Transportation. The views of the ICCT on this proposed rule reflect decades of experience in vehicles regulation from around the world, including those of former EPA staff and of international regulators, who look to the United States for leadership in setting world-class vehicle emission standards. We support EPA's effort to revised national engine standards and greenhouse gas standards for medium- and heavy-duty vehicles. The proposal must be finalized by the end of the year to ensure full implementation in Model Year 2027.

On its proposed engine standards for nitrogen oxides, we prefer Option 1, which largely aligns with
the California Omnibus Program and would generate
greater emission reductions and air quality benefits
compared with Option 2. EPA estimates Option 2 would
allow 1.25 million additional tons of NOx emissions and
lead to between $9 and $16 billion in health damages
cumulatively through 2045. Allowing these impacts to
occur would be unacceptable since the emission controls
to comply with Option 1 are technically feasible,
commercially available, and justified based on benefits
relative to costs. We support actions to further
strengthen Option 1 by fully aligning with the
California Omnibus Program. We also support removing
EV crediting and not adopting proposed changes to SCR
inducements, among other improvements movements we will
detail in our written comments.

On proposed revisions to Phase 2 greenhouse gas
standards, the proposal must be strengthened. Our
analysis of the proposal shows it would generate little
greenhouse gas benefit beyond what is currently
required and would not increase zero-emission vehicle
uptake. Unless the proposal is revised, new diesel
trucks will be permitted to emit more greenhouse gas
emissions than intended in the original Phase 2 rulemaking, not less. To limit global temperature change to below two degrees Celsius, we estimate that by 2030, the U.S. fleet must achieve 100-percent zero-emission bus sales, at least 50 percent zero-emission Class 4 to 8 rigid truck sales, and at least 30 percent tractor trailer sales. Meeting a one-and-a-half degree target would require even greater ambition than these numbers imply.

EPA cannot afford to wait until 2020 to accelerate this transition. Our view is that EPA has the authority to set minimum production requirements to ensure this ambition is met. To align with this trajectory, we recommend EPA revise its Phase 2 greenhouse gas standard to reflect at least 20 percent fleet average, zero-emission sales in 2027, 30 percent in 2028, and 40 percent in 2029. We recommend that EPA eliminate advanced technology credit multipliers, not allow credits from states who have joined the Advanced Clean Trucks Program, and limit the lifetime of any credits that are generated.

These comments reflect our views at the ICCT and
our organization will be submitting more extensive written comments that support these views. I appreciate the opportunity today. Thank you very much.

MS. PHILLIPS-THORYN: Thank you for your comment. The next speaker is Ryan Snyder. Unfortunately, we do not see you in the attendee list. If you've joined the hearing under another name, please click the raise hand button. If you've called in, please press star-9 to raise your hand. Again, that is Ryan Snyder.

(No response.)

MS. PHILLIPS-THORYN: The next speaker is Leslie Wharton. You may now unmute, and please state your name and affiliation for the record.

MS. WHARTON: Thank you. I'm Leslie Wharton, and although it says I'm not affiliated, I'm actually here as chair of Elders Climate Action, a nonprofit with more than 15,000 members across this country. You've heard from some of our members today already.

I'm here because diesel truck pollution is a significant cause of asthma and other ailments, and in children and the elderly like myself. I have family living in cities and along our highways who are exposed...
to the noxious pollutants issued by diesel trucks, but the nitrous oxide and particulate matter emitted from trucks are not the only or even the most significant cause of harm to our families. Unless we drastically cut diesel truck emissions, our children and grandchildren will face climate disasters that make the scenarios in climate change sci-fi novels look tame. I'm not saying anything you haven't heard from many, many, many of those others who have spoken today.

Replacing polluting vehicles with zero-emission vehicles is the only standard that will ensure an end to smog pollution in our cities and take a significant step in pulling back global warming. The two go together. Let me emphasize, zero-emissions vehicle is the one solution that addresses two very serious health problems affecting the American public. If this rule is adopted without amendment to require a swift transition to all electric vehicles, it's my understanding that the standards for new trucks cannot be made stricter for a period of three years. And as the most recent IPCC report underscores, with respect to climate change, we don't have that amount of time to
get our act together. It would be ironic to introduce standards designed to protect against asthma and other respiratory diseases while sealing in CO2 emissions that almost certainly will cause even more extreme health impacts across the country.

