THIS MEETING WILL BE CONDUCTED UNDER PROCEDURES AUTHORIZED BY ASSEMBLY BILL 361 (RIVAS 2021) ALLOWING REMOTE MEETINGS. THIS MEETING WILL BE ACCESSIBLE VIA WEBCAST, TELECONFERENCE, AND ZOOM. A ZOOM PANELIST LINK WILL BE SENT SEPARATELY TO COMMITTEE OR BOARD MEMBERS

• THE PUBLIC MAY OBSERVE THIS MEETING THROUGH THE WEBCAST BY CLICKING THE LINK AVAILABLE ON THE AIR DISTRICT’S AGENDA WEBPAGE AT

www.baaqmd.gov/bodagendas

• THE PUBLIC MAY PARTICIPATE REMOTELY VIA ZOOM AT THE FOLLOWING LINK OR BY PHONE

https://bayareametro.zoom.us/j/83305592195

(669) 900-6833 or (408) 638-0968

WEBINAR ID: 833 0559 2195

• THOSE PARTICIPATING BY PHONE WHO WOULD LIKE TO MAKE A COMMENT CAN USE THE “RAISE HAND” FEATURE BY DIALING “*9”. IN ORDER TO RECEIVE THE FULL ZOOM EXPERIENCE, PLEASE MAKE SURE YOUR APPLICATION IS UP TO DATE
MOBILE SOURCE AND CLIMATE IMPACTS COMMITTEE MEETING
AGENDA

THURSDAY, JULY 28, 2022
9:30 AM

1. Call to Order - Roll Call

2. Pledge of Allegiance

3. Public Meeting Procedure

   The Committee Chair shall call the meeting to order and the Clerk of the Boards shall take roll of the Committee members.

   This meeting will be webcast. To see the webcast, please visit www.baaqmd.gov/bodagendas at the time of the meeting. Closed captioning may contain errors and omissions and are not certified for their content or form.

   Public Comment on Agenda Items: The public may comment on each item on the agenda as the item is taken up. Members of the public who wish to speak on matters on the agenda for the meeting, will have two minutes each to address the Committee. No speaker who has already spoken on that item will be entitled to speak to that item again.

CONSENT CALENDAR (Item 4)

4. Approval of the Minutes of May 26, 2022

   The Committee will consider approving the draft minutes of the Mobile Source and Climate Impacts Committee meeting of May 26, 2022.

PRESENTATION(S)

5. California Air Resources Board Freight Activities

   This is an informational item only and will be presented by Cari Anderson, Branch Chief in the Transportation & Toxics Division at the California Air Resources Board.
6. Federal Mobile Source Update

This is an informational item only and will be presented by Alan Abbs, Legislative Officer.

OTHER BUSINESS

7. Public Comment on Non-Agenda Matters

Pursuant to Government Code Section 54954.3
Members of the public who wish to speak on matters not on the agenda for the meeting, will have two minutes each to address the Committee.

8. Committee Member Comments

Any member of the Committee, or its staff, on his or her own initiative or in response to questions posed by the public, may: ask a question for clarification, make a brief announcement or report on his or her own activities, provide a reference to staff regarding factual information, request staff to report back at a subsequent meeting concerning any matter or take action to direct staff to place a matter of business on a future agenda. (Gov’t Code § 54954.2)

9. Time and Place of Next Meeting

Thursday, September 22, 2022, at 9:30 a.m., via webcast, teleconference, or Zoom, pursuant to procedures in accordance with Assembly Bill 361 (Rivas 2021).

10. Adjournment

The Committee meeting shall be adjourned by the Chair.
Accessibility and Non-Discrimination Policy

The Bay Area Air Quality Management District (Air District) does not discriminate on the basis of race, national origin, ethnic group identification, ancestry, religion, age, sex, sexual orientation, gender identity, gender expression, color, genetic information, medical condition, or mental or physical disability, or any other attribute or belief protected by law.

It is the Air District’s policy to provide fair and equal access to the benefits of a program or activity administered by Air District. The Air District will not tolerate discrimination against any person(s) seeking to participate in, or receive the benefits of, any program or activity offered or conducted by the Air District. Members of the public who believe they or others were unlawfully denied full and equal access to an Air District program or activity may file a discrimination complaint under this policy. This non-discrimination policy also applies to other people or entities affiliated with Air District, including contractors or grantees that the Air District utilizes to provide benefits and services to members of the public.

Auxiliary aids and services including, for example, qualified interpreters and/or listening devices, to individuals who are deaf or hard of hearing, and to other individuals as necessary to ensure effective communication or an equal opportunity to participate fully in the benefits, activities, programs and services will be provided by the Air District in a timely manner and in such a way as to protect the privacy and independence of the individual. Please contact the Non-Discrimination Coordinator identified below at least three days in advance of a meeting so that arrangements can be made accordingly.

If you believe discrimination has occurred with respect to an Air District program or activity, you may contact the Non-Discrimination Coordinator identified below or visit our website at www.baaqmd.gov/accessibility to learn how and where to file a complaint of discrimination.

Questions regarding this Policy should be directed to the Air District’s Non-Discrimination Coordinator, Suma Peesapati, at (415) 749-4967 or by email at speesapati@baaqmd.gov.
# Monthly Calendar of Air District Meetings

## July 2022

<table>
<thead>
<tr>
<th>Type of Meeting</th>
<th>Day</th>
<th>Date</th>
<th>Time</th>
<th>Room</th>
</tr>
</thead>
<tbody>
<tr>
<td>Board of Directors Mobile Source and Climate Impacts Committee</td>
<td>Thursday</td>
<td>28</td>
<td>9:30 a.m.</td>
<td>Webcast only pursuant to Assembly Bill 361</td>
</tr>
</tbody>
</table>

## August 2022

<table>
<thead>
<tr>
<th>Type of Meeting</th>
<th>Day</th>
<th>Date</th>
<th>Time</th>
<th>Room</th>
</tr>
</thead>
<tbody>
<tr>
<td>Path to Clean Air Community Emissions Reduction Plan Steering Committee</td>
<td>Monday</td>
<td>15</td>
<td>5:30 p.m.</td>
<td>Webcast only pursuant to Assembly Bill 361</td>
</tr>
</tbody>
</table>

## September 2022

<table>
<thead>
<tr>
<th>Type of Meeting</th>
<th>Day</th>
<th>Date</th>
<th>Time</th>
<th>Room</th>
</tr>
</thead>
<tbody>
<tr>
<td>Board of Directors Community Equity, Health and Justice Committee - CANCELLED</td>
<td>Thursday</td>
<td>1</td>
<td>9:30 a.m.</td>
<td>Webcast only pursuant to Assembly Bill 361</td>
</tr>
<tr>
<td>Board of Directors Meeting</td>
<td>Wednesday</td>
<td>7</td>
<td>9:00 a.m.</td>
<td>Webcast only pursuant to Assembly Bill 361</td>
</tr>
<tr>
<td>Community Advisory Council Mtg.</td>
<td>Thursday</td>
<td>8</td>
<td>6:00 p.m.</td>
<td>Webcast only pursuant to Assembly Bill 361</td>
</tr>
<tr>
<td>Advisory Council Meeting</td>
<td>Monday</td>
<td>12</td>
<td>8:30 a.m.</td>
<td>Webcast only pursuant to Assembly Bill 361</td>
</tr>
<tr>
<td>Board of Directors Legislative Committee - CANCELLED</td>
<td>Monday</td>
<td>12</td>
<td>1:00 p.m.</td>
<td>Webcast only pursuant to Assembly Bill 361</td>
</tr>
<tr>
<td>Board of Directors Community Equity, Health and Justice Committee</td>
<td>Thursday</td>
<td>15</td>
<td>9:30 a.m.</td>
<td>Webcast only pursuant to Assembly Bill 361</td>
</tr>
<tr>
<td>Board of Directors Stationary Source and Climate Impacts Committee</td>
<td>Monday</td>
<td>19</td>
<td>9:00 a.m.</td>
<td>Webcast only pursuant to Assembly Bill 361</td>
</tr>
<tr>
<td>TYPE OF MEETING</td>
<td>DAY</td>
<td>DATE</td>
<td>TIME</td>
<td>ROOM</td>
</tr>
<tr>
<td>--------------------------------------------------------------------------------</td>
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<td>----------------------------------------------------------------------</td>
</tr>
<tr>
<td>Path to Clean Air Community Emissions Reduction Plan Steering Committee</td>
<td>Monday</td>
<td>19</td>
<td>5:30 p.m.</td>
<td>Webcast only pursuant to Assembly Bill 361</td>
</tr>
<tr>
<td>Board of Directors Meeting</td>
<td>Wednesday</td>
<td>21</td>
<td>9:00 a.m.</td>
<td>Webcast only pursuant to Assembly Bill 361</td>
</tr>
<tr>
<td>Board of Directors Administration Committee</td>
<td>Wednesday</td>
<td>21</td>
<td>1:00 p.m.</td>
<td>Webcast only pursuant to Assembly Bill 361</td>
</tr>
<tr>
<td>Board of Directors Mobile Source and Climate Impacts Committee</td>
<td>Thursday</td>
<td>22</td>
<td>9:30 a.m.</td>
<td>Webcast only pursuant to Assembly Bill 361</td>
</tr>
<tr>
<td>Board of Directors Budget and Finance Committee - CANCELLED</td>
<td>Wednesday</td>
<td>28</td>
<td>9:30 a.m.</td>
<td>Webcast only pursuant to Assembly Bill 361</td>
</tr>
</tbody>
</table>

