



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF
POLICY

April 26, 2022

MEMORANDUM

SUBJECT: Addressing Climate Change and Environmental Justice through Reviews Conducted Pursuant to the National Environmental Policy Act and Section 309 of the Clean Air Act

FROM: Vicki Arroyo
Associate Administrator

A handwritten signature in black ink that reads "Vicki Arroyo".

TO: Regional Administrators

The purpose of this memo is to provide guidance to the EPA's National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act (CAA) review community. Consistent with Executive Order (E.O.) 14057 on *Catalyzing Clean Energy Industries and Jobs Through Federal Sustainability*, E.O. 14008 on *Tackling the Climate Crisis at Home and Abroad*, E.O. 13990 on *Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crises*, E.O. 13985 on *Advancing Racial Equity and Support for Underserved Communities Through the Federal Government*, and E.O. 12898 on *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, Administrator Regan has directed leadership to integrate the consideration of climate change, climate adaptation, reduction of greenhouse (GHG) emissions, environmental justice, and equity into all EPA programs, policies and rulemaking processes.¹ The Administrator has also directed leadership to work with staff in their offices and the Office of Environmental Justice to identify ways to ensure that the country's environmental laws—and the policies implemented under them—deliver benefits to all individuals and communities, including those historically marginalized, overburdened, underserved, and living with the legacy of structural racism.²

Our ability to influence positive change within federal decisions subject to NEPA is dependent on a well-coordinated team effort, strong communication, and consistency in approach across our entire community. We have established two agency-wide working groups with representation from all regions

¹ <https://www.epa.gov/climate-adaptation/climate-adaptation-policy-statement>; <https://www.epa.gov/sites/default/files/2021-04/documents/regan-messageoncommitmenttoenvironmentaljustice-april072021.pdf>

² Administrator Regan message on environmental justice, *supra* note 1; E.O. 13985 defines equity as the “consistent and systematic fair, just, and impartial treatment of all individuals, including individuals who belong to underserved communities that have been denied such treatment, such as Black, Latino, and Indigenous and Native American persons. Asian Americans and Pacific Islanders and other persons of color; members of religious minorities; lesbian, gay, bisexual, transgender, and queer (LGBTQ+) persons; persons with disabilities; persons who live in rural areas; and persons otherwise adversely affected by persistent poverty or inequality.” Although policy is emerging in this area, EPA has broad authority under NEPA and CAA Section 309 to comment on relevant federal actions to help ensure that equitable treatment of underserved communities is considered and addressed, as appropriate (e.g., for persons with disabilities or rural communities disproportionately impacted by climate change).

that have informed our recommendations on recent policy initiatives including recommendations to the Council on Environmental Quality (CEQ), recent comment letters on environmental impact statements (EISs), and recommendations within this memorandum. These working groups will continue to support activities around climate change, environmental justice, and NEPA, inform EPA’s policy development, and assist in EPA’s CAA Section 309 reviews of other federal agencies’ EISs. It is important that these workgroups and our CAA Section 309 work also reflect the overlap between efforts to combat the climate crisis and to advance environmental justice and equity. Reducing GHG emissions reduces longer term disproportionate risks to already overburdened communities, building climate resilience reduces current disproportionate climate risks, and considering climate-related impacts on disadvantaged communities is an essential part of identifying and addressing disproportionate cumulative impacts, consistent with Section 219 of E.O. 14008.

NEPA requires federal agencies to disclose and assess the environmental impacts of proposed federal actions, together with all practicable mitigation measures.³ EPA is mandated by the CAA Section 309 to review all federal actions subject to NEPA’s EIS requirements, to make those reviews public, and to refer to CEQ proposed actions that the Administrator determines are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA’s unique policy review authority under CAA Section 309 provides EPA an opportunity to help ensure lead agencies disclose, assess, and mitigate the impacts of GHG emissions, and build climate change resilience. This is particularly important for carbon-intensive federal proposals or infrastructure. CAA Section 309 also provides EPA the authority to help ensure lead agencies to fully analyze environmental justice concerns and fully address those concerns, as appropriate.⁴ Under NEPA and CAA Section 309, EPA regions engage early with federal agencies in the scoping and drafting of their NEPA documents to help ensure the meaningful involvement of communities with environmental justice concerns, reduce adverse environmental impacts, consider alternatives, and improve environmental outcomes. This review responsibility places EPA in a unique position to help assist and encourage federal agencies to fulfill the requirements of NEPA, including as they align with the letter and spirit of the executive orders related to climate, environmental justice, and equity.