I speak for all the Elder Climate Action grandparents, great aunts and uncles, who insist that the standards for diesel trucks must include aggressive deadlines for phasing in zero-emission trucks. A rule that purports to protect public health by reducing one diesel truck pollutant while allowing other extremely harmful pollutants to go virtually on track -- sorry -- unchecked is a travesty.

I want to thank you so much for giving serious consideration to my request to substantially increase the pace of transition to all-electric diesel trucks.

MS. PHILLIPS-THORYN: Thank you for your comment. The next speaker is D.J. Polite. Unfortunately, we do not see you in the attendee list. If you have joined the hearing under another name, please raise your hand. If you have called in, please press star-9 to raise your hand.
(No response.)

MS. PHILLIPS-THORYN: As a reminder, if you are speaking today, you will receive a notification on your screen that you are being promoted to the role of panelist shortly prior to your speaking time. You must accept that invitation to be able to unmute when you are called to testify. This will also allow you to turn on your camera, which we encourage you to do. Speakers connected by telephone should unmute their phones when called to testify. If you are having technical difficulties, please send an email to public_hearing@abtassoc.com, or call (919) 294-7712. If you are not registered to speak, but you would like to, please send an email with your name and phone number to public_hearing@abtassoc.com, or call (919) 294-7712. In order to accommodate testimony in both Spanish and English throughout this hearing, all attendees must select their preferred language via the interpretation icon at the bottom of your screen. If you are giving testimony in Spanish today, the interpreter will switch their channel to provide translation.
The next speaker is Gloria Guardado. You have noted that you plan to give testimony in Spanish. Our interpreter will now change their channel to translate your testimony into the English channel for our panel and attendees listening in English. Gloria, you can begin.

MS. GUARDADO: (Spanish language spoken.)

INTERPRETER: Can you hear me?

MS. PHILLIPS-THORYN: We are. We can hear both Gloria and the Spanish interpretation, so we may want Gloria to speak slowly so that we can hear both one after the other.

MS. GUARDADO VIA INTERPRETER: Thank you. My name is Gloria Guardado. Thank you for the opportunity to testify today. I am here as a citizen and member of a nonprofit organization, Chispa Nevada. I would like to focus on one topic specifically.

We received an "F" on behalf of the American Lung Association in Colorado. These high levels of pollution lead to many health problems -- allergies, for example -- that just won't go away. We all know that the transportation sector is what most contributes
to pollution. They are the main cause of pollution even more than regular cars. That is why a proper and adequate transition from -- to electrical vehicles is necessary to reduce pollution in our community. In order to find a solution to this -- to this problem, I request you, EPA, to impose more demanding standard so that we don't continue to put our health at risk, here in Nevada especially.

We know that they will be -- that in the end, in the long term, these electrical vehicles will be cheaper for all of us. The trucks that are polluting our towns and states now need to be taken out. This way, we can remove pollution community after community, so that's why I use this space to request for these vehicles to be eliminated completely so that we can slowly, country-by-country, eliminate pollution.

Thank you so much for this opportunity to address you. I am sure that the future will depend on the actions we take today. We are ready to write a story free of pollution to save as many lives as possible in our communities. Thank you so much.
I will pause now for our interpreter to switch back to the correct channel.

(Pause.)

MS. PHILLIPS-THORYN: The next speaker is Rachael O'Reilly. Unfortunately, we do not see you in the attendee list. If you have joined the hearing under another name, please click the raise hand button. If you have called in, please press star-9 to raise your hand.

(No response.)

MS. PHILLIPS-THORYN: The next speaker is Giovanna Santo. Unfortunately, we do not see you in the attendee list. If you have joined the hearing under another name, please click the raise hand button. If you have called in, please press star-9 to raise your hand.

(No response.)

MS. PHILLIPS-THORYN: The next speaker is Kenneth Hammond. You may now unmute, and please state your name and affiliation for the record.

MR. HAMMOND: My name is Ken Hammond. I'm not affiliated with any group in particular. I'm calling
from Plainsboro in New Jersey. I just wanted to express appreciation for the EPA's efforts to reduce emissions from trucks but also to urge the EPA to pursue bolder targets for emissions reduction. Given the dangers of the exhaust fumes emitted by diesel-powered trucks as well as the threats posed by the climate crisis to the United States and the world, we need to eliminate truck emissions as quickly as possible.