ADG 7/20/22 – 1:40 p.m.  
G/Board/Executive Office/Moncal
BAY AREA AIR QUALITY MANAGEMENT DISTRICT
Memorandum

To: Chairperson Teresa Barrett and Members
of the Mobile Source and Climate Impacts Committee

From: Sharon L. Landers
Interim Executive Officer/APCO

Date: July 28, 2022

Re: Approval of the Minutes of May 26, 2022

RECOMMENDED ACTION

Approve the attached draft minutes of the Mobile Source and Climate Impacts Committee meeting of May 26, 2022.

BACKGROUND

None.

DISCUSSION

Attached for your review and approval are the draft minutes of the Mobile Source and Climate Impacts Committee meeting of May 26, 2022.

BUDGET CONSIDERATION/FINANCIAL IMPACT

None.

Respectfully submitted,

Sharon L. Landers
Interim Executive Officer/APCO

Prepared by: Marcy Hiratzka
Reviewed by: Vanessa Johnson
ATTACHMENTS:

1. Draft Minutes of the Mobile Source and Climate Impacts Committee meeting of May 26, 2022
DRAFT MINUTES

Mobile Source and Climate Impacts Committee Meeting
Thursday, May 26, 2022

This meeting was conducted under procedures in accordance with Assembly Bill 361. Members of the Committee participated by teleconference.

1. CALL TO ORDER – ROLL CALL

Mobile Source and Climate Impacts Committee Chairperson Barrett, called the meeting to order at 9:31 a.m.

Roll Call:

Present: Committee Chairperson Teresa Barrett; Vice Chairperson Dave Hudson; and Directors John Gioia, Lynda Hopkins, and Karen Mitchoff.

Absent: Director Margaret Abe-Koga, David Canepa, Pauline Russo Cutter, Davina Hurt, and Myrna Melgar.

2. PLEDGE OF ALLEGIANCE

3. PUBLIC MEETING PROCEDURE

4. PUBLIC COMMENT ON NON-AGENDA MATTERS (OUT OF ORDER, ITEM 8)

No requests received.

5. COMMITTEE MEMBER COMMENTS (ITEM 9)

Director Mitchoff expressed concerns about the absences of Committee members and asked staff to address the issue to avoid a lack of quorum in the future.

6. APPROVAL OF THE MINUTES OF APRIL 28, 2022 (ITEM 4)

Public Comments

No requests received.
Committee Comments

None.

Committee Action

Vice Chair Hudson made a motion, seconded by Director Mitchoff, to approve the Minutes of the Meeting of April 28, 2022; and the motion carried by the following vote of the Committee:

- AYES: Barrett, Gioia, Hopkins, Hudson, Mitchoff.
- NOES: None.
- ABSTAIN: None.
- ABSENT: Abe-Koga, Canepa, Cutter, Hurt, Melgar.

7. FISCAL YEAR ENDING (FYE) 2022 CHARGE! PROGRAM PROJECT RECOMMENDATIONS (ITEM 5)

Ada Troung, Staff Specialist, gave the staff presentation Charge! Program, including: outcome; outline; requested action; electric vehicle (EV) trends and goals; existing Bay Area EV infrastructure; program overview; Fiscal Year Ending (FYE) 2022 solicitation; application scoring; FYE 2022 program rank list and summary; other incentives for EV charging; and requested action.

Public Comments

No requests received.

Committee Comments

The Committee and staff discussed the request for project locations on future project rank lists; the need to educate potential applicants on the application process; whether funding includes the charger only, or the conduit to charge the hardware as well, and the need to advertise the answer to the applicants; the need for additional funding sources for this program; how household income is factored into program eligibility; the way in which the Air District is aligning its various mobile source incentive and grant programs, and a breakdown of how each program pays for EV charging infrastructure; and the need to build EV charging infrastructure at new affordable housing complexes, and whether the Charge! Program funds new construction projects.

Committee Action

Vice Chair Hudson made a motion, seconded by Director Mitchoff, to recommend that the Board approve the Charge! Program rank list and recommend projects with proposed grant awards; and authorize the Interim Executive Officer/Air Pollution Control Officer (APCO) to enter into all necessary agreements with applicants for the recommended projects; and the motion carried by the following vote of the Committee:
AYES: Barrett, Gioia, Hopkins, Hudson, Mitchoff.
NOES: None.
ABSTAIN: None.
ABSENT: Abe-Koga, Canepa, Cutter, Hurt, Melgar.

8. PROJECTS AND CONTRACTS WITH PROPOSED GRANT AWARDS OVER $500,000 (ITEM 6)

Adam Shapiro, Acting Manager in the Strategic Incentives Division, gave the staff presentation Projects and Contracts With Proposed Awards Over $500,000, including: outcome; outline; Carl Moyer Program (CMP)/Mobile Source Incentive Fund (MSIF), Community Air Protection Program (CAPP), and Funding Agricultural Replacement Measures for Emission Reduction (FARMER); Transportation Fund for Clean Air (TFCA); CMP/MSIF, CAPP, FARMER, and TFCA; incentive funding awarded & recommended since July 2021 by revenue source, project category, and county; and actions requested.

Public Comments

No requests received.

Committee Comments

None.

Committee Action

Vice Chair Hudson made a motion, seconded by Director Gioia, to recommend that the Board approve recommended projects with proposed grant awards over $500,000; and authorize the Executive Officer/APCO to enter into all necessary agreements with applicants for the recommended projects; and the motion carried by the following vote of the Committee:

AYES: Barrett, Gioia, Hopkins, Hudson, Mitchoff.
NOES: None.
ABSTAIN: None.
ABSENT: Abe-Koga, Canepa, Cutter, Hurt, Melgar.

9. UPDATES TO THE VEHICLE BUY BACK (VBB) PROGRAM UPDATE (ITEM 7)

Dr. Minda Berbeco, Manager in Strategic Incentives Division, gave the staff presentation Updates to the Vehicle Buy Back Program, including: outcome; outline; background; number of cars early retired through the VBB Program by year; decline in participation; inventory of vehicles; ideas for expanding program participation; and actions requested.

Public Comments

No requests received.
Committee Comments

The Board and staff discussed whether dismantling prices are increasing; and whether the California Air Resources Board offers a similar program.

