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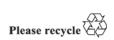
Visit to Canada

Report of the Special Rapporteur on the implications for human rights of the environmentally sound management and disposal of hazardous substances and wastes*, **

Summary

The Special Rapporteur on the implications for human rights of the environmentally sound management and disposal of hazardous substances and wastes, Baskut Tuncak, visited Canada from 24 May to 6 June 2019. The present report contains his findings and recommendations to the Government of Canada and Canadian business enterprises.

^{**} The present report was submitted after the deadline in order to reflect recent developments.





^{*} The summary of the report is being circulated in all official languages. The report itself, which is annexed to the summary, is being circulated in the language of submission only.

Annex

Report of the Special Rapporteur on the implications for human rights of the environmentally sound management and disposal of hazardous substances and wastes on his visit to Canada

I. Introduction, background and context

- 1. The Special Rapporteur on the implications for human rights of the environmentally sound management and disposal of hazardous substances and wastes, Baskut Tuncak, expresses his most sincere gratitude to the Government of Canada for the invitation to carry out the visit and for the full support and collaboration extended to him. He thanks all the individuals and organizations he met in Canada for sharing their thoughts and information on the struggles, challenges and opportunities they face in improving the protection of human rights in the context of exposure to hazardous substances and wastes (toxics).¹
- 2. The Special Rapporteur visited Ottawa, Toronto, Asubpeeschoseewagong Netum Anishinabek (also formerly known as Grassy Narrows First Nation), Aamjiwnaang First Nation, Sarnia, Fort McMurray, Edmonton, Vancouver and Montreal, where he met representatives of the federal Government and their representatives from the Ontario, Quebec, Alberta and British Columbia governments. He met with indigenous peoples' representatives and elders, civil society representatives, defenders, ² academics, youth representatives and representatives of the business community.
- 3. The Special Rapporteur is grateful to all who took time and opened their doors to dialogue in order to participate in a cross-cutting debate on protecting the human rights of those affected by toxic exposure.

A. Implications of toxics for the human rights obligations of Canada

- 4. Canada has ratified or acceded to seven United Nations human rights treaties and therefore has numerous obligations in relation to the impacts on human rights of hazardous substances and wastes. Under these treaties, Canada has the obligation to protect, respect and fulfil the human rights to life and dignity, health, security of the person and bodily integrity, safe food and water, adequate housing, safe and healthy working conditions, among others. Canada has obligations regarding the rights to information, participation, access to justice and remedies, and specific obligations regarding the rights of indigenous peoples, children, people of different genders, workers, minorities, migrants and persons with disabilities, among other vulnerable groups, as discussed below. These are all underpinned by the fundamental principle of non-discrimination.
- 5. Together, these rights and obligations create a duty for Canada to prevent exposure to toxic and otherwise hazardous substances. The only way to protect against violations of the above-mentioned human rights is to prevent exposure.³ This is a fundamental obligation that

Consistent with the previous reports of the current mandate holder and those of his predecessors, hazardous substances and wastes are not defined strictly; they include, inter alia, toxic industrial chemicals and pesticides, pollutants, contaminants, explosive and radioactive substances, certain food additives and various forms of waste. For ease of reference, the Special Rapporteur refers to hazardous substances and wastes as "toxics" and, therefore, in the present report, the term "toxics" (or "toxic substances") should be understood to also include non-toxic but hazardous substances and wastes.

² www.ohchr.org/en/issues/srhrdefenders/pages/defender.aspx.

³ A/74/480.

rests with the State. 4 However, businesses too have critical responsibilities to prevent exposure.

B. Canadian businesses and human rights

- 6. All business enterprises in Canada have responsibilities to respect human rights. In fulfilling these responsibilities, business enterprises should carry out robust due diligence in their supply chains and business relationships in order to identify and assess the impacts of toxic exposure and ensure prompt and accurate public reporting.⁵
- 7. During his mission, the Special Rapporteur focused on the extractive industries, in particular those involved in mining metals and oil sands and in constructing oil and gas pipelines, and on the chemical industries, including those using pesticides in agriculture. Over 50 per cent of multinational mining companies are based in Canada. 6 In 2015, agriculture and agribusiness, including food processing, contributed to approximately 2.6 per cent of the gross domestic product of Canada.