Climate change is impossible to ignore in New Jersey. Last year when the remnant -- or sorry -- remnants of Hurricane Ida came through, my county experienced widespread flooding as unprecedented levels of rainfall caused rivers to overflow their banks. Friends who had never had to worry about flooding before saw their basements inundated. The came on the heels of hearing from my sister, who lives in Seattle, Washington, experiencing several days of unprecedented triple-digit temperatures, and, on other occasions, air that wasn't breathable due to nearby wildfires. I don't want to consign my community and future generations to a world where these sorts of disasters
increase uncontrollably. We know that the only way to prevent this is to take decisive action now.

As emphasized in the latest report from the Intergovernmental Panel On Climate Change a couple weeks ago, we need to cut carbon emissions in half by 2030. Since trucks and buses contribute a disproportionately high share of emissions from the transportation sector, enacting zero-emission requirements for these vehicles will be an especially effective and essential way to help meet these emissions targets. We have the ability to secure a livable world for ourselves and our children, but to do so, it is incumbent on us to start treating the climate crisis like the emergency that it is. That means that we must take any and all possible measures to reduce carbon emissions. We have the technology today to make zero-emissions trucks and buses, and the EPA has the power to accelerate the transition to these cleaner vehicles through more ambitious regulations.

Please enact standards that put us securely on the path to 100-percent emissions-free sales no later than the year 2035, and, ideally, sooner than that. Thank
you very much for your time.

MS. PHILLIPS-THORYN: Thank you for that comment. I am now going to repeat the names of folks who are not here when we called them earlier. If you are here, press the raise hand button, or if you have called in, please press star-9. As a reminder, you have three minutes to provide your testimony, and we do ask for you to speak slowly and clearly so that our interpreters can speak along with you.

I will begin calling those folks who were not here earlier.

The first person is Douglas Gruenau. Again, if you are here, please press the raise hand button.

(No response.)

MS. PHILLIPS-THORYN: The next speaker would be Eleanor Farber. If you are here, please press the raised hand button.

(No response.)

MS. PHILLIPS-THORYN: The next speaker would be Sarah Mostafa. If you are here under a different name, please press the raise hand button.

(No response.)
MS. PHILLIPS-THORYN: The next speaker would be Ryan Snyder. If you are here under a different name, please press the raise hand button.

(No response.)

MS. PHILLIPS-THORYN: The next speaker would be D.J. Polite. If you are here under a different name, please press the raised hand button.

(No response.)

MS. PHILLIPS-THORYN: The next speaker would be Rachael O'Reilly. If you are here under a different name, please press the raise hand button.

(No response.)

The last name would be Giovanna Santo. If you are here under a different name, please press the raised hand button.

(No response.)

MS. PHILLIPS-THORYN: That concludes our full list of speakers for this block. EPA, would you like to conclude?

MR. CHARMLEY: Yes. Thank you, Lauren. So this is Bill Charmley. I wanted to thank everyone for -- who participated today, and certainly anyone who still
stuck with us all the way to the end. I think this is going to conclude our hearing for today, and I'd just like to remind anyone who is still on the line, today is just day one, and we're going to have a day two tomorrow, Wednesday, and a day three on Thursday. We have a number of folks who have signed up for both of those days.

So I'd like to conclude the hearing for now, and we'll begin tomorrow again at 9:00 a.m. Eastern Time. And I'd like to also remind everyone that we will be accepting written comments in addition to the opportunity for the testimony today, Wednesday, and Thursday. The written comment period is open through Friday, May 13th.

And with that, I think we can close today's hearing. Thank you all.

(Whereupon, at 7:07 p.m., the meeting was adjourned.)
HD2027 Rulemaking 4/12/2022

