UCSF Program on Reproductive Health and the Environment

Environmental Justice is essential to create healthy, thriving communities for all.

Recommendation

To ensure people are not made sick from exposure to toxic chemicals in air, water, and soil, EPA must accelerate efforts to eliminate health harms in communities that are more highly impacted by chemical exposures and non-chemical stressors.

SUMMARY

Environmental justice means "all people and communities have the right to live and thrive in safe, healthy environments with equal protections and meaningful involvement in these actions."[1] **Current U.S. policies and regulations fail to protect the health of all people, leaving many in harm's way.** For example, people living near polluting facilities and contaminated sites are exposed to higher levels of toxic chemicals via air, water, soil, and food.[2] Also, due to a legacy of discriminatory housing and lending policies people living near polluting facilities and contaminated sites are also more likely to be Black, Latino/a, Indigenous, and/or low-income, putting them at greater risk of harm from numerous chemical exposures.[2]

EPA urgently needs to identify and account for real-world chemical exposures and the differential impacts of environmental stressors experienced by people most affected in all Agency assessments and decisions. New policies were established under the Biden Administration to identify and ameliorate pollution in more highly exposed communities. The Trump Administration has put in place directives to dismantle many of them. The systematic removal of programs and policies to address highly polluted communities, a component of environmental justice initiatives, will result in millions of Americans already harmed by polluting facilities continuing to be exposed to toxic chemicals and pollutants making them sick and contributing to early death.

PROPOSED ACTIONS

To ensure the Agency protects health for all including communities with greater cumulative impacts from chemical and non-chemical stressors, **we recommend that EPA:**

1. **Rely on the best available science to safeguard health and promote environmental justice in every aspect of environmental policy and EPA's work.**
2. **Create and sustain community partnerships centered around transparency, trust, and legitimacy at all stages of the scientific assessment and decision-making process to ensure that EPA evaluations fully account for differences in risk across communities.**
3. **Allocate additional resources to build capacity within overburdened communities.**

BACKGROUND

Low-income communities and communities that are predominantly Black, Latino/a, and/or Indigenous are more likely to live in areas with higher levels of air and water pollution due to discriminatory land use policies, inequitable siting practices, and other forms of environmental racism. Evidence suggests that communities of color disproportionately experience health harms and premature mortality due to air pollution exposure.[3] These communities are also more susceptible to the cumulative health impacts of harmful exposures due to external stressors, including food insecurity, and/or limited access to healthcare, poverty, and discrimination, which can exacerbate existing health disparities.[4–11] The National Academy of Sciences has warned that failing to account for both internal and external stressors significantly underestimates risks from chemical exposures in the human population.[12]

Under the Biden Administration, a number of seminal policies, executive orders, and laws were adopted to increase efforts to counter environmental injustice, including Executive Order 14008 on "Tackling the Climate Crisis at Home and Abroad,"[13] Executive Order 14096 on "Revitalizing Our Nation's Commitment to Environmental Justice for All,"[14] and the Justice 40 Initiative.[15] However, the way the government implemented these laws and policies did not ensure equitable, socially just safeguards for environmental health, and many communities across the US still face higher exposure to environmental pollution that exacerbates health disparities and social injustices.[16,17]

With President Trump's deregulatory agenda and actions to undo Biden-era policies, such as rescinding Executive Order 14008 and removing the EJSCREEN tool, toxic pollution could continue unabated, exacerbating health conditions in already overburdened communities. The Trump Administration has said that *"Every American should have access to clean air, land, and water"* and[18] thus, to achieve this **the Trump Administration should reaffirm the importance of prioritizing communities that have the highest burdens of exposure, a key component of environmental justice, in order to promote healthy, thriving communities for all.**

At the end of 2024, EPA released the revised *Technical Guidance for Assessing Environmental Justice in Regulatory Analysis*.[19] This Technical Guidance is the latest document from EPA in response to Executive Order (E.O.)14096,[14] and is an important step toward developing recommendations to account for real-world chemical exposures and the differential impacts of environmental stressors experienced by susceptible subgroups for regulatory decision-making. However, the Technical Guidance failed to reflect the best available science or provide structured recommendations on how to identify the impacts of chemical and non-chemical stressors on susceptible groups.[20] EPA's 2022 proposed "Fenceline Screening Methodology"[21] for risk evaluations under the Toxic Substances Control Act (TSCA) also failed to reflect the best available science and made a number of scientifically unsupported assumptions that will severely underestimate the health risks to fenceline communities.[21(p30)]

EPA can take steps today to increase protections for communities facing disproportionate harm from chemical exposures which will improve health for those most burdened, including low-income communities and communities of color. In order to support those that are most burdened by disease and environmental exposures, EPA should affirm and adopt key environmental justice principles developed during the 1991 People of Color Environmental Leadership Summit. These principles will ensure that all communities benefit from equitable protection,[22] and include:

- That **public policy be based on mutual respect and justice for all peoples**, free from any form of discrimination or bias;
- Ethical, balanced and responsible uses of land and renewable resources in the interest of a **sustainable planet for humans** and other living things;
- **Universal protection from extraction, production and disposal of toxics** and hazardous wastes and poisons that threaten access to clean air, land, water, and food;
- **The right to participate as equal partners** at every level of public environmental decision-making, including needs assessment, planning, implementation, enforcement and evaluation; and
- The **right of all workers to a safe and healthy work environment** without being forced to choose between an unsafe workplace and loss of livelihood.