C. Cooperation, collaboration and shared jurisdiction

- 8. Canada has taken positive steps to increase collaboration between relevant authorities to protect the human rights of those exposed to toxics. Federal and provincial jurisdictions overlap in important areas, namely health, the environment and agriculture. Health Canada and Environment and Climate Change Canada share responsibilities for many toxic chemicals under the Canadian Environmental Protection Act, 1999. This is a good practice that other States may wish to emulate. Other examples of cooperation include the Chemicals Management Plan, which brings existing federal chemical programmes together under a single strategy. Strengthened collaboration between various government bodies can be leveraged to address intersectional inequalities in accessing rights in relation to toxic exposure.
- 9. In some respects, discussed below, the flexibility given to provinces and territories to set standards more stringent than the federal requirements has reduced actual and potential exposure to toxic substances. For example, the legally binding and more stringent air pollution limits in certain provinces illustrate the potential positive role of provincial autonomy.
- 10. The fact that jurisdiction is shared by the federal, provincial and territorial authorities has also created challenges, however. One example is the jurisdictional quagmire faced by indigenous peoples, whose reserves often fall between the cracks of federal and provincial jurisdiction, posing a risk of unregulated toxic exposure. For example, throughout Canada, the provincial drinking water quality standards are not applicable on reserves and the federal standards, which have yet to be set, are not legally binding. Jurisdictional separation is not an excuse for shortcomings by the Government in taking prompt action to address toxic exposure.
- 11. The active participation of Canada in international forums on toxics is welcome. Canada has ratified all international treaties on chemicals and wastes and co-chairs the intersessional process initiated by the International Conference on Chemicals Management to prepare recommendations for the implementation beyond 2020 of the Strategic Approach to International Chemicals Management, a non-binding global policy framework on toxic chemicals and wastes.

⁴ Ibid.

⁵ Ibid.

⁶ Submission by the Assembly of First Nations (2019).

www.canada.ca/en/health-canada/corporate/about-health-canada/accountability-performance-financial-reporting/evaluation-reports/evaluation-phase-chemicals-management-plan-2011-2012-2015-2016.html#exsum.

D. Implementation of international obligations

- 12. The Canadian Charter of Rights and Freedoms, the Canadian Human Rights Act and provincial and territorial human rights codes form the main national human rights framework. The Canadian Human Rights Commission was established by the Canadian Human Rights Act. As discussed below, these instruments, the various courts and tribunals that make decisions in relation to them and the Commission are the foundation for addressing discrimination related to the disproportionate impacts of toxic exposure.
- 13. The Canadian Human Rights Commission faces various challenges, however, including limited public awareness of available avenues for filing complaints and a limited mandate to handle human rights issues relating to discrimination. Therefore, with regard to human rights violations or abuses linked to toxics, the Commission is hindered from offering much-needed services.
- 14. A concern that was expressed repeatedly was that Canada does not pay appropriate attention to the implementation of relevant international obligations and recommendations. Various recommendations of United Nations human rights mechanisms, including on the justiciability of economic, social and cultural rights, have not been cohesively implemented. While the international human rights obligations of Canada may be implemented in law and policy, economic, social and cultural rights are not directly actionable in Canadian courts. Furthermore, insufficient funding at the provincial, territorial and municipal levels of government to strengthen implementation of these rights poses a hindrance. Thus, the rights to health, to safe water and food, to adequate housing, to safe and healthy working conditions, among other rights implicated by toxics, do not appear to be directly actionable under Canadian law.
- 15. Reports cited the tendency of the Government to focus on reporting obligations at the expense of comprehensive planning, assessment and action on human rights recommendations. The intergovernmental Continuing Committee of Officials on Human Rights has reportedly not consistently followed up on the practical implementation of recommendations. ¹⁰ The Special Rapporteur notes that the Federal-Provincial-Territorial Ministers Responsible for Human Rights met in 2017, for the first time in nearly 30 years. Furthermore, environmental rights do not feature prominently in the mandate of the Canadian Human Rights Commission. Consequently, the Special Rapporteur considers that the Government must strengthen its legal and institutional frameworks and mechanisms to implement all of its obligations under international human rights law.
- 16. As discussed below, the Canadian Environmental Protection Act and various government plans and programmes offer opportunities to further integrate human rights protection into the Canadian legal framework.