Through this memorandum, EPA reaffirms our commitment to consistently applying climate change and environmental justice policy principles through the EPA review process conducted pursuant to NEPA and CAA Section 309. To assist NEPA/309 program staff, please find attached information on climate change and environmental justice tools and practices that should be used for continued implementation of this executive direction. In addition, EPA regions are encouraged to seek early engagement and cooperating agency status on proposed federal actions to help federal agencies identify climate change and environmental justice impacts and consider adopting measures at the earliest instance to improve environmental outcomes. Throughout the NEPA process, regions should encourage the full disclosure of all associated environmental impacts as well as promote steps to incorporate GHG mitigation and resilience and to address disproportionate impacts on overburdened and underserved communities.

³ NEPA Section 102(2)(a) also directs agencies to, among other things, ensure the integrated use of the environmental design arts in planning and decision-making—which supports including climate resilient design in federal proposals.

⁴ See also, [Pres. Memo], providing that “The Environmental Protection Agency, when reviewing environmental effects of proposed action of other federal agencies under section 309 of the Clean Air Act, 42 U.S.C. section 7609, shall ensure that the involved agency has fully analyzed environmental effects on minority communities and low-income communities, including human health, social, and economic effects.” <https://www.govinfo.gov/content/pkg/WCPD-1994-02-14/pdf/WCPD-1994-02-14-Pg279.pdf>

Regions are encouraged to identify and share opportunities for improvement with the NEPA/309 Program National Program Manager to help advance our efforts. I look forward to working with you to advance climate and environmental justice considerations as an integral part of EPA's review process pursuant to NEPA and CAA Section 309.

Attachment 1: Tools for Addressing Climate Change through Reviews Conducted Pursuant to the National Environmental Policy Act and Section 309 of the Clean Air Act

Attachment 2: Tools for Addressing Environmental Justice through Reviews Conducted Pursuant to the National Environmental Policy Act and Section 309 of the Clean Air Act

cc: Deputy Regional Administrators
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ATTACHMENT 1: Tools for Addressing Climate Change through Reviews Conducted Pursuant to the National Environmental Policy Act and Section 309 of the Clean Air Act.

The following tools and additional references on the [EPA NEPA/309 Community SharePoint](#) site are recommended to assist the EPA staff conducting reviews under NEPA and CAA Section 309. The SharePoint site will be regularly updated as additional tools are identified or developed. Guidance on how to utilize specific tools in the NEPA/309 review will also be developed and included on the NEPA/309 Community SharePoint site.