Page 4
contributing 78:8 95:6 340:2
contribution 48:8 84:22 278:20
contributors 62:2 126:12 251:8 321:7
table 316:2
trolled 82:2 146:5
trolling 45:6
Controls 3:6,8 21:1 44:12 66:6 72:2 137:5 194:10,12 357:7
controversy 224:14
tvenience 313:22 348:2
convenient 42:9
conveying 23:8
conventional 111:2 162:3
conversation 55:20 222:22
convert 259:5
co-occurrence 186:19
cook 95:1
Cook 160:17 161:4,6
cooling 278:10
COOPER 3:18 73:17, 20 74:3,4
cooperation 20:2 234:19
cooperative 269:7
coordinator 309:22 312:15
COP26 246:5,19
COPD 54:17 99:3 123:22 216:4
cope 109:2
co-pollutants 278:20
Corporate 298:11 299:6
Corporation 232:4
corporations 290:17 291:3 292:3
correct 202:17 327:21,22 332:12,13 365:2
correctly 279:16
correlated 27:6 36:7
correlation 216:12
cost-competitive 60:3
cost-effective 45:1 49:1 50:1 83:14 113:1 171:10
cost-effectively 132:10,14
costly 140:14 151:16
cough 118:15 259:12 326:5
coughing 54:4
coughs 354:16
Council 9:7 10:12 58:5 236:21 301:3 356:10
counsel 139:13
counselor 121:1
count 85:19 304:15
counterproductive 234:8
counties 76:6 158:16 327:1,5
counting 40:4
countries 255:13 280:17
country-by-country 364:16
countrymen 301:18
country's 89:7 105:11 267:13
counts 48:18 68:13
courage 265:11,19 266:3 302:18 303:5
cover 33:11 181:18 289:15
covered 63:9 182:5 274:14
covering 334:15
COVID 70:14 121:17,18 124:7,8 307:18,19 336:1
COVID-19 51:12,14,15,16 151:18
co-workers 116:1
CR 139:15 142:22
crafting 236:2
crash 184:7
CRAWFORD 2:17 22:20 23:1,2,6,9
create 41:19 90:18
created 181:13 238:15
creates 215:3 324:22
Creation 6:20 62:2 177:16 205:7,8,11,12 206:14 310:16
creatures 263:9
credible 200:18
credit 45:19 46:4 163:3 172:6 244:20 358:18
crediting 40:1 357:13
credits 40:7 46:1,2,3 59:2 142:6 144:21
HD2027 Rulemaking

enact 63:15 92:14
95:13 102:18 107:10
117:8 122:13 127:8
140:20 322:8 327:9
367:20
enacting 117:1 127:19
129:4 367:8
encountering 57:19
encourage 22:3, 13
101:18 113:22 120:3
125:12 150:4 155:18
167:8 168:8 180:1
188:13 192:8 207:7
221:20 222:18 231:2
236:19 242:10, 21
260:18 265:10, 17 266:2
287:14 294:5 305:15
317:17 333:15 334:3
345:12 349:14 354:7
356:1 362:8
encouraged 139:15
142:22 280:16
encouraging 135:6
258:12 355:9
ended 124:6, 8
end-of-life 48:9
endorse 298:17
ends 155:2
endure 318:21
Energy 2:18 9:14 23:3,
11, 12 41:17, 18 51:2
107:6 201:2 206:14
251:3 272:3 276:4
280:13 281:6 305:1
312:22 318:6, 8 319:12
355:13
enforce 282:22
enforcement 36:10
enforcing 352:13
engage 163:17 298:6
engagement 150:18
253:5
Engine 1:16 4:4 5:5
11:5 17:19 23:18 25:10
26:3, 6 33:9 47:20
58:10, 18 60:21 64:4
83:8 131:4, 22 136:2
149:9 160:1 170:5
176:12 181:14 183:11,
16 184:2 191:13 226:15
227:4 235:19 241:12
252:21 267:5, 12 286:20
288:21 293:2, 3 294:17
311:16 342:3 356:17, 21
engineered 123:2
Engines 12:11, 18 13:20
14:16, 18 16:15, 16
25:13 31:4 33:12 39:13,
14, 18 40:3 45:21 46:11
47:22 70:14, 17 72:3