II. Rights to life, health and bodily integrity

- 17. Pollution and exposure to toxic chemicals threaten the right to life and a life with dignity, as environmental degradation threatens or poisons individuals and communities, poses health challenges and erodes opportunities to maintain bodily integrity.¹¹
- 18. Canada has taken steps in several areas to implement its duty to prevent exposure. One example relates to air pollution, which accounts for millions of premature deaths globally. ¹² Air quality in Canada has improved by some metrics in recent years. ¹³ For example, the phasing out of coal-based power plants in Ontario has had a positive impact. ¹⁴

⁸ E/C.12/CAN/CO/6.

⁹ Ibid.

 $^{^{10}\} A/HRC/22/50/Add.1,\ para.\ 12,\ and\ E/C.12/CAN/CO/4-E/C.12/CAN/CO/5,\ para.\ 12.$

¹¹ A/74/480.

www.who.int/health-topics/air-pollution#tab=tab_1.

www.canada.ca/en/environment-climate-change/services/environmental-indicators.html. See also https://laws-lois.justice.gc.ca/eng/regulations/SOR-2016-151/index.html.

¹⁴ www.ontario.ca/page/end-coal.

Canada has also taken action to prevent exposure to other substances of concern. For example, since the 1970s, various measures have contributed to a 90 per cent reduction in mercury emissions.¹⁵

- 19. The recent regulations restricting the use and export of asbestos¹⁶ and collaborative initiatives to protect workers from toxic exposure¹⁷ are notable.
- 20. The efforts of Canada to better understand the nuanced ways in which early-age exposure to toxics can affect health are encouraging. As has often been said, children are not little adults. The impacts of exposure to toxics during sensitive periods of development are unique and multifaceted. The silent pandemic of diseases and disabilities linked to childhood exposure adversely affects human rights at various stages of life, with profound economic costs, including in terms of health care and lost productivity.
- 21. Despite these efforts, problems persist. Canada had the second-highest number of known mining accidents during the period 2007–2017, a significant increase over previous years. Such accidents display only one avenue through which the rights of workers and nearby communities are threatened and, in certain instances, ignored.
- 22. The people and peoples of Canada are chronically exposed to a multitude of toxic substances; this can and should be prevented. Chronic exposure to various hazardous substances in Canada contributes tremendously to premature deaths and numerous diseases and disabilities. For example, exposure to just three anthropogenic air pollutants prematurely kills an estimated 14,600 people annually in Canada. In 2015, urban air pollution, including exposure to fine particulate matter (PM2.5), accounted for 7,712 deaths and to health-related and well-being-related costs estimated at 36 billion Canadian dollars (Can\$).
- 23. Air pollution poses significant health risks to children in Canada, including adverse pregnancy outcomes in mothers and respiratory health problems.²¹ One study has found that vehicle emissions contribute to about 20 per cent of childhood asthma cases.²² Furthermore, studies suggest that there is a link between an increased risk of early childhood cancers and prenatal exposure to ambient air pollution.²³
- 24. In 2011, occupational exposure to toxics accounted for 3.9–4.2 per cent of cancer cases, a significant contribution to the cancer burden of Canada.²⁴ A 2018 study in British Columbia found that cancer caused more than 86 per cent of firefighter deaths and that firefighters were often exposed to toxic carcinogens from fire sites.²⁵ Another study found strikingly high rates of acute myeloid leukaemia in areas highly populated by industrial

¹⁵ www.ourcommons.ca/DocumentViewer/en/42-1/INAN/meeting-155/evidence.

https://pollution-waste.canada.ca/environmental-protection-registry/regulations/view?id=150.

www.canada.ca/en/health-canada/programs/consulting-integrated-strategy-protection-canadian-workers-exposure-chemicals.html.

https://gridarendal-website-live.s3.amazonaws.com/production/documents/:s_document/371/ original/RRA_MineTailings_lores.pdf?1510660693, p. 27.

http://publications.gc.ca/collections/collection_2018/sc-hc/H144-51-2017-eng.pdf; http://publications.gc.ca/collections/collection_2019/sc-hc/H144-51-2019-eng.pdf; www.canada.ca/en/health-canada/services/air-quality/health-effects-indoor-air-pollution.html.