Committee Action

Vice Chair Hudson made a motion, seconded by Director Mitchoff, to recommend that the Board approve the allocation of up to an additional $5.8 million in incentive revenue from MSCI and/or TFCA monies to cover the cost of increased program participation; and authorize the Interim Executive Officer/APCO to execute amendments that increase the contract amounts in FYE 2023 and 2024 with vehicle dismantlers Environmental Engineering Services and Pick-n-Pull by an additional $5 million annually and with Direct Mail Services by an additional $800,000 annually; and the motion carried by the following vote of the Committee:

AYES: Barrett, Gioia, Hopkins, Hudson, Mitchoff.
NOES: None.
ABSTAIN: None.
ABSENT: Abe-Koga, Canepa, Cutter, Hurt, Melgar.

10. TIME AND PLACE OF NEXT MEETING

At the end of the meeting, the date of the next meeting was scheduled for Thursday, June 23, 2022. After the meeting adjourned, the next meeting was scheduled for Thursday, July 28, 2022, at 9:30 a.m., via webcast, teleconference, or Zoom, pursuant to procedures in accordance with Assembly Bill 361 (Rivas 2021).

11. ADJOURNMENT

The meeting adjourned at 10:35 a.m.

Marcy Hiratzka
Clerk of the Boards
BAY AREA AIR QUALITY MANAGEMENT DISTRICT
Memorandum

To: Chairperson Teresa Barrett and Members
   of the Mobile Source and Climate Impacts Committee

From: Sharon L. Landers
       Interim Executive Officer/APCO

Date: July 28, 2022

Re: California Air Resources Board Freight Activities

RECOMMENDED ACTION

None; receive and file.

BACKGROUND

The California Air Resources Board (CARB), like the Air District, is charged with protecting the community from the harmful effects of air pollution. CARB's jurisdiction extends throughout the state of California and their work is focused on mobile sources within the state. CARB is also the state's lead agency on climate change programs and initiatives.

DISCUSSION

California Air Resources Board staff will provide the Air District Board of Directors with background and information on CARB's freight activities, including regulations for trucks, buses, drayage trucks, transport refrigeration units (TRUs), cargo handling equipment, locomotives, and marine vessels. Cari Anderson, Branch Chief in the Transportation and Toxics Division at CARB, will provide this presentation.

BUDGET CONSIDERATION/FINANCIAL IMPACT

None.

Respectfully submitted,

Sharon L. Landers
Interim Executive Officer/APCO
Prepared by: Elizabeth Yura & Sonam Shah-Paul
Reviewed by: Greg Nudd

ATTACHMENTS:
None
BAY AREA AIR QUALITY MANAGEMENT DISTRICT
Memorandum

To: Chairperson Teresa Barrett and Members
   of the Mobile Source and Climate Impacts Committee

From: Sharon L. Landers
       Interim Executive Officer/APCO

Date: July 28, 2022

Re: Federal Mobile Source Update

RECOMMENDED ACTION

None; receive and file.

BACKGROUND

As part of the regulatory framework governing air emissions under the Clean Air Act, authority to regulate various sources of pollution is delegated to separate agencies via the United States Environmental Protection Agency (EPA) to State, Tribal and regional agencies like the Air District. In California, local air districts regulate stationary sources of air pollution, with the State of California regulating mobile sources of air pollution and air pollution from consumer goods. However, EPA does retain authority to regulate emissions from certain mobile source categories that span international or multiple state borders such as ocean-going vessels, trains and passenger aircraft. EPA also sets emissions standards for trucks in other states and in conjunction with the National Highway Traffic Safety Administration (NHTSA) sets standards for overall passenger vehicle fleet fuel efficiency, both of the latter effecting emissions in California.

DISCUSSION

The Mobile Source and Climate Impacts Committee (Committee) will receive an update on current EPA regulatory activities related to mobile sources for the following:

Proposed Rule for Control of Heavy-Duty Engine and Vehicle Standards

On March 28, 2022, the EPA published a proposed rule that would set new, more stringent standards to reduce pollution from heavy-duty vehicles and engines starting in model year (MY) 2027. The proposed standards would significantly reduce emissions of smog- and soot-forming nitrogen oxides (NOx) from heavy-duty gasoline and diesel engines and set more stringent greenhouse gas (GHG) standards for certain commercial vehicle categories where electrification is advancing at a more rapid pace. These sectors include school buses, transit buses, commercial delivery trucks, and short-haul tractors. This proposal is consistent with President Biden’s
Executive Order, “Strengthening American Leadership in Clean Cars and Trucks” and would ensure the heavy-duty vehicles and engines that drive American commerce are as clean as possible while charting a path to advance zero-emission vehicles in the heavy-duty fleet.

EPA held virtual public hearings in April 2022, and accepted written comments through mid-May 2022. The final rule is expected to be issued in late 2022.

In a separate action, EPA will be setting new GHG emissions standards for heavy-duty vehicles as soon as model year 2030. This action will more comprehensively address the long-term trend towards zero-emissions vehicles across the heavy-duty sector.

**Regulations for Emissions from Aircraft Engines**

EPA is proposing particulate matter (PM) emission standards and test procedures applicable to certain classes of engines used by civil subsonic jet airplanes, such as commercial passenger and freight aircraft and larger business jets. These proposed standards and test procedures match the aircraft engine standards adopted by the United Nations' International Civil Aviation Organization (ICAO) in 2017 and 2020.

The written comment period ended in April 2022. EPA has not announced a public hearing date yet.

**Regulations for Lead Emissions from Aircraft**

Protecting children’s health and reducing lead exposure are two of EPA’s top priorities. EPA has been investigating the air quality impact of lead emissions from piston-engine aircraft operating on leaded fuel, including assessment of lead concentrations in air near airports and evaluation of the potentially exposed population.

EPA is now evaluating, under the Clean Air Act, whether emissions of lead from piston-engine aircraft cause or contribute to air pollution that endangers public health or welfare. For convenience, we refer to this action collectively as the “endangerment finding.”

EPA currently plans to issue a proposed endangerment finding in 2022 which will undergo public notice and comment. After evaluating comments on the proposal, EPA plans to issue any final endangerment finding in 2023.

**Light-Duty Vehicle Greenhouse Gas Emission Standards and Zero Emission Vehicle Requirements**

On April 28, 2021, EPA issued a Federal Register notice soliciting public input on the reconsideration of EPA’s action under the joint EPA/National Highway Traffic Safety Administration (NHTSA) action titled: The Safer Affordable Fuel-Efficient Vehicles Rule Part One: One National Program (SAFE-1), issued in September 2019. EPA’s reconsideration of SAFE-1 responds to petitions for reconsideration filed by states and other stakeholders, and is consistent with President Biden’s Executive Order 13990 on Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis. The result of EPA’s reconsideration is to rescind the SAFE-1 action. This means that the Clean Air Act waiver granted to California to implement its Advanced Clean Car (ACC) program in 2013 is back in
force. The ACC program is a package of state regulations that set emissions standards for criteria pollutants and GHG emissions for light-duty vehicles and a zero-emission vehicle (ZEV) sales mandate. In this action, EPA is also withdrawing the SAFE-1 interpretation of the Clean Air Act that would prohibit other states from adopting the California GHG emission standards.

BUDGET CONSIDERATION/FINANCIAL IMPACT

None.

Respectfully submitted,

Sharon L. Landers
Interim Executive Officer/APCO

Prepared by: Alan Abbs
Reviewed by: Sharon L. Landers

ATTACHMENTS:

1. Fact Sheet - Heavy-Duty 2027 and Beyond - Clean Trucks Proposed Rulemaking
2. Executive Order 14037 of August 5, 2021
4. Fact Sheet - Notice of Decision: Reconsideration of a Previous Withdrawal of a Waiver for California’s Advanced Clean Car Program
5. Executive Order 13990 of January 20, 2021
Heavy-Duty 2027 and Beyond: Clean Trucks Proposed Rulemaking

The Biden Administration’s Clean Trucks Plan

Heavy-duty trucks and buses drive American commerce and connect people across the country. Creating cleaner trucks is an economic opportunity to support jobs and make more efficient vehicles while reducing harmful pollution. Heavy-duty trucks and buses continue to contribute significantly to air pollution at the local, regional, and national level, often disproportionally affecting communities of color and low-income populations. 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 will be major steps towards improving air quality and addressing the climate crisis.