4/12/2022
Page 17
74:17 82:6, 10 83:10
84:22 94:21 123:3
126:10, 11 131:11, 21
133:2, 7, 19 137:7 148:6,
7 151:2 152:17 167:10
183:12, 15 184:18, 19
193:11 198:19 201:20
214:2 248:21 249:19
251:16 252:9, 12 267:16,
18 269:2, 5, 6 304:8
314:19 315:22 316:1
317:16 329:17 336:22
English 11:9, 14 149:12,
17 191:16, 21 241:15, 20
254:10 286:22 287:5
332:20 333:4 362:17
363:4, 5
engulfed 336:16
enhanced 36:10 83:13
enjoy 224:15 318:20
enormity 169:17
enormous 32:7 33:16
136:15
ensure 20:19 33:7, 11
36:3, 8 37:12 43:2, 19
84:19 133:14 142:9
163:21 167:7 172:2
194:22 232:12 269:4
293:9 298:10 356:19
358:13 360:11
ensures 178:2
ensuring 23:14 32:22
33:4 41:15 56:6 98:1
132:22 175:18 299:12
enter 116:6 317:5
entire 164:17 165:21
224:9 227:10 259:6
262:17 263:6 271:17
290:8, 13 350:8
entirely 40:7 163:12
356:2
entitled 236:14, 22
Entrepreneurs 7:15, 18
238:9 244:1
Environment 2:18 8:9
23:3, 11 29:16 30:7
64:13 65:6 96:9 115:2
143:6 153:19 165:11
184:14 201:9 221:4
224:17 226:8 227:1
238:13 248:10 252:13
255:6 265:4, 6 267:15
308:1 354:11
ENVIRONMENTAL 1:4
2:2 3:15 5:19 6:6 7:4,
11, 15, 18 8:5, 12 10:8
11:3, 20 23:12 32:14
43:21 52:19 55:18
58:16 67:18, 19 68:17
69:14 70:15 72:17
75:11 81:3 84:5, 6, 8

Trustpoint.One Alderson.

90:13, 15 96:14, 18
97:14 104:14 107:8, 21
133:1 140:14 142:19
143:15 151:7 155:10
157:7 169:8 171:1
175:15, 17 176:15 177:1,
6, 7, 18 184:20 185:2
199:19 201:13 202:12
203:4 211:5, 8, 12
212:10 215:2 221:3
223:2, 5 228:2 238:9
244:1 253:19 255:3
268:4 270:3, 5 271:22
272:9 277:4 279:2
303:17 306:19 310:4, 8
314:6, 12 324:11, 14
339:13 342:22 344:19
347:1, 9 348:16
Environments 3:21 5:8
33:12 80:13 137:3
envisions 310:3
EPA 11:7, 18 12:11, 12,
15 13:9 14:7 15:8, 12
16:7 17:1, 12 18:14
20:5, 18 21:8 25:5
26:11 27:7, 12, 18 28:20
30:9 31:5, 6, 10, 18, 21
32:21 33:8, 11, 21 35:9
37:11, 14 40:9, 11 42:7
45:18 46:14, 22 49:15,
18, 20 52:5 53:14 55:8,
14 56:11 58:17, 19 59:5,
9, 18 60:5, 8, 13 63:15
65:18, 20 66:4, 14, 22
67:2, 6 69:16 71:7, 18
76:12, 14, 18 84:18
85:14 89:5 90:17 91:6
92:14 95:18 100:13
102:14, 17 105:9 107:10
110:1 114:22 116:21
117:8 118:1, 8 125:8
127:8, 17, 20 128:9
132:8 135:15, 18 136:1,
3, 14 139:15 140:20
141:1 142:4, 6, 9, 22
143:3 144:16, 20 146:13,
19 147:3, 4, 13, 16 148:3,
9, 12, 18 151:3 152:14
155:18 159:11 160:11
161:11 162:5, 6, 10, 20
163:9, 17, 18, 21 165:1,
14, 16 166:16 167:17
170:18, 19 171:19 172:2,
4, 9, 12 176:1, 20 177:3,
9, 12 178:1 181:20
182:11 188:14 191:1
193:5, 10 194:14, 19
195:6, 14, 17 198:11, 16
200:7, 20 201:1, 13
202:17 203:7 204:21
206:16 209:7 210:15