- CEQ has the following resources available to assist 309 environmental review staff to become familiar with and follow the CEQ NEPA guidance on climate change:
 - [Consideration of Greenhouse Gases \(GHG\)](#), provides informal guidance and resources to assist federal agencies in their consideration of the effects of GHG emissions and climate change when evaluating proposed federal actions in accordance with NEPA and CEQ Regulations Implementing the Procedural Provisions of NEPA. Consistent with CEQ's Federal Register notice rescinding the 2019 draft GHG Guidance, we recommend using the 2016 Final GHG Guidance as a resource in assessing the disclosure of GHG impacts, alternatives, and climate justice issues in agency NEPA documents, as appropriate and relevant, until updated guidance is issued by CEQ. Updated guidance is forthcoming and will be posted on NEPA/309 Community SharePoint site when available.
 - [GHG Accounting Tools](#), a compilation of GHG accounting tools, methodologies, and available reports. To facilitate quick agency assessment of the applicability of the tools to their proposed actions, CEQ categorized the tools, provided a brief description of the methodology of each tool, and explained how each tool can be employed. Additionally, CEQ provided "specific use" examples which are sector-specific cases of application for each individual tool. Also provided is a stable hyperlink to the tool, a homepage that includes additional information and access to the tool, or a technical document with comprehensive information about the tool. Finally, CEQ attempted to call out nuanced aspects of or caveats to working with individual tools, such as hardware requirements, limitations, or new updates to previous editions.
- EPA's [Climate Change Indicators](#) compiles a key set of indicators related to the causes and effects of climate change. These indicators also provide important input to the [National Climate Assessment](#) and other efforts to understand and track the science and impacts of climate change. This site also links to other useful resources, such as EPA's [GHG Emissions and Removals](#) which includes a link to EPA's [Inventory of U.S. GHG Emissions and Sinks](#), an annual report that provides a comprehensive accounting of total annual U.S. emissions and removals by source, economic sector, and gas going back to 1990 using guidelines provided by the Intergovernmental Panel on Climate Change (IPCC). For this report, EPA uses national energy data, data on national agricultural activities, and other national statistics to provide a comprehensive accounting of total GHG emissions for all man-made sources in the United States.
- EPA's [Climate Change Adaptation Resource Center \(ARC-X\)](#) is an interactive resource designed to help local governments effectively deliver services to their communities even as the climate changes. Decision makers can create an integrated package of information *tailored specifically to their needs*. Once users select areas of interest, they will find information about the risks posed by climate change to the issues of concern; relevant adaptation strategies; case studies illustrating how other communities have successfully adapted to those risks and tools to replicate their successes; and EPA funding opportunities.

- EPA’s [Facility Level Information on GHG Tool](#) provides useful information about GHG emissions from large facilities in the U.S. and offers mapping, charting, comparing, and other analysis of facility reported data.
- The [Fourth National Climate Assessment](#) provides a comprehensive assessment of the science of climate change and variability and its impacts across the United States, now and throughout this century. The Assessment includes information on regional trends and considerations by various sectors and resource topics and can be helpful when assessing climate resilience issues generally, and the impacts of climate change on communities with environmental justice concerns, in particular. Further guidance on how to utilize these tools as a NEPA/309 reviewer will be posted on the NEPA/309 Community SharePoint. In addition, [EPA’s Climate Change and Social Vulnerability in the United States \(September 2021\)](#) report provides an understanding of the degree to which four socially vulnerable populations—defined based on income, educational attainment, race and ethnicity, and age—may be more exposed to the highest impacts of climate in six categories: Air Quality and Health; Extreme Temperature and Health; Extreme Temperature and Labor; Coastal Flooding and Traffic; Coastal Flooding and Property; and Inland Flooding and Property.
- The [GSA EPA Smart Location Calculator](#) is a placed-based GHG estimation tool that enables users to easily evaluate the GHG differences associated with any state or federal facility siting decision. Further guidance on how to utilize these tools as a NEPA/309 reviewer will be posted on the NEPA/309 Community SharePoint.
- [EPA’s Smart Location Database](#) is a placed-based tool that contains a number of Census Block Group based variables that quantify locations where infrastructure investments would support reinvestment in neighborhoods with higher rates of walking, biking, transit use and shorter average vehicle trips. While not a direct measure of GHG, this tool provides key variables associated with places that are more GHG efficient. Further guidance on how to utilize these tools as a NEPA/309 reviewer will be posted on the NEPA/309 Community SharePoint.
- EPA continues to encourage lead agencies to monetize impacts of GHG emissions using estimates of the social cost of GHG (SC-GHG), as appropriate. Estimates of the SC-GHG provide potentially useful information relevant to analyzing and disclosing the impacts of a project’s GHG emissions.⁵ SC-GHG estimates allow analysts to incorporate the societal value of changes in carbon dioxide and other GHG emissions into analyses of actions that have small, or marginal, impacts on cumulative global emissions. Estimates of the social cost of carbon and other GHG (e.g., methane) have been used for over a decade in federal analyses, while acknowledging the uncertainties involved and clearly understanding the need for updates over time to reflect evolving science and economics of climate impacts. A discussion of the SC-GHG estimates used in recent federal analyses can be found in EPA’s supporting documents.⁶ Specifically, the estimates used in the benefit cost analysis of the [Revised 2023 and Later Model Year Light-Duty Vehicle GHG Emissions Standards](#) are the interim SC-GHG estimates that EPA and other agencies are using until an improved estimate of the impacts of climate change can be developed based on the best available science and economics taking into