²⁰ www.iisd.org/story/costs-of-pollution-in-canada/.

Samuel Koranteng, Alvaro R. Osornio Vargas and Irena Buka, "Ambient air pollution and children's health: a systematic review of Canadian epidemiological studies", *Paediatrics and Child Health*, vol. 12, No. 3 (March 2007), pp. 225–233.

www.vchri.ca/articles/2019/07/03/1-5-new-cases-childhood-asthma-canada-are-caused-traffic-pollution; Pattanun Achakulwisut and others, "Global, national, and urban burdens of paediatric asthma incidence attributable to ambient NO₂ pollution: estimates from global datasets", *The Lancet Planetary Health*, vol. 3, No. 4 (April 2019).

²³ Éric Lavigne and others, "Maternal exposure to ambient air pollution and risk of early childhood cancers: a population-based study in Ontario, Canada", *Environment International*, vol. 100 (March 2017), pp. 139–147.

www.occupationalcancer.ca/wp-content/uploads/2019/09/OCRC_National-Burden-Report_2019.pdf.

www.thesafetymag.com/ca/topics/occupational-hygiene/millions-of-canadians-exposed-to-cancer-causing-agents-at-work/184489.

facilities, including Sarnia and Hamilton, well above the national average.²⁶ Canadians continue to be exposed to pesticides that are banned in other countries for health and environmental reasons but that are still in use in Canada.

- 25. The environmental health laws of Canada do not adequately protect health. Canada does not have national legally binding ambient air pollution standards and some provincial laws offer considerable flexibility for industries to develop their own standards, for example in Sarnia, Ontario. This flexibility impedes the enforcement of health-based standards and accountability for violations. For example, between 2010 and 2014 the oil sands industry contributed to some substances being in the air in concentrations exceeding provincial health thresholds, elevating the likelihood of adverse health impacts.²⁷ Notable ongoing efforts by the Government include supporting indigenous community-led initiatives and contributing to data generation through air quality and odour investigations.
- 26. While the situation is not particular to Canada alone, there is increasingly a need to formulate binding caps on ambient pollution. An opportunity for taking corrective action has been presented through the review of the Canadian Environmental Protection Act, which could mandate ministers to establish binding caps on ambient air pollution and enact regulations to safeguard water quality.²⁸ This would contribute towards addressing acute air pollution in hotspots. Failing to consider this, a province may remain within the provincial air quality levels yet communities in hotspots suffer inordinately higher levels of pollution than the general population, posing heightened risks to their life and health.
- 27. The Canadian Environmental Protection Act unfortunately requires exposure to be factored into assessments to designate substances as "toxic", which manipulates classification of hazardous substances and denies the public its right to know.²⁹ Where substances are determined to be toxic at an international level, such as by the European Union or the Organization for Economic Cooperation and Development (OECD), the Government should implement interim measures, such as preliminary bans, to expedite exposure reduction.
- 28. Contamination from the extractive industries, including the massive tailings ponds in Alberta, which could seep into local water supplies, is of concern. Local communities reported limitations in accessing traditional foods or water sources, citing sickened animals, contaminated meat and mutations in fish. Despite apparent adherence to regulations, evidence confirms the claims of local communities, including regarding access to food and water. For example, despite compliance with the Fisheries Act, 76 per cent of metal mines have confirmed effects on fish, fish habitat or both. Of these mines, 92 per cent confirmed at least one effect of a magnitude that may be indicative of a higher risk to the environment.³⁰
- 29. Finally, Canadians experience numerous health problems, including cancers, reproductive health issues and behavioural and developmental challenges linked to childhood exposure to toxics.³¹ For example, children ingest "acceptable" traces of harmful pesticides in food.³² Children are also exposed to air pollution such as particulate matter from phthalates in fragrances, volatile organic compounds in cleaning products and other consumer products at home, at school and outdoors.³³ It is widely acknowledged that

Feras M. Ghazawi and others, "Analysis of acute myeloid leukemia incidence and geographic distribution in Canada from 1992 to 2010 reveals disease clusters in Sarnia and other industrial US border cities in Ontario", *Cancer*, vol. 125, No. 11 (June 2019), pp. 1886–1897.

www.aer.ca/documents/reports/FortMcKay_FINAL.pdf.