www.trustpoint.one
www.aldersonreporting.com

213:6 214:8 215:6
217:10 220:6, 14 221:7
225:19 227:4, 11, 13
232:11, 14, 16, 18, 22
233:16, 20 234:4, 11, 13,
20 235:22 236:1, 20
238:16 239:9 244:11, 13,
17 245:4 248:8, 12, 16
252:11 253:5, 17 255:4,
7 256:13, 20, 22 257:3, 6,
17 258:8, 12 264:14
267:3 271:18 272:9
276:10, 17 277:22 278:5
281:2 283:2 286:9
289:13 292:11 293:5
300:1 304:22 307:2
310:17 311:15 313:1
315:21 316:8 318:9
322:8 327:6, 9 330:13
332:5 334:22 336:20
342:3, 4 345:2 352:12,
18 353:22 354:4 355:21
356:13 357:3 358:10, 11,
14, 17 364:6 366:3
367:17 369:18
EPA-HQ-OAR 19:6
22:15 243:1 334:5
EPA-HQ-OAR-2019-0055
1:14 125:14
EPA's 12:4, 7 13:13
19:4 23:19 32:15 45:2
48:8 58:12 61:14 65:6
74:16, 20 77:10 83:18,
20, 22 84:5 85:20 87:10,
12 93:9 98:15 100:14
106:6 108:11 111:5
121:8 127:12 131:6, 8
132:11 133:13 147:17
149:6, 8 153:15 161:15,
19 163:1, 16 171:5, 16
175:22 191:10, 12 193:2
195:13 204:3 208:3
215:4 220:22 231:14
233:2, 14 241:9, 10
251:14, 18 255:12, 14, 15
256:8, 17 257:19 277:8,
18 279:8 282:13 286:16,
18 294:20 295:8 298:14
300:5, 12 322:17 348:13,
16 356:16 366:2
epi 81:9
epidemic 189:5
Epidemiologist 7:8
222:10
episode 259:17
episodes 197:16 259:12
EPN 255:15 256:10, 11
257:17
Epsom 258:7
equal 278:14

800.FOR.DEPO
(800.367.3376)


equally 70:17 135:12
278:19
equating 66:12
equip 205:9
equipment 16:17 64:7
65:1, 16 67:6 166:22
167:11 18:13 182:10
213:7 251:8 293:2
equitable 309:5 310:5
equitably 204:7 280:20
equity 75:12 234:17
equivalent 112:13
147:21 171:21
ER 69:8
eradicating 310:3
ERIK 2:21 34:4, 13
erode 40:2 46:8 345:20
erodes 59:4
erosion 45:20
especially 15:3 25:4
29:22 32:19 35:15 37:8
38:19 46:19 60:1, 13
68:21 75:11, 17 80:22
81:20 84:7 90:22 91:3
97:15 99:8, 14 101:9
105:3, 15 107:13 126:6
137:6 145:5 147:21
181:17 196:15 209:19
212:12 216:15, 20
220:15 234:10 255:17
278:10 282:18 302:1
308:13 313:18 314:8
326:18 342:10 343:15
344:18 345:13 346:3
354:12, 21 355:5 364:8
367:9
essence 229:5
essential 41:21 58:11
82:19 91:6 105:4
107:14 138:10 209:21
230:11 308:13 316:15
367:10
establish 14:4 276:3
established 193:12
283:14
estimate 145:22 358:3
estimated 15:4 71:9
76:5 151:9 158:5
198:13 230:1 335:11
350:18
estimates 279:7 357:3
estimating 338:7
et 291:11
ethanol 131:20
ethnic 198:10
Europe 49:13 291:21
EV 112:20 142:1 257:2
357:13
evacuate 322:1 329:11, 12

**punishment**

execution 33:14
44:11 145:14 153:14
175:14 293:1
execising 82:2
exhaust 48:6 126:20
158:12, 19 190:13
211:22 223:4, 10, 20
226:6 284:11 310:22
311:11, 22 366:5
exist 27:19 321:10, 12
existential 274:7
existing 15:15 22 49:7
91:21 92:10 146:8
234:15 245:1 268:6
269:2, 5 317:19 346:7
exists 113:13 141:19
224:15
exit 166:15
expand 18:3 233:20
246:17
expanded 295:7
expanding 334:22
expands 140:6
expansion 56:2 281:15
307:13
expect 39:5 163:19
expectancies 26:17
expected 283:20
expectation 351:17
experience 15:2 47:21
49:8 68:3 93:22 94:5
186:2 203:5 209:3
224:5 356:12
experienced 43:15
166:17 228:12 291:17
336:5 366:13
experiencing 22:5
196:18 220:13 328:13
366:18
expert 211:12
expertise 128:7
experts 44:19 158:18
299:3 335:17
explicit 274:20
Expo 281:14
expos 29:4, 10 30:2
212:10 213:1, 16 336:11
express 265:9 366:2
expressed 111:10
extended 83:14 162:14
extending 152:21 337:3
extends 229:7
extensive 77:22 94:17
359:1
extent 251:17
extra 339:16
extraterritorial 246:15
extreme 37:6 104:20
183:22 184:12 196:21
210:3, 8, 10 262:9
263:17 320:17 321:13,
14 322:11 339:13 361:4
extremely 184:9 355:12
361:11
eyes 347:10, 12