⁵ There are two pending court cases challenging the use of the interim SC-GHG estimates. The government’s motion to dismiss was granted in *Missouri v. Biden*, 2021 WL 3885590 (E.D. Mo. Aug. 31, 2021), appeal filed, No. 21-3013 (8th Cir.). The Fifth Circuit granted the government’s emergency motion for a stay of the district court’s preliminary injunction on March 16, 2022, in *Louisiana v. Biden*, No. 22-30087 (5th Cir.).

⁶ Recent example EIS comment letters addressing SC-GHG for energy projects can be found at the NEPA/309 Community SharePoint - [NEPA Climate Change Regional Work Group Energy Sector Subsite](#)

consideration recommendations from the National Academies of Sciences, Engineering, and Medicine (National Academies, 2017). [Revised 2023 and Later Model Year Light-Duty Vehicle GHG Emissions Standards](#). Specifically, the estimates used in the benefit cost analysis of the [Revised 2023 and Later Model Year Light-Duty Vehicle GHG Emissions Standards](#) are the interim SC-GHG estimates that EPA and other agencies are using until an improved estimate of the impacts of climate change can be developed based on the best available science and economics taking into consideration recommendations from the National Academies of Sciences, Engineering, and Medicine (National Academies, 2017).

- If project specific technical assistance is needed from a supporting EPA HQ program office, please contact the [Office of Federal Activities, NEPA Compliance Division Climate Change and Climate Adaptation Points of Contact](#).

ATTACHMENT 2. Tools for Addressing Environmental Justice through Reviews Conducted Pursuant to the National Environmental Policy Act and Section 309 of the Clean Air Act.

The following tools and additional references on the [EPA NEPA/309 Community SharePoint](#) site are recommended to assist the EPA staff conducting reviews under NEPA and CAA Section 309. The SharePoint site will be regularly updated as additional tools are identified or developed. Guidance on how to utilize specific tools in the NEPA/309 review will also be developed and included on the NEPA/309 Community SharePoint site.

- EPA's [Environmental Justice Consideration in the NEPA Process](#) and Council on Environmental Quality's [Environmental Justice](#) website provide specific information to address environmental justice issues, including environmental justice policies, and specific NEPA procedures and guidance.
- EPA's [Environmental Justice Legal Tools](#) is a compendium of EPA authorities available to advance environmental justice, and includes a discussion of NEPA and CAA Section 309. The document has been updated. Once finalized for distribution, a link to the update will be included on the NEPA/309 Community SharePoint site.
- EPA's [Technical Guidance for Assessing Environmental Justice in Regulatory Analysis](#). This document focuses on the rulemaking process but has useful relevant information to NEPA analysis in terms of how to conduct an Environmental Justice analysis.
- To assist in the evaluation of disproportionately high and adverse effects on communities with environmental justice concerns, consider the following screening tools (which should be ground-truthed/supplemented as needed):
 - EPA's [EJSCREEN](#) as a first step in environmental justice analyses.
 - Center for Disease Control (CDC)'s [Tracking Network](#), contains data and information on environments and hazards, health effects, and population health.
 - EPA's [Health Impact Assessment \(HIA\) Resource and Tool Compilation](#), includes tools and resources related to the HIA process and those that can be used to collect and analyze data, establish a baseline profile, assess potential health impacts, and establish benchmarks and indicators for monitoring and evaluation. These resources include literature and evidence bases, data and statistics, guidelines, benchmarks, decision and economic analysis tools, scientific models, methods, frameworks, indices, mapping, and various data collection tools.
 - EPA's [Air Now](#) portal, for air quality data.
 - EPA's [Air Toxic Screening Assessment](#), a screening tool to provide communities with information about health risks from air toxics.
 - CDC's [Social Vulnerability Index](#), identifies communities that may need support before, during, or after disasters.
 - EPA's [NEPAssist](#), a screening tool that contains environmental and socioeconomic information with national GIS data layers. The application links to EPA's EJSCREEN tool as well.
 - EPA's [ENVIROFACTS](#) and [ENVIROATLAS](#), which are points of access to a large number of EPA environmental data sets covering, climate, criteria air pollution, air toxics, water pollution, waste sites, toxic releases, enforcement, and more.
 - EPA's [Facility Level Information on GHG Tool](#) which has an EJ mapping layer that will allow users to view demographic indicator information using census tract information. EPA's GHG Reporting Program (GHGRP) also has an [EJ Demographic Highlights dashboard](#) to view data on demographic indicators in proximity to GHGRP reporting facilities by industry through interactive maps, graphs, and charts.