²⁸ https://cela.ca/wp-content/uploads/2019/07/CEPA-CCSPA-Cosmetics-Regs-Briefing-Note.pdf.

²⁹ www.canada.ca/en/health-canada/services/chemical-substances/canada-approach-chemicals/risk-assessment.html.

³⁰ http://publications.gc.ca/collections/collection_2016/eccc/En14-64-2016-eng.pdf.

Michael Tyshenko and others, "Regulatory and nonregulatory strategies for improving children's environmental health in Canada", *Journal of Toxicology and Environmental Health*, vol. 10, Nos. 1–2 (December 2007), pp. 143–156; Nicole De Long and Alison Holloway, "Early-life chemical exposures and risk of metabolic syndrome", *Diabetes, Metabolic Syndrome and Obesity: Targets and Therapy*, vol. 2017, No. 10 (March 2017), pp. 101–109.

³² https://d36rd3gki5z3d3.cloudfront.net/wp-content/uploads/2018/09/Whats-In-Your-Lunch-Glyphosate-Report-Sept-2018.pdf?x19835.

https://environmentaldefence.ca/2018/04/23/asthma-rates-children-toxics/.

children are also exposed to other pollutants, including lead, mercury, dioxins, polychlorinated biphenyls, some solvents, polyhalogenated compounds such as flame retardants and so-called "forever chemicals", and that the list of adverse effects identified is growing steadily.³⁴

III. Non-discrimination

- 30. The Canadian Charter of Rights and Freedoms and legislation at all levels of government guarantee the right of every individual to equality and equal protection and benefit of the law without discrimination on various grounds.³⁵
- 31. While the constitutional recognition of protection against discrimination is applauded, such recognition does not appear to have served as a significant safeguard or recourse for disproportionately affected communities. A 2018 analysis found that health inequalities existed in respect of various socioeconomic indicators, including income, employment and occupational status, and that certain groups, such as indigenous peoples, immigrants and racial minorities, had less favourable health outcomes than the general population. ³⁶ In examining toxic exposure in Canada, the question of discrimination becomes simply unavoidable. Canada has not explicitly recognized the right to a healthy environment at the federal level, ³⁷ unlike Quebec and Ontario, as well as most countries in the world. That said, it has been argued that the Canadian Charter of Rights and Freedoms may be implicitly read to include environmental rights protections. As shown in recent climate change litigation, ³⁸ a constitutional provision would place Canada at the forefront of global efforts. In the interim, a provision under the Canadian Environmental Protection Act³⁹ would extend the application of the right to everyone in Canada.
- 32. Equality and non-discrimination require urgent attention in Canada. The present section focuses on those at risk of being left behind notwithstanding the general progress made. Different levels of discrimination intersect, exacerbating the problem and making it necessary to consider the ways in which intersectional forms of discrimination manifest themselves in the impacts of toxic exposure.

A. Indigenous peoples

- 33. The fact that indigenous peoples in Canada have struggled for recognition of their human rights is nothing new. History has shaped the laws, policies and practices of Canada today regarding indigenous rights.
- 34. Many interlocutors spoke positively about the roles of the Truth and Reconciliation Commission and the National Inquiry into Missing and Murdered Indigenous Women and Girls in moving away from a sad history of cultural genocide and assimilation. ⁴⁰ The Government acknowledges the "unacceptable socioeconomic gap" that has resulted from the development of colonial structures, negatively affecting indigenous peoples in Canada, ⁴¹ and has begun to strengthen institutional frameworks.

https://opha.on.ca/OPHA/media/Resources/Resource%20Documents/boh_environmental_threats_summary_all.pdf?ext=.pdf.

³⁵ Canadian Charter of Rights and Freedoms, sect. 15; HRI/CORE/CAN/2019, in particular sect. IV.

³⁶ www.canada.ca/content/dam/phac-aspc/documents/services/publications/science-research/key-health-inequalities-canada-national-portrait-executive-summary/key_health_inequalities_full_report-eng.pdf.