EPA must also prioritize use of existing tools and databases that are recognized and accessible, and meaningfully incorporate community knowledge, partnership, and research to identify communities facing disproportionate exposures, hazards, and risks from chemical exposures and take action to eliminate harms.[23] We urge EPA to swiftly adopt the following recommendations to ensure and promote environmental justice in Agency policy and decision-making.

SUPPORTING EVIDENCE

EPA should rely on the best available science to safeguard health and promote environmental justice in every aspect of environmental policy and EPA's work.

The adoption of the best available scientific methods in EPA's chemical regulatory process is crucial for promoting environmental justice and safeguarding public health. Updating its assessment methodologies in alignment with the best available scientific methods, including those outlined below, will enable EPA to better identify, quantify, and eliminate health harms in communities that are disproportionately affected by environmental hazards.

EPA Offices and Programs (e.g. EPA's Office of Chemical Safety and Pollution Prevention) that conduct or collaborate on scientific assessments used to support health policy decisions must adopt the following best available scientific methods to promote and ensure environmental justice in all levels of decision-making (see "Health Protective Chemical Policy Reform" for details of Methods 1, 2, &3):

> ***Method 1:*** *EPA should adopt and apply established methods to quantify risks of non-cancer health effects at all relevant levels of exposure.*
>
> ***Method 2:*** *EPA should increase the human variability adjustment factor to at least 42X and include an additional 10X to account for additional chemical and non-chemical stressors.*
>
> ***Method 3:*** *EPA should adopt a consistent approach to account for all foreseeable exposures and account for combinations of exposures in each chemical assessment and characterize exposures using the 99th percentile.*
>
> ***Method 4:*** *EPA should identify and eliminate health harms in communities that are more highly impacted by the cumulative impacts of chemical exposures and non-chemical stressors.*

EPA should focus its environmental and scientific assessments on communities that are more highly exposed to environmental pollutants, where there are higher levels of health problems, and where exposures are exacerbated by long-standing social inequities such as poverty, racism, and lack of access to healthcare.[24]

EPA must first systematically identify communities experiencing the totality of these stressors, referred to as "cumulative impacts," in its scientific assessments in order to eliminate identified health harms through tailored environmental protections. It is also critical that EPA first adopt a more comprehensive definition of the term, such as the definition proposed by the Centers for Disease Control and Prevention (CDC): "Cumulative impacts are the total harm to human health that occurs from the combination of environmental burden, pre-existing health conditions, and social factors. Cumulative impacts can result from long-term exposure to environmental pollution and community stress, such as noise pollution, odor pollution, loss of natural resources, or lack of access to quality health care or other resources."[25]

EPA should more effectively leverage and combine data from existing tools and databases to identify communities experiencing disproportionate exposures and poor health outcomes, rather than requiring communities to continually produce the burden of proof. Putting the burden of proof on communities to demonstrate harm often allows environmental degradation to continue until definitive data is collected. This will also enable swifter action to protect public health while reducing the need for communities to fight for basic protections.

EPA can use tools that have been developed to identify cumulative impacts in communities across the United States,[25] such as California EPA's CalEnviroScreen[26] and the CDC Environmental Justice Index.[27] It is also critical for the Trump Administration to stop dismantling vital tools and databases that are essential for identifying and alleviating the higher burden of chemical pollution in communities across the US, such as the White House Council on Environmental Quality's Climate and Environmental Justice Screening Tool (CEJST)[28] and EPA's EJSCREEN.[29] Without accurate data, resources cannot be directed to those disproportionately harmed, resulting in unnecessary suffering and loss of life.

EPA can also more effectively leverage existing health data, such as asthma rates, cancer clusters, and prevalence of other chronic illnesses to inform its identification of susceptible communities.

EPA can also expand reliance on its multiple chemical release reporting databases to identify highly exposed communities, like the Toxics Release Inventory (TRI), the National Emissions Inventory (NEI), and Discharge Monitoring Reports (DMRs), data reported through the Risk Management Program (RMP), and data reported to EPA regional offices indicating accidental releases or releases occurring during facility start-up, shutdown, and malfunction events. While EPA has relied on these sources individually to support scientific assessments, it rarely uses data from these sources in combination to better identify highly exposed communities. EPA can supplement these sources with data obtained from real-time monitoring technologies and community-based participatory research, which can provide

immediate data on pollutant levels and allow for quicker interventions. By using existing data to systematically identify overburdened populations, EPA can focus its policies on providing enhanced protection to those who need it most, thus enhancing environmental justice for all communities.

