The Routine Outcome of Our Environmental Laws and Policies at All Levels of Government Must Be Equal Protection, Not Environmental Disparities

RECOMMENDATION

We must adopt environmental justice (EJ) principles in chemical policymaking and implement environmental statutes such as the 2016 Frank R. Lautenberg Chemical Safety for the 21st Century Act [Public Law No. 114-182] (known as TSCA) as Congress intended to fundamentally transform chemical policy to address health disparities from harmful chemicals.

ISSUE SUMMARY

Communities of color are disproportionately exposed to harmful chemicals, pesticides, and accidental industrial releases.^{1,2} Although our U.S. laws aspire to protect health, the way the government implements these laws and policies do not ensure equal, socially just safeguards for environmental health.^{1,2}

The science linking environmental pollution to poor health, especially for children, low-income families, and communities of color has led medical societies such as the American College of Obstetricians and Gynecologists (ACOG) and the International Federation of Gynecology and Obstetrics (FIGO) to recognize the threat toxic chemicals pose to public health and call for policies to prevent harmful exposures.^{3–5} Environmental exposures to harmful industrial chemicals are a preventable source of adverse health consequences.^{3,6}

Science should guide chemical policy to promote healthy outcomes for diverse communities not just for the privileged and powerful.⁷ The U.S. Environmental Protection Agency (EPA) must require and evaluate data for population disparities in chemical exposures and health risks in implementing the law. Only those companies with full evidence that their products are safe should have access to lucrative U.S. markets, and U.S. decision-making must include meaningful community participation as equal partners at every step of the regulatory process for evaluating chemicals, from needs assessment to enforcement and evaluation.

PROPOSED ACTIONS

- **1. Incorporate environmental justice principles** into every aspect of environmental policy and EPA's work.
- 2. Expand consideration of susceptible populations in risk assessment to include at-risk communities where health problems from chemical exposures and pollutants may be worse due to discrimination, poverty and other chronic stressors.
- 3. Allocate additional resources to monitor and reduce environmental pollution and risks in overburdened communities and build capacity for risk evaluations that comport with National Academies of Sciences' recommendations.
- **4. Increase community engagement and accountability** to ensure that EPA actions demonstrably reduce inequitable pollution exposures.

SUPPORTING EVIDENCE

The first step to addressing environmental health inequities is to adopt environmental justice principles to guide policymaking. In October 1991, the People of Color Environmental Leadership Summit[®] affirmed principles of Environmental Justice that 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
- 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

With environmental justice principles as a guide:

We can boldly imagine and create U.S. policy in which the environment enhances health for all people—in land and natural resource management, the products in our homes and schools, and actions in our workplaces.

Incorporate environmental justice into every aspect of environmental policy and EPA's work.

EPA must meaningfully incorporate EJ into its evaluation of new chemicals under TSCA. This requires the use of cumulative environmental risk frameworks, full assessment of aggregate exposures, inclusion of legacy compounds and full health assessment of communities near manufacturing and disposal sites.

EPA must fully implement Executive Order 12898: "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations." EPA leadership must require meaningful—not boilerplate—and publicly available environmental justice analyses of core EPA risk management actions, examining impacts on overburdened communities and opportunities to address pollution disparities. Analyses should be shared as part of the public record and methodologies shared with state and local governments.

Obtain White House support for reviving, expanding (including formally adding the White House Council on Environmental Quality), and revitalizing the federal Interagency Working Group on Environmental Justice (EJ IWG). Establish and utilize regional interagency working groups to prioritize action on healthprotective chemical policy.

EPA should follow the methods outlined in *Guidance on* Considering Environmental Justice During the Development of a Regulatory Action at each step of developing significant rulemakings (including decision briefings) and other actions related to chemical policy.

Measure EPA and Senior Executive Service performance based on environmental justice metrics.

Expand consideration of susceptible populations in risk assessment to include at-risk communities where health problems from chemical exposures and pollutants may be worse due to discrimination, poverty and other chronic stressors.

EPA must utilize authorities under 2016 amended TSCA to obtain information to fully assess risks to all susceptible and potentially highly exposed groups using modern risk assessment techniques as recommended by NAS in Science and Decisions (2009) and other NAS reports.⁹⁻¹¹ With the exception of pesticides, most chemicals used in industrial processes or commercial products are not required to have adequate health testing to stay on the market. No formal risk assessment was performed because most chemicals on the market today were grandfathered in under the flawed 1976 TSCA, and their safety has never been assessed.¹²

Under the weak 1976 law, even known harmful chemicals such as asbestos and methylene chloride were not banned. While the law was amended in 2016, the implementation of the new Lautenberg amendments has focused on speeding approvals of new chemicals rather than obtaining and sharing adequate safety data. And it is still not required for existing chemicals on the market to provide adequate data on health risks to stay on the market.

Working with communities and other public health partners, EPA must routinely evaluate likely chemical exposures and disparities via mapping, biomonitoring, citizen-science measurements, and other public health surveillance tools. Adequate budget and resources need to be acquired for these purposes.