The regulatory actions that make up the Clean Trucks Plan are as follows:

- Setting stronger nitrogen oxide (NOx) standards for heavy duty trucks beginning in model year (MY) 2027 and tightening the “Phase 2” greenhouse gas (GHG) emissions for MY 2027 and beyond. This fact sheet provides an overview of the proposal to address this first action.

- Setting stronger emissions standards for medium-duty commercial vehicles for MY 2027 and later. These revised standards will be proposed in combination with new standards for light-duty vehicles for MY 2027 and beyond.

- Setting “Phase 3” GHG standards for heavy-duty vehicles beginning as soon as MY 2030 that are significantly stronger than the MY 2027 GHG standards.

In developing these actions EPA is applying its Clean Air Act authority, which allows the Agency to maximize NOx and GHG emissions reductions over the short and long terms, which will promote the path to a zero-emissions transportation future.

Overview of the Proposed Rule

This action, titled, Control of Air Pollution from New Motor Vehicles: Heavy-Duty Engine and Vehicle Standards, proposes stronger NOx and GHG standards to reduce pollution...
from heavy-duty vehicles and engines starting in MY 2027. The proposed standards would significantly reduce emissions of NOx from heavy-duty gasoline and diesel engines and set stronger GHG standards for certain heavy-duty vehicle categories. This proposed rule would ensure heavy-duty vehicles and engines are as clean as possible while helping jump-start the transition to zero-emission vehicles in the heavy-duty fleet.

EPA last revised the NOx standards for on-highway heavy-duty trucks and engines in 2001—more than 20 years ago. Although those standards achieved important NOx reductions, new technologies that are an evolution of those available today can help achieve the additional reductions we need to improve air quality and health in our communities.

EPA intends to finalize this proposal before the end of 2022.

### Air Quality and Health Impacts of Heavy-Duty Vehicles

Emissions from heavy-duty vehicles contribute to poor air quality and health across the country, especially in overburdened and underserved communities. Without further reductions, heavy-duty vehicles will continue to be one of the largest contributors to mobile source emissions of NOx, which react in the atmosphere to form ozone and particulate matter. Heavy-duty vehicles would contribute 32 percent of the mobile source NOx emissions, and 89 percent of onroad NOx emissions, in calendar year 2045. These pollutants are linked to respiratory and/or cardiovascular problems and other adverse health impacts that lead to hospital admissions, emergency department visits, and premature deaths.

Pollution from trucks directly affects people who live near roads and other areas of high truck activity like ports. Populations who live, work, or go to school near high-traffic roadways experience higher rates of numerous adverse health effects. EPA has estimated that 72 million people live within 200 meters of a truck freight route, and relative to the rest of the population, people of color and those with lower incomes are more likely to live near truck routes. NOx pollution from heavy-duty vehicles also impairs visibility and causes damage to terrestrial and aquatic ecosystems.

![Mobile Source NOx (2045)](chart)

**Sources:** MOVES3 for onroad and nonroad and 2016 Emissions Modeling Platform for all other mobile sectors.
Heavy-Duty Vehicles and Climate Change

Transportation is the largest source of GHG emissions in the United States, making up 29 percent of all emissions. Within the transportation sector, heavy-duty vehicles are the second-largest contributor, at 23 percent. Reducing GHG emissions is a critical step in reducing the probability of impacts from climate change, including heat waves, drought, sea level rise, extreme climate and weather events, coastal flooding, and wildfires. Some populations may be especially vulnerable to damages associated with climate change, such as the very young, the elderly, low-income people, the disabled, people of color, and indigenous populations.

Mobile Source GHGs (2019)

Significant Benefits to Public Health and Welfare

EPA’s goal is to deliver significant and needed public health benefits by designing a program that sets ambitious standards and that is feasible for the trucking industry, after giving appropriate consideration to cost and other factors. Under the proposal, NOx emissions from the in-use fleet of heavy-duty trucks would be reduced by as much as 60 percent in 2045 and would result in widespread air quality improvements across the U.S., especially in areas already overburdened by air pollution and diesel emissions. Reducing these emissions will provide cleaner air for communities across the country, prevent health issues like asthma, and ultimately save money, lives, and trips to the hospital.

The present value of the stream of health-related benefits for the years 2027 through 2045 for the most robust proposed option would be as much as $250 billion dollars, assuming a 3 percent discount rate. EPA estimates that in 2045, the most robust proposed option would result in public health benefits by preventing the following (annually):

- Between 860 and 2,100 premature deaths
- 6,700 hospital admissions and emergency department visits
- 18,000 cases of asthma onset in children
- 3.1 million cases of asthma symptoms and allergic rhinitis symptoms
- 78,000 lost days of work
- 1.1 million lost school days

The benefits of the proposed rule would exceed its costs by billions of dollars.
Reducing NOx Emissions from Heavy-duty Vehicles: Proposed Regulatory Options

This proposed rule would reduce NOx from heavy-duty vehicles over a wide range of operating conditions, with significant emissions reductions at low speeds, idling, and in stop-and-go traffic. EPA is proposing longer useful life periods to ensure engines would meet emission standards for more of their operational lives and prompt engine manufacturers to design and build durable engines and emission controls. EPA is also proposing longer emissions warranty periods which would increase the number of useful life miles covered under warranty. Longer warranty periods may make it less likely for owners to tamper with emissions controls, and more likely that owners will make needed repairs.

EPA is proposing two regulatory options and is requesting comment on both, as well as considering the full range of options between them. Both options would set stronger standards for NOx emissions beginning in MY 2027, increase regulatory useful life, and increase emissions-related warranty periods. Proposed Option 1 would implement stronger NOx standards in two steps. The first increase in stringency would be in MY 2027, and the second would be in MY 2031; under this Option the 2031 NOx standards would be 90% lower than today’s standards. Option 2 would immediately jump to full implementation of a NOx standard in MY 2027. As shown below, Option 2 would achieve less NOx emissions reductions than Option 1.

Heavy-Duty Highway NOx Emissions Inventory: Baseline versus Proposed Options 1 and 2

Updating Existing Greenhouse Gas Standards

We are at the early stages of a significant transition in the history of the heavy-duty on-highway vehicle sector—a shift to zero-emission vehicle technologies. Major truck manufacturers and U.S. states have announced plans to transition the heavy-duty fleet to zero-emissions technology, and over the past few years we have seen the early introduction of zero-emission technologies in several commercial vehicle market segments. In light of these developments, the agency is now proposing targeted updates to the “Phase 2” GHG standards to reflect these market shifts to zero-emission...
technologies, which the agency did not foresee when it issued the “Phase 2” GHG emission standards. The “Phase 2” standards began in 2021 and become stronger every three years through 2027. The fully phased-in Phase 2 standards will achieve up to 24-25 percent lower CO₂ emissions compared to the previous GHG standards. The existing Phase 2 standards are still phasing-in, with the next change in stringency coming in 2024.

This proposal would further tighten the “Phase 2” GHG standards for MY 2027 for 17 of the 33 subcategories of vocational and tractor vehicles. These subsectors include school buses, transit buses, commercial delivery trucks, and short-haul tractors. EPA is also requesting comment on whether it would be appropriate in the final rule to increase the stringency of the standards even more than what we propose for MYs 2027 through 2029, including the potential for progressively stronger CO₂ standards across these three model years.

The agency aims to finalize standards that are as strong as possible in the near term and that provide a robust starting point for ambitious GHG standards for the truck industry as soon as MY 2030.

Related Actions
As noted above, EPA is developing two additional regulations under President Biden’s Clean Trucks Plan. As part of a proposal for light- and medium-duty vehicles, EPA will consider new, stronger emission standards for MY 2027 and later commercial pickup trucks and vans. EPA is also developing “Phase 3” GHG emissions standards for heavy-duty engines and vehicles starting as early as MY 2030. These three rulemaking actions provide the opportunity for EPA to establish comprehensive, multipollutant standards for the near term and the long term, all while considering the significant potential for emission reductions that zero-emission technology can provide.