EPA must prioritize the elimination of cumulative burdens that contribute to health disparities in identified communities. Cumulative impacts assessments will better position EPA to eliminate the compounding factors that contribute to health problems in overburdened communities and enable comprehensive interventions to improve health. EPA has the legal authority to factor cumulative impacts into decision-making.[30] Some examples include using cumulative impacts assessments to inform facility permitting, environmental cleanups, and the allocation of funding and resources to overburdened communities for increased fenceline monitoring or research.[25]

We recommend that all EPA Offices and Programs that conduct or collaborate on scientific assessments used to support health policy decisions rely on cumulative impacts assessment or cumulative risk assessment to identify health hazards and risks in communities facing harm from multiple chemical and non-chemical stressors. Once cumulative impacts are identified, we further recommend that EPA use its legal authority under federal statutes (e.g. the Toxic Substances Control Act) to eliminate identified hazards.

EPA should create and sustain community partnerships centered around transparency, trust, and legitimacy at all stages of the scientific assessment and decision-making process to ensure that EPA evaluations fully account for differences in risk across communities.

Meaningful community partnership must be at the heart of the EPA's environmental assessment and decision-making processes.[31] Engaging communities directly impacted by environmental hazards at every stage of the decision-making process, from scientific assessments to policy development is key. This includes embedding accountability mechanisms in all community-driven programs, ensuring and documenting that the EPA's actions are directly responsive to the needs and concerns of these communities.[32] As such, **we recommend that EPA fully implements the Meaningful Engagement Policy finalized in 2024, and that all EPA Offices and Programs that conduct or collaborate on scientific assessments used to support health policy decisions partner with community groups as co-leaders to ensure that policies and regulations are informed by those most affected.** In accordance with the Jemez Principles of Democratic Organizing, the process of partnering with communities must:

1) **be inclusive,**
2) **engage all levels of leadership within community organizations,**
3) **ensure that relevant community voices are heard and represented,**
4) **foster solidarity, and**
5) **be founded on respect, justice, and community-centeredness.**[33]

Increased transparency and accessibility of EPA processes are also crucial to building trust with communities disproportionately harmed by chemical and non-chemical stressors. For example, the EPA's lack of transparency regarding the levels of chemical contamination that residents of East Palestine faced following the train derailment left many community members vulnerable to toxic chemical and pollutant exposure and unaware of their real risks. Transparent sharing of critical data is essential in such crises to ensure residents can make informed decisions about their health and safety. Further, EPA used out of date methods for identifying risks, underestimating the impacts to the community.

If the Trump administration aims to follow through on promises made to the East Palestine residents,[34] EPA must prioritize public access to information that also ensures that individual data will not be disclosed. This includes making data and scientific assessments easily accessible in an understandable format, emphasizing the use of plain language and culturally relevant materials, and accounting for disabilities and non-English language access. Additionally, EPA should institutionalize shared leadership by establishing long-term partnerships with community-based organizations. This collaborative approach will allow the EPA to harness local expertise while ensuring accountability in policy implementation, and also build trust and ensure that its actions are directly responsive to the needs of communities.[24] EPA should also incorporate lived experiences into cumulative impact assessments.[25,35] This approach recognizes that residents of overburdened communities possess invaluable knowledge about local environmental conditions, historical pollution, and the health impacts they experience.

Furthermore, community partnership and engagement play a crucial role in the scientific assessment and decision-making process, ensuring that risks are fully understood and accounted for while also preventing further harm to impacted communities.

EPA has outlined preliminary steps for meaningful community engagement in its "Guidance on Considering Environmental Justice During the Development of Regulatory Actions."[36] **We recommend that EPA strengthen this guidance by outlining clear mechanisms that allow for transparent and continuous dialogue with affected communities, ensuring their concerns are not only heard but also acted upon,**

and mechanisms for building authentic relationships with community-based organizations.[32] This should include consideration of hiring community partners as paid consultants when community expertise is used to advance scientific assessments. We further recommend that EPA expeditiously implement these recommendations across all Offices and Programs that conduct or collaborate on scientific assessments used to support health policy decisions.

EPA should allocate additional resources and expand existing financial resources to build capacity within overburdened communities.

Cumulative impacts assessments can help EPA to identify communities to allocate resources for capacity building, particularly communities overburdened by pollution. The federal government and EPA should continue to expand existing grant programs and ensure that funds and resources are accessible to the most overburdened communities. The Trump administration should also allow EPA to resume programs that help identify and address cumulative impacts.

The federal Thriving Communities program provides financial and technical assistance resources to overburdened communities, such as addressing brownfields.[37] Continued funding of these programs is necessary to both allow existing grantees to fully realize the goals of their ongoing activities and provide communities with a consistent resource to address emerging or long-ignored problems.

It is also necessary for EPA to assess the accessibility of its programs and ensure programs are evolving to meet the needs of the most overburdened and often under-resourced communities. The types of application requirements, funding disbursement schemes, reporting, and monitoring requirements are among several barriers that can reduce the ability for communities to apply for these programs or to successfully meet their requirements. EPA's requirements for applicants and grantees should be assessed to account for communities that may not be familiar with the administrative requirements of federal funding or may not have the capacity, such as hiring technical experts, to develop and track metrics from the start of the program to support data reporting requirements. EPA must build on the current funding and technical assistance it provides communities and take steps to evaluate that applications to access these resources do not perpetuate the existing inequities communities face.

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