< F >

face 37:3 76:3 104:2
127:5 145:21 146:1
189:12 360:6
faced 66:20
facilitating 19:22
facilities 68:8 112:1
215:10 347:18
facility 209:9 232:3
302:14
facing 81:2 154:15
339:12
fact 43:12 92:8 95:7
137:19 160:2, 4 170:8
197:20 198:12 201:14
249:10 257:2 284:19
363:17 338:19 350:11
351:17 352:8, 12
factor 38:18 95:6
factories 123:1
factors 13:1 15:19
113:8 197:13 294:7
301:22
factory 347:18
faculty 173:15
Fahrenheit 76:4 184:7
fail 59:12 244:14
failed 96:20 145:20
failing 58:13, 15 74:11
99:17 190:5
fails 58:13 59:13 61:1
162:1 170:1 256:17
294:21
failures 85:8 181:16
fair 278:13
Faith 8:17 157:10
229:1 283:11 310:6, 9
faiths 312:17
heavily-congested

Heavy-Duty

heavy

heavyhearted

HEDGES

H-E-W-E-S

heavy

heavies

heavily

heavily-constested

heavily-impacted

heavily-trafficfed

heavily-traveled

heavy

Heath

heather

heating

heats

heatwaves

heaviest

heavily

helpful

helping

Help

Henry

hiroshige

highly

highly-effective

highly-polluted

highest

highest-emitting

higher

higher-earning

higher-priced

Highland

high-speed

high-tax

highways

Hikers

hill

Hiring

historical

historically

historically-marginalized

History

hit

Hockey

Hoesung

Hold

holding

holistically

Holmes

home

Home

homegrown

homeowners

Homeowner

Homeowners

Homeowners'
public_hearing@abtassoc.com
Puget Sound
Puuyallup
Pyle

< Q >
Quality 5:11 6:18 12:7
13:16 14:15 23:10, 13,
15 26:18 28:19 31:18
35:5, 9 40:11 64:12
68:4, 15, 16 80:17 81:12,
19 82:3 91:15 94:8
96:20 97:1 103:18, 19
111:8 126:9 138:9
144:14 145:15, 16, 21
157:18 169:19 179:21
197:10 203:3, 6, 15
204:13 220:8, 10, 13
221:2 230:12 233:5
234:2 249:3, 4, 13
235:2 257:20 262:20
266:14, 17 267:2 269:13
273:16 284:5, 7 295:10
296:7 308:8 314:6
321:5, 7 326:10 344:10
348:11, 13 350:18 351:1,
18, 19 352:13 354:9, 21
357:2
quarter 88:17 112:12
172:15
question 154:6
questionable 224:14
questions 18:5, 7 21:7
187:7 269:19 289:21
quick 254:9
quickly 23:20 30:14
52:9 78:19 79:8 89:9,
16 95:16 97:19 101:2
105:13 111:7 112:18
127:10, 22 132:10
146:22 179:2 198:17
258:14 271:1 275:3
307:1 343:21 345:1
366:8
quiet 254:8
quieter 118:12
QUINTA 5:10 140:15
142:14, 17, 20
quit 218:18
quite 81:10 218:3
219:2 283:16
quo 224:6
quote 246:3, 15
quoting 246:1