Public Participation
EPA welcomes public input into this rulemaking and looks forward to continuing its engagement with stakeholders throughout the rulemaking process. Today’s proposal reflects input from stakeholders including community groups, the trucking industry, environmental and public health organizations, and state, local, and tribal governments gathered through comments in response to the Advance Notice of Proposed Rulemaking and through meetings with stakeholders throughout the development of the proposal.

EPA plans to hold a virtual public hearing for this proposal. EPA will begin registering speakers for the hearing upon publication of the proposal in the Federal Register. To register, please use the registration link that will be available on the EPA rule webpage once registration begins: www.epa.gov/regulations-emissions-vehicles-and-engines/proposed-rule-and-related-materials-control-air-1. Written comments must be received on or before 46 days after publication in the Federal Register.

For More Information
You can access the Notice and related documents on the U.S. Environmental Protection Agency, Office of Transportation and Air Quality webpage at: www.epa.gov/regulations-emissions-vehicles-and-engines/proposed-rule-and-related-materials-control-air-1.
By the authority vested in me as President by the Constitution and the laws of the United States of America, and in order to promote the interests of American workers, businesses, consumers, and communities, it is hereby ordered as follows:

Section 1. Policy. America must lead the world on clean and efficient cars and trucks. That means bolstering our domestic market by setting a goal that 50 percent of all new passenger cars and light trucks sold in 2030 be zero-emission vehicles, including battery electric, plug-in hybrid electric, or fuel cell electric vehicles. My Administration will prioritize setting clear standards, expanding key infrastructure, spurring critical innovation, and investing in the American autoworker. This will allow us to boost jobs—with good pay and benefits—across the United States along the full supply chain for the automotive sector, from parts and equipment manufacturing to final assembly.

It is the policy of my Administration to advance these objectives in order to improve our economy and public health, boost energy security, secure consumer savings, advance environmental justice, and address the climate crisis.

Sec. 2. Light-, Medium-, and Certain Heavy-Duty Vehicles Multi-Pollutant and Fuel Economy Standards for 2027 and Later.

(a) The Administrator of the Environmental Protection Agency (EPA) shall, as appropriate and consistent with applicable law, consider beginning work on a rulemaking under the Clean Air Act (42 U.S.C. 7401–7671q) to establish new multi-pollutant emissions standards, including for greenhouse gas emissions, for light- and medium-duty vehicles beginning with model year 2027 and extending through and including at least model year 2030.

(b) The Secretary of Transportation shall, as appropriate and consistent with applicable law, consider beginning work on a rulemaking under the Energy Independence and Security Act of 2007 (Public Law 110–140, 121 Stat. 1492) (EISA) to establish new fuel economy standards for passenger cars and light-duty trucks beginning with model year 2027 and extending through and including at least model year 2030.

(c) The Secretary of Transportation shall, as appropriate and consistent with applicable law, consider beginning work on a rulemaking under EISA to establish new greenhouse gas emissions standards for heavy-duty pickup trucks and vans beginning with model year 2028 and extending through and including at least model year 2030.

Sec. 3. Heavy-Duty Engines and Vehicles Multi-Pollutant Standards for 2027 and Later. (a) The Administrator of the EPA shall, as appropriate and consistent with applicable law, consider beginning work on a rulemaking under the Clean Air Act to establish new oxides of nitrogen standards for heavy-duty engines and vehicles beginning with model year 2027 and extending through and including at least model year 2030.

(b) The Administrator of the EPA shall, as appropriate and consistent with applicable law, and in consideration of the role that zero-emission heavy-duty vehicles might have in reducing emissions from certain market segments, consider updating the existing greenhouse gas emissions standards...
for heavy-duty engines and vehicles beginning with model year 2027 and extending through and including at least model year 2029.

Sec. 4. Medium- and Heavy-Duty Engines and Vehicles Greenhouse Gas and Fuel Efficiency Standards as Soon as 2030 and Later. (a) The Administrator of the EPA shall, as appropriate and consistent with applicable law, consider beginning work on a rulemaking under the Clean Air Act to establish new greenhouse gas emissions standards for heavy-duty engines and vehicles to begin as soon as model year 2030.

(b) The Secretary of Transportation shall, as appropriate and consistent with applicable law, consider beginning work on a rulemaking under EISA to establish new fuel efficiency standards for medium- and heavy-duty engines and vehicles to begin as soon as model year 2030.

Sec. 5. Rulemaking Targets. (a) With respect to the rulemaking described in section 3(a) of this order, the Administrator of the EPA shall, as appropriate and consistent with applicable law, consider issuing a notice of proposed rulemaking by January 2022 and any final rulemaking by December 2022.

(b) With respect to the other rulemakings described in section 2 and section 4 of this order, the Secretary of Transportation and the Administrator of the EPA shall, as appropriate and consistent with applicable law, consider issuing any final rulemakings no later than July 2024.

Sec. 6. Coordination and Engagement. (a) The Secretary of Transportation and the Administrator of the EPA shall coordinate, as appropriate and consistent with applicable law, during the consideration of any rulemakings pursuant to this order.

(b) The Secretary of Transportation and the Administrator of the EPA shall consult with the Secretaries of Commerce, Labor, and Energy on ways to achieve the goals laid out in section 1 of this order, to accelerate innovation and manufacturing in the automotive sector, to strengthen the domestic supply chain for that sector, and to grow jobs that provide good pay and benefits.

(c) Given the significant expertise and historical leadership demonstrated by the State of California with respect to establishing emissions standards for light-, medium-, and heavy-duty vehicles, the Administrator of the EPA shall coordinate the agency’s activities pursuant to sections 2 through 4 of this order, as appropriate and consistent with applicable law, with the State of California as well as other States that are leading the way in reducing vehicle emissions, including by adopting California’s standards.

(d) In carrying out any of the actions described in this order, the Secretary of Transportation and the Administrator of the EPA shall seek input from a diverse range of stakeholders, including representatives from labor unions, States, industry, environmental justice organizations, and public health experts.

Sec. 7. General Provisions. (a) Nothing in this order shall be construed to impair or otherwise affect:

(i) the authority granted by law to an executive department or agency, or the head thereof; or

(ii) the functions of the Director of the Office of Management and Budget relating to budgetary, administrative, or legislative proposals.

(b) This order shall be implemented consistent with applicable law and subject to the availability of appropriations.
(c) This order is not intended to, and does not, create any right or benefit, substantive or procedural, enforceable at law or in equity by any party against the United States, its departments, agencies, or entities, its officers, employees, or agents, or any other person.

THE WHITE HOUSE,
August 5, 2021.
EPA to Evaluate Whether Lead Emissions from Piston-Engine Aircraft Endanger Human Health and Welfare

January 12, 2022

Contact Information
EPA Press Office (press@epa.gov)

WASHINGTON (Jan. 12, 2022) — The U.S. Environmental Protection Agency (EPA) announced today that it will evaluate whether emissions from piston-engine aircraft operating on leaded fuel contribute to air pollution that endangers public health and welfare. The agency plans to issue a proposal for public review and comment in 2022 and take final action in 2023.

“Protecting children’s health and reducing lead exposure are interlocking priorities at the core of EPA’s agenda,” said EPA Administrator Michael S. Regan. “EPA has been investigating the air quality impact of lead emissions from piston-engine aircraft near airports for years, and now we’re going to apply that information to determine whether this pollution endangers human health and welfare.”

While levels of airborne lead in the United States have declined 99 percent since 1980, piston-engine aircraft that operate on leaded fuel are the largest remaining source of lead emissions into the air.

Lead exposure can come from multiple sources, including leaded paint, contaminated soil, industrial emissions from battery recycling or metals processing, and the combustion of fuel or waste containing lead. Children’s exposure to lead can cause irreversible and life-long health effects. No safe blood lead level in children has been identified. Even low levels of lead in blood have been shown to affect IQ, ability to pay attention, and academic achievement. In adults, health impacts from lead exposure can include cardiovascular effects, increased blood pressure and incidence of hypertension, decreased kidney function, and reproductive issues.
Under the Clean Air Act, EPA reviews information on air pollutants and sources of air pollution to determine whether they threaten human health or welfare. This is referred to as an “endangerment finding.” EPA currently plans to issue a proposed endangerment finding for piston-engine aircraft that run on leaded fuel in 2022 for public review and comment. After evaluating comments on the proposal, we plan to issue any final endangerment finding in 2023.