 $^{^{37} \} www.ubcpress.ca/asset/9095/1/9780774824125.pdf.$

https://enjeu.qc.ca/justice-eng/.

www.ecojustice.ca/cepa-turns-20-its-time-to-modernize-canadas-cornerstone-environmental-law/; Niladri Basu and Bruce P. Lanphear, "The challenge of pollution and health in Canada", Canadian Journal of Public Health, vol. 110, No. 2 (April 2019), pp. 159–164; submission by Lynda Collins (2019)

⁴⁰ http://nctr.ca/reports2.php; www.mmiwg-ffada.ca/final-report.

⁴¹ HRI/CORE/CAN/2019.

- 35. The struggle of indigenous peoples across Canada has been harder than has generally been acknowledged. Indigenous peoples face several more challenges than the rest of the population: higher poverty rates, greater food insecurity, greater incidence of inadequate living conditions, higher incarceration rates, lower levels of education and higher health inequalities. ⁴² The invisible violence inflicted by toxics is an insidious burden disproportionately borne by indigenous peoples in Canada.
- 36. Emblematic is the mercury poisoning of the Grassy Narrows First Nation and the Wabaseemoong (Whitedog) Independent Nations. From 1963 to 1970, a pulp and paper mill released several tons of highly toxic mercury into the water, contaminating the English River and the Wabigoon River, including the fish and game these peoples traditionally depended upon. A 2016 study found mercury levels to be 130 times higher in the river sediment near the mill site than immediately upstream. A subsequent assessment of the soil and groundwater at the site revealed a continued presence of elevated levels of mercury, igning credence to claims that those communities were still at risk of exposure due to the failure to remediate contamination for over 50 years (see sect. IV below).
- 37. Mercury exposure poses various health risks, especially to fetuses and to children, whose developing nervous systems are extremely sensitive. ⁴⁶ Over 58 per cent of the community members examined have or are suspected of having Minamata disease, a serious neurological disease resulting from mercury exposure. ⁴⁷ Socioeconomic impacts include the destruction of fisheries, tourism and related industries, and severe impacts on hunting and gathering, forcing changes in modes of sustenance and negatively affecting people's culture and sense of pride. ⁴⁸ Access to safe water and nutritious food has been a persistent problem. Furthermore, communities have reported delays in the delivery of effective remedies, lack of funding and inadequate political will to secure a dignified life for them and future generations. ⁴⁹
- 38. The health risks posed to indigenous peoples by the multibillion-dollar oil sands industry are also of concern. The situations at Fort McMurray, Fort MacKay and Fort Chipewyan paint a disturbing picture of the negative health outcomes of the oil sands (i.e., tar sands), outcomes that were not properly investigated for years, despite increasing evidence that the health of local communities was being affected. The alarming health trends recorded at Fort Chipewyan were raised repeatedly. The oil sands situation cannot be divorced from the troubling Trans Mountain Pipeline Expansion Project, which has been strenuously opposed by many. Landfills, incinerators and waste disposal sites are often closest to indigenous reserves. For example, concerns have been expressed relating to the Swan Hills hazardous waste treatment centre, where highly toxic polychlorinated biphenyls from around Canada are incinerated.
- 39. The situation of the Aamjiwnaang First Nation in Sarnia is profoundly unsettling. Deeply connected with their land, the residents on the reserve have been invaded by industry as far back as the 1940s. They are now almost entirely surrounded by over 60 industrial facilities whose presence creates physiological and mental stress among community members because of the risk of impending explosions or other disasters and because of

www.canada.ca/content/dam/phac-aspc/documents/services/publications/science-research/key-health-inequalities-canada-national-portrait-executive-summary/key_health_inequalities_full_report-eng.pdf; A/HRC/39/11, para. 8.

www.canada.ca/en/indigenous-services-canada/news/2020/04/the-government-of-canada-and-asubpeeschoseewagong-netum-anishinabek-grassy-narrows-first-nation-sign-a-framework-agreement-to-build-a-mercury-care-.html.

http://docs.assets.eco.on.ca/reports/environmental-protection/2017/Good-Choices-Bad-Choices-03.pdf.

www.ourcommons.ca/DocumentViewer/en/42-1/INAN/meeting-155/evidence.

⁴⁶ Ibid

⁴⁷ http://docs.assets.eco.on.ca/reports/environmental-protection/2017/Good-Choices-Bad-Choices-03.pdf.

⁴⁸ www.ourcommons.ca/DocumentViewer/en/42-1/INAN/meeting-155/evidence.