< R >
race 115:18
Rachel 365:4 369:10
RACHEL 8:17 283:5, 10
R-A-C-H-E-L 283:10
racing 75:22 198:9
209:4
racing 126:17 270:5, 11
271:22 272:7
racer 143:9 307:12
RADIATION 1:7 11:21
12:5
radios 78:1
rade 248:21 249:17
ragged 246:8
rail 209:13 215:13
273:11 284:2
railroad 106:17 158:15
railyards 51:9 271:15, 21
rainfall 366:14
rainstorms 119:4, 5
raise 34:7 79:19, 21
80:5, 6 89:22 90:1
110:12, 13 164:6, 7
169:1, 2 175:7, 8 180:16,
20 187:12, 13 190:18, 20
20, 199:4, 5 217:15 219:11,
13, 18 224:17, 225:1,
6 232:1 238:1 240:8
245:13, 14 247:11, 12, 17,
18 253:11 261:7, 8
275:8, 10, 17 285:9, 10,
16 296:16, 17 297:1, 3, 8,
10, 15 306:8, 9 312:7,
8 323:7, 8 327:17
328:20 332:1 341:2, 9,
10 346:15, 16 353:4, 5
359:7, 9 361:20, 21
367:5, 8, 14, 15 368:5, 13,
21 369:3, 11
raised 34:9 164:8
178:13 180:17, 19
217:16 219:21 247:20
253:13 275:16 294:18
324:4 329:1 341:11
368:17 369:7, 14
RAMOS 8:15 276:13, 15
Ramos-Pusat 276:15
ramp 166:16 274:21
RANDOLPH 6:13
192:19 21, 22
ranged 122:9
range 14:16 32:18 85:1
249:13 279:5 289:6
320:18
ranges 39:2 141:21
ranked 189:7 274:1
282:1 311:5 348:12
ranks 348:9
rapid 16:4 49:12 52:12
61:19 75:1 77:16 87:19
92:2 93:15 98:18
100:16 105:3 106:9
107:13 138:19 201:4
209:20 251:2 322:22
rapidly 59:1 66:18
76:13 103:9 140:6
172:22 281:12 299:5
326:19
rarely 273:17
RASTO 3:6 44:7, 10
rate 51:1 71:14 81:4
88:10, 14 138:1, 12
198:8 257:7 299:16
348:15
rates 15:2 27:5 60:10
80:16 82:20 94:12, 15
103:6, 17 104:7 197:18
198:3 209:4 245:2
246:7 259:22 307:16
311:9
rating 26:15 61:22
rational 116:20
RAUCH 4:12 98:5, 8, 10
R-A-U-C-H 98:11
raw 299:6
RAY 7:13 10:12
153:14 235:14, 16 356:5, 8
reach 51:2, 6 55:8
146:15 204:12 236:17
257:14 258:21 268:13
317:13
reached 125:10
reaching 204:18
react 54:2
reactive 54:8
read 240:7 246:22
323:11 351:13
readily 29:12 159:15
readily-available 24:14
readiness 161:22
reading 248:11 291:10
328:8
readings 183:18
ready 11:17 57:13 80:9
110:14 118:17 127:14
191:7 234:13 237:4
277:12 320:7 324:4
364:19
reaffirmed 268:17
reaffirms 59:6
real 27:16 48:21 55:17
155:6 178:20 194:12
229:11 249:3
realistic 155:1, 13 156:5
330:1 331:1
realities 155:13
reality 27:20 29:10
126:5 148:2 160:7
301:8 302:19
realize 41:22 59:13
212:6 267:6 290:10, 21
realized 36:4 94:19
259:17
68:10 69:19 72:18
74:18 77:10 87:12
93:10 98:15 106:7
108:12 115:4 121:8
161:12 174:20 190:2
200:22 201:14 208:3
256:18 290:21 291:1
298:17 322:17 325:8
360:13

STEPHEN 7:21 247:8
295:20

STEEPLETON 7:20
245:17, 20, 21

steps 13:15 106:18
124:12 252:7 335:21

STEVEN 6:7 168:20
178:6, 17

still-developing 103:12
stimulate 280:21

stop 55:22 66:10
119:16 124:12, 17
183:15 185:12 218:13
226:4 264:13 285:3
294:8
stopped 239:19 243:10, 11 284:18

stops 66:7 184:11
209:14

store 291:20

stores 313:21

stories 78:22

storm 210:5

storms 104:21 196:22

story 29:19 71:18 79:1
293:13 364:19

stranger 62:7

strategies 271:17

strategy 113:15 133:12
256:2 295:16 309:3

stream 270:19

street 62:15 228:6
270:14 276:16 278:3
342:10

streets 26:8 151:22

STREIF 9:18 297:13
323:19 328:1 329:5, 7
331:19

strengthen 14:1 30:15
32:21 42:7 52:15 60:6
61:14 69:17 76:14 79:8
87:10 97:16 20 100:21
102:14 107:16 108:11
125:3 144:17 152:15
163:17 198:18 203:7
210:16 215:5 222:18
244:18 257:18 260:8
272:10 276:11 281:2
311:19 336:20 346:8
357:11
### third-generation

<table>
<thead>
<tr>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>294:3</td>
</tr>
</tbody>
</table>