Today’s action responds to petitions from Alaska Community Action on Toxics, Center for Environmental Health, Friends of the Earth, Montgomery-Gibbs Environmental Coalition, Oregon Aviation Watch, the County of Santa Clara, and the Town of Middleton, WI.

More information on the petition response and EPA’s activities on lead emissions from piston-engine aircraft can be found here: https://www.epa.gov/regulations-emissions-vehicles-and-engines/petitions-and-epa-response-memorandums-related-lead
California State Motor Vehicle Pollution Control Standards; Advanced Clean Car Program; Reconsideration of a Previous Withdrawal of a Waiver of Preemption; Notice of Decision

On April 28, 2021, the U.S. Environmental Protection Agency (EPA) issued a Federal Register notice soliciting public input on the reconsideration of EPA’s action under the joint EPA/National Highway Traffic Safety Administration (NHTSA) action titled: The Safer Affordable Fuel-Efficient Vehicles Rule Part One: One National Program (SAFE-1), issued in September 2019. EPA’s reconsideration of SAFE-1 responds to petitions for reconsideration filed by states and other stakeholders, and is consistent with President Biden’s Executive Order 13990 on Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis.

The result of EPA’s reconsideration is to rescind the SAFE-1 action. This means that the Clean Air Act (CAA) waiver granted to California to implement its Advanced Clean Car (ACC) program in 2013 is back in force. The ACC program is a package of state regulations that set emissions standards for criteria pollutants and greenhouse gas (GHG) emissions for light-duty vehicles and a zero-emission vehicle (ZEV) sales mandate. In this action, EPA is also withdrawing the SAFE-1 interpretation of the Clean Air Act that would prohibit other states from adopting the California GHG emission standards.

Summary of SAFE-1

In SAFE-1, NHTSA issued an action declaring that state regulations of carbon dioxide emissions from new motor vehicles (including California’s GHG emission standards and ZEV sales mandate) are related to fuel economy and preempted under the Energy Policy and Conservation Act (EPCA). EPA withdrew California’s waiver based on
NHTSA’s EPCA preemption action as well as a new interpretation and application of a waiver criterion within the CAA that resulted in EPA determining that California does not need its GHG emission standards and ZEV sales mandate to meet compelling and extraordinary conditions in the state. SAFE-1 also included a new interpretive view of CAA section 177 which would preclude states from adopting California’s GHG emissions standards.

Summary of EPA’s Final Decision Regarding Its Reconsideration of SAFE-1

EPA’s Notice of Reconsideration of SAFE-1, issued on April 28, 2021, sought public comment on whether the decision to withdraw portions of California’s 2013 ACC program waiver was a valid and appropriate exercise of the Agency’s authority. EPA has determined that SAFE-1 was an inappropriate exercise of the agency’s authority and rescinds that action in this final determination. The final decision is based on the following:

- EPA’s finding that the limited authority to reconsider a prior CAA waiver was not properly exercised in the SAFE-1 action. EPA believes it may only reconsider a previously granted waiver to address a clerical or factual error or mistake, or where information shows that factual circumstances or conditions related to the waiver criteria evaluated when the waiver was granted have changed so significantly that the propriety of the waiver grant is called into doubt. EPA has determined that there were no factual errors in the ACC program waiver granted in 2013, and thus the SAFE-1 action was not properly based on findings of factual error.

- A determination that the Agency’s action to withdraw California’s waiver on the basis of NHTSA’s preemption regulation under EPCA was inappropriate and in conflict with EPA’s longstanding waiver practice. In addition, EPA has determined that NHTSA’s subsequent repeal of its regulation and other pronouncements in SAFE-1 regarding EPCA preemption effectively removes the underpinning for SAFE-1 on this basis, and thus it is appropriate to rescind the waiver withdrawal that was based on NHTSA’s finding of preemption.

- EPA’s finding that it was inappropriate to withdraw California’s waiver under a new interpretation of CAA section 209(b)(1)(B) that was inconsistent with Congressional intent, and which discounts the interrelated nature of CARB’s motor vehicle emission standards and California’s air quality problem. EPA has determined that the record from both the ACC program waiver action and the SAFE-1 proceedings demonstrated that California has a need for its GHG standards and ZEV sales mandate under both the traditional interpretation (assessing the need for the “motor vehicle emission program”) and the SAFE-1 interpretation of section 209(b)(1)(B) (assessing the need for the specific emission standards in the waiver request). EPA has confirmed that the traditional interpretation of section 209(b)(1)(B) was appropriate and continues to be the proper interpretation in the wake of the rescission of the SAFE-1.

- A determination that it was inappropriate, within a waiver proceeding, to provide an interpretive view of section 177 in SAFE-1. States may adopt California’s new motor vehicle emission standards that have received a waiver. Section 177 does not describe a direct approval role for EPA. States may choose to submit these adopted standards to EPA as part of a SIP request but are not obligated to do so. If a State makes a SIP submission that includes
standards adopted under section 177, EPA’s role is to review them the same way that EPA reviews all SIP revisions a state submits, via a notice and comment process, to ensure that the submission meets all statutory and regulatory requirements.

**Clean Air Act Legal Framework Regarding State Emissions Standards for New Motor Vehicles**

- CAA section 209(a) preempts states and political subdivisions from adopting and enforcing standards related to the control of emissions from new motor vehicles and new motor vehicle engines.

- CAA section 209(b) allows California to enforce emission standards for new motor vehicles and engines if EPA grants a waiver from the preemption contained in CAA section 209(a).

- CAA Section 209(b) requires that EPA grant a waiver unless it finds that California:
  - was arbitrary and capricious in its finding that its standards are, in the aggregate, at least as protective of public health and welfare as applicable federal standards;
  - does not need such standards to meet compelling and extraordinary conditions; or
  - such standards that are not consistent with Section 202(a) of the Clean Air Act.

- Section 177 of the CAA allows other States to adopt California’s new motor vehicle emission standards for which EPA has granted a waiver if other specified criteria in section 177 are met.

**Key Milestones**

- In 2012, the CARB finalized the ACC program. The program combined control of smog and soot-causing pollutants and greenhouse gas emissions into a single coordinated package of requirements for passenger cars, light-duty trucks, and medium-duty passenger vehicles, and set requirements for sales of ZEVs in the state.

- In 2013, EPA granted a waiver of CAA section 209 preemption for California’s ACC regulations.

- In 2018, EPA and NHTSA issued a joint proposal titled The Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule for Model Years 2021-2026 Passenger Cars and Light Trucks. In this action, EPA proposed to weaken the federal greenhouse gas emissions standards for light duty vehicles for model years 2021-2026 and withdraw the waiver for the ACC program GHG emission standards and ZEV sales mandate.

- In September 2019, NHTSA and EPA issued the SAFE-1 final action. In SAFE-1, EPA withdrew the ACC waiver issued in 2013 as it relates to GHG emission standards and the ZEV sales mandate. In the same action, NHTSA codified text and provided pronouncements finding that state or local regulations of tailpipe carbon dioxide emissions (including
California’s ACC program standards) are “related to fuel economy standards” and are therefore preempted under EPCA.

- In October 2019, California submitted a petition for clarification/reconsideration asking EPA to clarify the scope of SAFE-1.

- In November 2019, California, Connecticut, Delaware, Hawaii, Illinois, Maine, Maryland, Minnesota, Nevada, New Jersey, New Mexico, New York, North Carolina, Oregon, Rhode Island, Vermont, Washington, and Wisconsin, the People of the State of Michigan, the Commonwealths of Massachusetts, Pennsylvania, and Virginia, the District of Columbia, and the Cities of Los Angeles, New York, San Francisco, and San Jose filed a petition for EPA to reconsider SAFE-1.