⁴⁹ Ibid

https://landuse.alberta.ca/Forms%20and%20Applications/RFR_ACFN%20Reply%20t o%20Crown%20Submission%206%20-%20TabD11%20Report_2014-08_PUBLIC.pdf.

chronic exposure to unquestionably poisonous substances. Sarnia, one of the most polluted places in Canada, has been dubbed "chemical valley".

- 40. Various interlocutors acknowledged that existing regulations do not protect the health of the Aamjiwnaang. Improvements can be made in terms of investigating the health impacts, conducting proper monitoring and enforcing existing standards. Risk assessments do not fully take into account the cumulative health impacts. The environmental injustice to which the Aamjiwnaang are subjected is an ongoing tragedy, the legacy of land use planning that would not be allowed today. Encouragingly, the community and companies have increased cooperation and engagement in recent years, including through financing for the communities to hire their own environmental scientists to facilitate meaningful participation.
- 41. Despite suffering from greater exposure to hazardous substances, indigenous peoples face considerable challenges in accessing quality health care in comparison to non-indigenous peoples in Canada.⁵¹ Sixty-two percent of Grassy Narrows First Nation members, those living on the reserve, report experiencing barriers to health care compared to those living off reserve (38 per cent).⁵² Only through robust campaigns have strides been made to establish a primary health-care facility.⁵³ It is harder to access adequate health care on reserves than in other parts of Canada. Challenges include remoteness, physical inaccessibility of health centres and perceived racial discrimination when accessing health-care facilities. This different reality experienced by indigenous peoples reflects the systematic lack of consideration given to their particular challenges in environmental health policies. Policies should pursue funding for all public services on reserves, including for health care, water, food, housing, sanitation and waste management, and not stand in for piecemeal steps that do not decisively and comprehensively address the rights of indigenous peoples.
- 42. Measures to address the cumulative impact of exposure to toxic chemicals must be informed by an understanding of the deep connection that indigenous peoples have with their land and water. Indigenous peoples' reliance on natural resources for food, medicine, culture, identity, knowledge and the economy must be considered in any assessment of risks and impacts. For example, the aerial spraying of pesticides such as glyphosate on indigenous territories and lands poses serious, multidimensional threats to indigenous peoples' lives, health and environment.⁵⁴
- 43. The Special Rapporteur was informed that efforts were being taken through remediation, planning for the closure of projects and impact assessments, but there appears to be room for improvement. For example, while illegal dumping off reserve (i.e., on provincial lands) is subject to fines of hundreds of thousands of dollars under provincial laws, the maximum fine for illegal dumping on reserves is Can\$100.55
- 44. The Aamjiwnaang First Nation raising concern about the shrinking of their ancestral grounds due to the encroachment of petrochemical processing plants and indigenous communities agitating for free, prior and informed consent regarding the Trans Mountain Pipeline Expansion Project serve as just two examples of how existing and proposed megaprojects crisscross the lands of indigenous peoples. They do not, however, simply represent examples of straightforward opposition to economic development, as some critics have implied. Instead, they illustrate an underlying trend of duty bearers' failure to resolve issues relating to indigenous rights and titles unless forced to do so through lengthy and costly litigation. In the supplementation of the process of the proc

⁵¹ Submission by the Government of Canada (2019).

⁵² Submission by Asubpeeschoseewagong Netum Anishinabek (May 2018).

www.ourcommons.ca/DocumentViewer/en/42-1/INAN/meeting-155/evidence.

⁵⁴ Submission by the Traditional Ecological Knowledge Elders (2019).

https://laws-lois.justice.gc.ca/eng/regulations/C.R.C.,_c._960/page-1.html#h-599822; www.woodwardandcompany.com/wp-content/uploads/pdfs/2016-09-20-Contaminated_Sites_on_First_Nation_Lands-Final.pdf.

⁵⁶ Submission by the Union of British Columbia Indian Chiefs (2019).

⁵⁷ https://davidsuzuki.org/story/pipeline-actions-signal-need-for-true-reconciliation/.