- Various Regional and State Tools – including, but not limited to the following (Please contact your regional Environmental Justice Program Office for the most current list of regional tools):
 - California’s [CalEnviroScreen](#), which is a mapping tool that uses environmental, health, and socioeconomic information to produce scores for every census tract in the state of California to help identify communities in California that are most affected by many sources of pollution and where people are especially vulnerable to pollution’s effects
 - Washington’s [Environmental Health Disparities Map](#), which compares communities across Washington State for environmental health disparities. The map shows pollution measures such as diesel emissions and ozone, as well as proximity to hazardous waste sites, while displaying measures including poverty and cardiovascular disease.
- The "[Environmental Justice \(EJ\) Interagency Working Group \(IWG\) Promising Practices for EJ Methodologies in NEPA Reviews](#)" report, or the Promising Practices Report, provides ways to both consider environmental justice concerns during environmental analyses and encourage effective participation by communities with environmental justice concerns. The Promising Practices Report is a compilation of methodologies gleaned from current agency practices concerning the interface of environmental justice considerations through NEPA processes. For example, the Promising Practices Report suggests initiating meaningful engagement with communities early and often; providing potentially affected communities with an agency-designated point of contact; and convening project-specific community advisory committees, as appropriate.
- The [Community Guide to Environmental Justice and NEPA Methods](#) provides information for communities who want to assure that their environmental justice issues are adequately considered when there is a federal agency action that may involve environmental impacts on minority populations, low-income populations, and/or Indian tribes and indigenous communities.
- Early engagement with lead agencies provides for an effective tool to assist lead agencies with identifying, avoiding and minimizing impacts to communities with environmental justice concerns. Early engagement tools include participating in the scoping process and providing detailed recommendations on Notices of Intent; participating as a cooperating agency to help the lead agency develop the NEPA analysis; assisting the lead agency in the identification of communities with environmental justice concerns that may be disproportionately affected by the proposal; providing recommended ways that the agency may avoid and minimize impacts to communities; assisting in the development of a new alternative to alleviate adverse effects; proposing potential modifications to the project design to reduce impacts; assisting the lead agency in how to engage any new relevant communities with environmental justice concerns; and/or identifying mitigation measures that could be incorporated into the decision.
- The regional Environmental Justice program staff are available to assist as Associate Reviewers as appropriate during EIS reviews and as part of early engagement. Working closely with the regional Environmental Justice program staff early will help reviewers address critical environmental justice concerns early and improve the advancement of environmental justice priorities within the NEPA process.
- For additional technical assistance on commenting and addressing environmental justice concerns, please contact the [Office of Federal Activities, NEPA Compliance Division Environmental Justice Program Liaisons](#).