- In November 2019, a petition for reconsideration was filed with EPA by several environmental groups, including the Center for Biological Diversity, Chesapeake Bay Foundation, Environment America, Environmental Defense Fund, Environmental Law & Policy Center, Natural Resources Defense Council, Public Citizen, Inc., Sierra Club, and the Union of Concerned Scientists.

- On January 20, 2021, President Biden issued Executive Order 13990 on Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis. The President directed the Federal Agencies to “immediately review” SAFE-1, among other actions, and to consider “suspending, revising, or rescinding” the action by April 2021.

- On April 28, 2021, EPA issued a Federal Register notice that sought public comment on whether the decision to withdraw portions of California’s 2013 ACC program waiver was a valid and appropriate exercise of the Agency’s authority.

- On June 2, 2021, EPA held a virtual, public hearing on the 2021 Notice of Reconsideration. The transcript for that hearing and associated written comments can be found at www.regulations.gov.

- On December 29, 2021, NHTSA issued a Federal Register notice that repealed its regulatory text as well as other pronouncements made in SAFE-1 regarding preemption under EPCA.

For More Information
You can access the notice and related documents on EPA’s Office of Transportation and Air Quality (OTAQ) website at

Executive Order 13990 of January 20, 2021

Protecting Public Health and the Environment and Restoring Science To Tackle the Climate Crisis

By the authority vested in me as President by the Constitution and the laws of the United States of America, it is hereby ordered as follows:

Section 1. Policy. Our Nation has an abiding commitment to empower our workers and communities; promote and protect our public health and the environment; and conserve our national treasures and monuments, places that secure our national memory. Where the Federal Government has failed to meet that commitment in the past, it must advance environmental justice. In carrying out this charge, the Federal Government must be guided by the best science and be protected by processes that ensure the integrity of Federal decision-making. It is, therefore, the policy of my Administration to listen to the science; to improve public health and protect our environment; to ensure access to clean air and water; to limit exposure to dangerous chemicals and pesticides; to hold polluters accountable, including those who disproportionately harm communities of color and low-income communities; to reduce greenhouse gas emissions; to bolster resilience to the impacts of climate change; to restore and expand our national treasures and monuments; and to prioritize both environmental justice and the creation of the well-paying union jobs necessary to deliver on these goals.

To that end, this order directs all executive departments and agencies (agencies) to immediately review and, as appropriate and consistent with applicable law, take action to address the promulgation of Federal regulations and other actions during the last 4 years that conflict with these important national objectives, and to immediately commence work to confront the climate crisis.

Sec. 2. Immediate Review of Agency Actions Taken Between January 20, 2017, and January 20, 2021. (a) The heads of all agencies shall immediately review all existing regulations, orders, guidance documents, policies, and any other similar agency actions (agency actions) promulgated, issued, or adopted between January 20, 2017, and January 20, 2021, that are or may be inconsistent with, or present obstacles to, the policy set forth in section 1 of this order. For any such actions identified by the agencies, the heads of agencies shall, as appropriate and consistent with applicable law, consider suspending, revising, or rescinding the agency actions. In addition, for the agency actions in the 4 categories set forth in subsections (i) through (iv) of this section, the head of the relevant agency, as appropriate and consistent with applicable law, shall consider publishing for notice and comment a proposed rule suspending, revising, or rescinding the agency action within the time frame specified.


2020), by July 2021. In considering whether to propose suspending, revising, or rescinding the latter rule, the agency should consider the views of representatives from labor unions, States, and industry.


(b) Within 30 days of the date of this order, heads of agencies shall submit to the Director of the Office of Management and Budget (OMB) a preliminary list of any actions being considered pursuant to section (2)(a) of this order that would be completed by December 31, 2021, and that would be subject to OMB review. Within 90 days of the date of this order, heads of agencies shall submit to the Director of OMB an updated list of any actions being considered pursuant to section (2)(a) of this order that would be completed by December 31, 2025, and that would be subject to OMB review. At the time of submission to the Director of OMB, heads of agencies shall also send each list to the National Climate Advisor. In addition, and at the same time, heads of agencies shall send to the National Climate Advisor a list of additional actions being considered pursuant to section (2)(a) of this order that would not be subject to OMB review.

(c) Heads of agencies shall, as appropriate and consistent with applicable law, consider whether to take any additional agency actions to fully enforce the policy set forth in section 1 of this order. With respect to the Administrator of the Environmental Protection Agency, the following specific actions should be considered:

(i) proposing new regulations to establish comprehensive standards of performance and emission guidelines for methane and volatile organic compound emissions from existing operations in the oil and gas sector, including the exploration and production, transmission, processing, and storage segments, by September 2021; and

(ii) proposing a Federal Implementation Plan in accordance with the Environmental Protection Agency’s “Findings of Failure To Submit State Implementation Plan Revisions in Response to the 2016 Oil and Natural Gas Industry Control Techniques Guidelines for the 2008 Ozone National Ambient Air Quality Standards (NAAQS) and for States in the Ozone Transport Region,” 85 FR 72963 (November 16, 2020), for California, Connecticut, New York, Pennsylvania, and Texas by January 2022.
(d) The Attorney General may, as appropriate and consistent with applicable law, provide notice of this order and any actions taken pursuant to section 2(a) of this order to any court with jurisdiction over pending litigation related to those agency actions identified pursuant to section (2)(a) of this order, and may, in his discretion, request that the court stay or otherwise dispose of litigation, or seek other appropriate relief consistent with this order, until the completion of the processes described in this order.

(e) In carrying out the actions directed in this section, heads of agencies shall seek input from the public and stakeholders, including State local, Tribal, and territorial officials, scientists, labor unions, environmental advocates, and environmental justice organizations.

Sec. 3. Restoring National Monuments. (a) The Secretary of the Interior, as appropriate and consistent with applicable law, including the Antiquities Act, 54 U.S.C. 320301 et seq., shall, in consultation with the Attorney General, the Secretaries of Agriculture and Commerce, the Chair of the Council on Environmental Quality, and Tribal governments, conduct a review of the monument boundaries and conditions that were established by Proclamation 9681 of December 4, 2017 (Modifying the Bears Ears National Monument); Proclamation 9682 of December 4, 2017 (Modifying the Grand Staircase-Escalante National Monument); and Proclamation 10049 of June 5, 2020 (Modifying the Northeast Canyons and Seamounts Marine National Monument), to determine whether restoration of the monument boundaries and conditions that existed as of January 20, 2017, would be appropriate.

(b) Within 60 days of the date of this order, the Secretary of the Interior shall submit a report to the President summarizing the findings of the review conducted pursuant to subsection (a), which shall include recommendations for such Presidential actions or other actions consistent with law as the Secretary may consider appropriate to carry out the policy set forth in section 1 of this order.

(c) The Attorney General may, as appropriate and consistent with applicable law, provide notice of this order to any court with jurisdiction over pending litigation related to the Grand Staircase-Escalante, Bears Ears, and Northeast Canyons and Seamounts Marine National Monuments, and may, in his discretion, request that the court stay the litigation or otherwise delay further litigation, or seek other appropriate relief consistent with this order, pending the completion of the actions described in subsection (a) of this section.

Sec. 4. Arctic Refuge. (a) In light of the alleged legal deficiencies underlying the program, including the inadequacy of the environmental review required by the National Environmental Policy Act, the Secretary of the Interior shall, as appropriate and consistent with applicable law, place a temporary moratorium on all activities of the Federal Government relating to the implementation of the Coastal Plain Oil and Gas Leasing Program, as established by the Record of Decision signed August 17, 2020, in the Arctic National Wildlife Refuge. The Secretary shall review the program and, as appropriate and consistent with applicable law, conduct a new, comprehensive analysis of the potential environmental impacts of the oil and gas program.