In cooperation with the Centers for Disease Control (CDC), EPA must utilize sentinel surveillance and require systems to incorporate sociodemographic data to identify communities that are suffering the most from health threats. Thus, we can prioritize interventions to address inequities at their root causes and tailor public-health interventions to reach all vulnerable and highly exposed groups (e.g., in occupational settings, schools, nursing homes) rather than applying a one-size-fits-all approach.

Allocate additional resources to monitor and reduce environmental pollution and risks in overburdened communities; build capacity for risk evaluations that comport with National Academies of Sciences recommendations.

Meaningful engagement with impacted, frontline communities includes providing resources and building capacity within



communities to participate in the risk evaluation process. This capacity can begin to reverse systemic racial discrimination and close racial disparities in exposures and harms from contact with harmful products on the market and their manufacture and disposal.

EPA should support and facilitate the use of alternative dispute resolution mechanisms for communities addressing environmental challenges.

EPA must disavow the Department of Justice (DOJ) memo "Supplemental Environmental Projects (SEPs) in Civil Settlements with Private Defendants" and encourage resumption and expansion of the use of SEPs as enforcement tools. SEPs should involve considerable outreach to and input from the community.

Build EPA's capacity to promote environmental justice through risk evaluations that comport with NAS recommendations. Develop equity metrics and seek input from the National Academy of Sciences.

Consult with communities to develop improved mapping and screening tools (see CalEPA's online mapping tool CalEnviroScreen) to assess cumulative and disproportionate impacts. Develop nationally consistent data for identifying overburdened communities to inform targeting of resources, track results, and encourage states to share best practices.

Increase community engagement and accountability to ensure that EPA actions demonstrably reduce inequitable pollution exposures.

EPA must accelerate environmental education programs with input from community experiences to support education similar to NASA's support for space sciences. We need to end systemic racism in K-12 education, including in science, technology, engineering, and mathematics (STEM), where diversity has not meaningfully changed for decades.¹³ EPA must ensure that diverse scientists are represented in its science and educational initiatives in STEM.

EPA should implement and expand its own 2016 Plan to increase access to results of EPA-funded scientific research. We must build a more complete, "whole fabric" understanding of health effects of environmental exposures to chemicals, and put some special focus on understanding overlapping threats as well as include diverse cultural perspectives, valuing the special knowledge held by communities.

REFERENCES

- 1 Schulz, Amy J, Ments, GB, Sampson, Natalie, Ward, M, Anderson, R, deMajo, R, Isreal, BA, Lewis TC, Wilkins, D. Race and the distribution of social and physical environmental risk: a case example from the Detroit Metropolitan Area. DuBois Rev.(2016). doi:10.1017/ S1742058x16000163.
- 2 Morello-Frosch, R. et al. Environmental Chemicals in an Urban Population of Pregnant Women and Their Newborns from San Francisco. Environ. Sci. Technol.50, 12464-12472 (2016).
- 3 American Academy of Pediatricians. Chemical-Management Policy: Prioritizing Children's Health. Pediatrics127, 983 LP –990 (2011). 4 American College of Obstetrics and Gynocology. ACOG -Exposure to toxic environmental agents. Committee Opinion No. 575. American College of Obstetricians and Gynecologists. Obstet Gynecol 2013;122:931–5. (2013). Availableat: http://www.acog.org/Resources_And_ Publications/Committee_Opinions/Committee_on_Health_Care_for_Underserved_Wom-
- en/Exposure_to_Toxic_Environmental_Agents. (Accessed: 10th February 2014). 5 Di Renzo, G. C. et al.International Federation of Gynecology and Obstetrics opinion on reproductive health impacts of exposure to toxic environmental chemicals. Int. J. Gynecol. Obstet.131, 219–225 (2015).
- 6 The President's Council on Cancer. Reducing Environmental Cancer Risk: What We Can Do Now. (2008).
- 7 Frieden, T. R. A framework for public health action: the health impact pyramid. Am. J. Public Health100, 590-5 (2010)
- 8 Mohai, P., Lantz, P. M., Morenoff, J., House, J. S. & Mero, R. P. Racial and socioeconomic disparities in residential proximity to pollutingindustrial facilities: evidence from the Ameri-cans' Changing Lives Study. Am. J. Public Health99 Suppl 3, S649-56 (2009).
- 9 National Academies of Sciences Engineering and Medicine. Using 21st Century Science to Improve Risk-Related Evaluations. (The National Academies Press, 2017). doi: 10.17226/24635.
- 10 National Research Council Committee on improving risk analysis approaches used by the US EPA, N. R. C. B. on E. S. and T. N. R. C. D. on E. and L. S. Science and decisions: advancing risk assessment. (2009).
- 11 National Research Council. Phthalates and cumulative risk assessment: the task ahead. (2008).
- 12 Wilson, M. P. & Schwarzman, M. R. Toward a new US chemicals policy: rebuilding the foundation to advance new science, green chemistry, and environmental health. Env. Heal. Perspect117, 1202-1209 (2009).
- 13 Bernard, R. E. & Cooperdock, E. H. G. No progress on diversity in 40 years. Nat. Geosci.11, 292-295 (2018).

