

Advancing Environmental Justice: Response from the Ontario Society of Professional Engineers (OSPE)

Foundation 2: Assessing, Preventing and Addressing Environmental Racism

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The Ontario Society of Professional Engineers (OSPE) is a member-driven professional association that welcomes the entire engineering community to contribute knowledge, skills and leadership to help create a better future for our profession and society at large. Through our Equity, Diversity, Inclusion & Accessibility (EDIA) Task Force, OSPE is committed to working with industry, academia, and government to advance EDIA in the engineering profession and in engineering solutions.

1. Discussion Question: How would you define environmental racism in the context of a federal national strategy?

In answering this question, you may wish to think about:

- What does environmental racism mean to you? How would you describe this concept in your own words?
- If you're comfortable sharing, have any personal experiences or other factors shaped how you think about environmental racism?
- Are there characteristics of environmental racism in the Canadian context that are unique? These unique features may be important when describing environmental racism in Canada specifically.
- What aspects of environmental justice do you find particularly important or relevant?

From the perspective of the Ontario Society of Professional Engineers (OSPE), environmental racism is the systemic and disproportionate exposure of communities to environmental hazards, coupled with their historical exclusion from decision-making. It results in unequal access to clean air, safe drinking water, uncontaminated land, and resilient infrastructure. These inequities are rooted in social, economic, and political systems.

In Canada, it is reflected is in the persistent boil water advisories, inadequate waste management, and environmental degradation affecting many First Nations, Inuit, and Métis communities, as well as infrastructure gaps in rural and northern regions. In Canadian urban areas, like Toronto, racialized groups are disproportionately located close to industrial facilities that emit toxic pollutants.

Providing funding to STEM programs and career support for equity-deserving communities is of particular relevance to OSPE as we advocate for improving the engineering profession. Funding and career support for equity-deserving communities allows participation in technical, regulatory, and policymaking decisions influencing exposure to environmental hazards.

A federal strategy to address environmental racism must identify and mitigate environmental burdens, invest in equitable infrastructure, and ensure that historically excluded groups are meaningfully included in environmental decision-making.

2. Discussion Question: What are the key areas to focus on in preventing and addressing environmental racism? Are there roadblocks that are in the way or key challenges to pay attention to?

In answering this question, you may wish to think about:

- Are there success stories that can be learned from or specific challenges that could be considered?
- When environmental racism occurs, what does a just response look like? Are there
 alternatives to traditional compliance-based processes such as restorative justice,
 and/or community-led resolution processes?
- What can the federal government do about environmental racism? Are there any existing programs or tools that could help?
- What are the opportunities and/or barriers related to the involvement of community groups in environmental policy-making?
- How can the Government of Canada help Canadians, communities, and partners such as other governments, businesses, and organizations—prevent environmental racism? How can it support them in responding effectively when environmental racism occurs?
- What could the Government of Canada do to support embedding an anti-racism approach across environmental policy and decision-making?

Key areas of focus OSPE believes engineers can support to prevent and address environmental racism include:

Inclusive Decision-Making:

Engineering and environmental policy decisions must include meaningful participation from impacted communities. Early and continuous engagement builds trust, ensures local knowledge informs solutions, and leads to more equitable outcomes.

Data, Transparency, and Accountability:

Federal and provincial governments should improve data collection on environmental health outcomes by race, income, age, ability, years in Canada, and geography. Transparent reporting

allows engineers, policymakers, and communities to identify inequities and target interventions effectively.

Equitable Infrastructure and Planning:

Investments in clean water, safe housing, transportation, and energy infrastructure must prioritize historically underserved and marginalized communities. This would include designs that consider the needs of all people. Engineers play a key role in designing resilient, inclusive systems that protect all Canadians.

Challenges and Barriers:

- Limited community representation in technical and regulatory processes.
- Underfunded monitoring and enforcement in marginalized areas.
- Systemic bias in land-use planning and environmental assessment frameworks.
 - 3. Concluding question: Is there anything else you would like to add to contribute to the development of a national strategy for Canada

As Canada develops a national strategy to prevent and address environmental racism, OSPE emphasizes that engineering expertise must be integral to designing equitable, evidence-based solutions. Engineers have a duty to protect public safety and the environment, and are uniquely positioned to apply technical knowledge, systems thinking, and innovation to contribute to environmental justice.