(b) In Executive Order 13754 of December 9, 2016 (Northern Bering Sea Climate Resilience), and in the Presidential Memorandum of December 20, 2016 (Withdrawal of Certain Portions of the United States Arctic Outer Continental Shelf From Mineral Leasing), President Obama withdrew areas in Arctic waters and the Bering Sea from oil and gas drilling and established the Northern Bering Sea Climate Resilience Area. Subsequently, the order was revoked and the memorandum was amended in Executive Order 13795 of April 28, 2017 (Implementing an America-First Offshore Energy Strategy). Pursuant to section 12(a) of the Outer Continental Shelf Lands Act, 43 U.S.C. 1341(a), Executive Order 13754 and the Presidential Memorandum of December 20, 2016, are hereby reinstated in their original form, thereby restoring the original withdrawal of certain offshore areas in Arctic waters and the Bering Sea from oil and gas drilling.
(c) The Attorney General may, as appropriate and consistent with applicable law, provide notice of this order to any court with jurisdiction over pending litigation related to the Coastal Plain Oil and Gas Leasing Program in the Arctic National Wildlife Refuge and other related programs, and may, in his discretion, request that the court stay the litigation or otherwise delay further litigation, or seek other appropriate relief consistent with this order, pending the completion of the actions described in subsection (a) of this section.

Sec. 5. Accounting for the Benefits of Reducing Climate Pollution. (a) It is essential that agencies capture the full costs of greenhouse gas emissions as accurately as possible, including by taking global damages into account. Doing so facilitates sound decision-making, recognizes the breadth of climate impacts, and supports the international leadership of the United States on climate issues. The “social cost of carbon” (SCC), “social cost of nitrous oxide” (SCN), and “social cost of methane” (SCM) are estimates of the monetized damages associated with incremental increases in greenhouse gas emissions. They are intended to include changes in net agricultural productivity, human health, property damage from increased flood risk, and the value of ecosystem services. An accurate social cost is essential for agencies to accurately determine the social benefits of reducing greenhouse gas emissions when conducting cost-benefit analyses of regulatory and other actions.

(b) There is hereby established an Interagency Working Group on the Social Cost of Greenhouse Gases (the “Working Group”). The Chair of the Council of Economic Advisers, Director of OMB, and Director of the Office of Science and Technology Policy shall serve as Co-Chairs of the Working Group.

(i) Membership. The Working Group shall also include the following other officers, or their designees: the Secretary of the Treasury; the Secretary of the Interior; the Secretary of Agriculture; the Secretary of Commerce; the Secretary of Health and Human Services; the Secretary of Transportation; the Secretary of Energy; the Chair of the Council on Environmental Quality; the Administrator of the Environmental Protection Agency; the Assistant to the President and National Climate Advisor; and the Assistant to the President for Economic Policy and Director of the National Economic Council.

(ii) Mission and Work. The Working Group shall, as appropriate and consistent with applicable law:

(A) publish an interim SCC, SCN, and SCM within 30 days of the date of this order, which agencies shall use when monetizing the value of changes in greenhouse gas emissions resulting from regulations and other relevant agency actions until final values are published;

(B) publish a final SCC, SCN, and SCM by no later than January 2022;

(C) provide recommendations to the President, by no later than September 1, 2021, regarding areas of decision-making, budgeting, and procurement by the Federal Government where the SCC, SCN, and SCM should be applied;

(D) provide recommendations, by no later than June 1, 2022, regarding a process for reviewing, and, as appropriate, updating, the SCC, SCN, and SCM to ensure that these costs are based on the best available economics and science; and

(E) provide recommendations, to be published with the final SCC, SCN, and SCM under subparagraph (A) if feasible, and in any event by no later than June 1, 2022, to revise methodologies for calculating the SCC, SCN, and SCM, to the extent that current methodologies do not adequately take account of climate risk, environmental justice, and intergenerational equity.
(iii) Methodology. In carrying out its activities, the Working Group shall consider the recommendations of the National Academies of Science, Engineering, and Medicine as reported in Valuing Climate Damages: Updating Estimation of the Social Cost of Carbon Dioxide (2017) and other pertinent scientific literature; solicit public comment; engage with the public and stakeholders; seek the advice of ethics experts; and ensure that the SCC, SCN, and SCM reflect the interests of future generations in avoiding threats posed by climate change.

Sec. 6. Revoking the March 2019 Permit for the Keystone XL Pipeline. (a) On March 29, 2019, the President granted to TransCanada Keystone Pipeline, L.P. a Presidential permit (the “Permit”) to construct, connect, operate, and maintain pipeline facilities at the international border of the United States and Canada (the “Keystone XL pipeline”), subject to express conditions and potential revocation in the President’s sole discretion. The Permit is hereby revoked in accordance with Article 1(1) of the Permit.

(b) In 2015, following an exhaustive review, the Department of State and the President determined that approving the proposed Keystone XL pipeline would not serve the U.S. national interest. That analysis, in addition to concluding that the significance of the proposed pipeline for our energy security and economy is limited, stressed that the United States must prioritize the development of a clean energy economy, which will in turn create good jobs. The analysis further concluded that approval of the proposed pipeline would undermine U.S. climate leadership by undercutting the credibility and influence of the United States in urging other countries to take ambitious climate action.

(c) Climate change has had a growing effect on the U.S. economy, with climate-related costs increasing over the last 4 years. Extreme weather events and other climate-related effects have harmed the health, safety, and security of the American people and have increased the urgency for combatting climate change and accelerating the transition toward a clean energy economy. The world must be put on a sustainable climate pathway to protect Americans and the domestic economy from harmful climate impacts, and to create well-paying union jobs as part of the climate solution.

(d) The Keystone XL pipeline disserves the U.S. national interest. The United States and the world face a climate crisis. That crisis must be met with action on a scale and at a speed commensurate with the need to avoid setting the world on a dangerous, potentially catastrophic, climate trajectory. At home, we will combat the crisis with an ambitious plan to build back better, designed to both reduce harmful emissions and create good clean-energy jobs. Our domestic efforts must go hand in hand with U.S. diplomatic engagement. Because most greenhouse gas emissions originate beyond our borders, such engagement is more necessary and urgent than ever. The United States must be in a position to exercise vigorous climate leadership in order to achieve a significant increase in global climate action and put the world on a sustainable climate pathway. Leaving the Keystone XL pipeline permit in place would not be consistent with my Administration’s economic and climate imperatives.

(Efficient Federal Operations), is hereby revoked except for sections 6, 7, and 11.

(b) Executive Order 13807 of August 15, 2017 (Establishing Discipline and Accountability in the Environmental Review and Permitting Process for Infrastructure Projects), is hereby revoked. The Director of OMB and the Chair of the Council on Environmental Quality shall jointly consider whether to recommend that a replacement order be issued.

(c) Executive Order 13920 of May 1, 2020 (Securing the United States Bulk-Power System), is hereby suspended for 90 days. The Secretary of Energy and the Director of OMB shall jointly consider whether to recommend that a replacement order be issued.

(d) The Presidential Memorandum of April 12, 2018 (Promoting Domestic Manufacturing and Job Creation Policies and Procedures Relating to Implementation of Air Quality Standards), the Presidential Memorandum of October 19, 2018 (Promoting the Reliable Supply and Delivery of Water in the West), and the Presidential Memorandum of February 19, 2020 (Developing and Delivering More Water Supplies in California), are hereby revoked.


(f) The Director of OMB and the heads of agencies shall promptly take steps to rescind any orders, rules, regulations, guidelines, or policies, or portions thereof, including, if necessary, by proposing such rescissions through notice-and-comment rulemaking, implementing or enforcing the Executive Orders, Presidential Memoranda, and draft guidance identified in this section, as appropriate and consistent with applicable law.

Sec. 8. General Provisions. (a) Nothing in this order shall be construed to impair or otherwise affect:

(i) the authority granted by law to an executive department or agency, or the head thereof; or

(ii) the functions of the Director of the Office of Management and Budget relating to budgetary, administrative, or legislative proposals.

(b) This order shall be implemented in a manner consistent with applicable law and subject to the availability of appropriations.
(c) This order is not intended to, and does not, create any right or benefit, substantive or procedural, enforceable at law or in equity by any party against the United States, its departments, agencies, or entities, its officers, employees, or agents, or any other person.

THE WHITE HOUSE,
January 20, 2021.