B. Income, race and ethnicity

- 45. Poverty contributes to vulnerability both in terms of greater exposure to toxics and of less power to take action to obtain protection from such exposure.⁵⁸ Poverty, health and the environment intersect in especially prominent ways when it comes to addressing water and air pollution.⁵⁹ More than 1 million low-income Canadians live within one kilometre of a major source of industrial pollution, which results in elevated risks of hospitalization for respiratory and cardiovascular illnesses.⁶⁰ The burden of such disproportionate exposure has plagued poor communities. A 2003 study in Ontario found a correlation between exposure to particulate matter and sulphur dioxide and income level.⁶¹ A 2008 mapping of poverty and pollution in Toronto showed that 17 neighbourhoods with high levels of air pollutants also had poverty rates above the national average.⁶² The concentration of poverty in Hamilton and health inequalities between different neighbourhoods, including with respect to air pollution, amplify social deprivation.⁶³
- 46. Inequality among low-income Canadians regarding their exposure to toxics must be considered in the context of complex and overlapping inequalities that, together, form a cumulative barrier to the fulfilment of rights. Approximately 20.8 per cent of racialized (non-Caucasian) people have low incomes compared to 12.2 per cent non-racialized people. ⁶⁴ According to the 2016 census, about 81 per cent of people on reserves had median incomes below the low-income measure. ⁶⁵ Indigenous and racialized people in Canada tend to be locked in a vicious, intergenerational cycle of poverty, ⁶⁶ to which their disproportionate exposure to toxic substances contribute. For example, the First Nations Food, Nutrition and Environment Study confirms that indigenous peoples in some geographic areas have higher levels of heavy metals in their blood than the general Canadian population. ⁶⁷ Exposure to heavy metals not only leads to reduced income when diseases or disability become manifest, but also to well-documented cognitive and behavioural impacts that reduce earning potential across lifetimes.
- 47. Environmental injustice persists in Canada. A significant proportion of the population in Canada experiences racial discrimination, with indigenous and racialized peoples being worst affected. ⁶⁸ The Canadian Human Rights Commission recently raised concerns of "environmental racism" to the Human Rights Council, explaining that "landfills, waste dumps and other environmentally hazardous activities are disproportionately situated near neighbourhoods of people of African descent, creating serious health risks". ⁶⁹ Garbage dumps are disproportionately situated in African-Canadian communities in Nova Scotia. ⁷⁰ The disproportionate exposure to pollution is worsened by pre-existing and long-standing socioeconomic inequalities resulting from the colonial legacy of Canada. Outside Canada,

⁵⁸ www.ipcc.ch/site/assets/uploads/2018/03/SREX-Chap2_FINAL-1.pdf.

 $^{^{59}\} www.who.int/tobacco/research/economics/publications/oecd_dac_pov_health.pdf.$

⁶⁰ https://secure.cihi.ca/free_products/UrbanPhysicalReport2012EN_web.pdf.

Murray M. Finkelstein and others, "Relation between income, air pollution and mortality: a cohort study", *Canadian Medical Association Journal*, vol. 169, No. 5 (September 2003), pp. 397–402. See also www.euro.who.int/__data/assets/pdf_file/0003/78069/E93670.pdf.

⁶² https://cela.ca/wp-content/uploads/2019/07/633B_PWSES_TOfacts.pdf.

https://macsphere.mcmaster.ca/bitstream/11375/14827/1/fulltext.pdf.

⁶⁴ https://colourofpoverty.ca/wp-content/uploads/2019/03/cop-coc-fact-sheet-2-an-introduction-to-racialized-poverty-3.pdf.

⁶⁵ Ibid.

Submission by the Canadian Centre for Policy Alternatives (2019); www.policyalternatives.ca/sites/default/files/uploads/publications/National%20Office/2019/12/Canada%27s%20Colour%20Coded%20Income%20Inequality.pdf.

⁶⁷ www.fnfnes.ca/docs/FNFNES_draft_technical_report_Nov_2__2019.pdf.

www.environicsinstitute.org/docs/default-source/project-documents/race-relations-2019-survey/race-relations-in-canada-2019-survey---final-report-english.pdf?sfvrsn=ef8d61e3_2.

⁶⁹ www.upr-info.org/sites/default/files/document/canada/session_30_may 2018/chrc upr30 can e main.pdf; A/HRC/36/60/Add.1, para. 63.

⁷⁰ Submission by Ingrid Waldron (2019).

communities in low- and middle-income countries raise similar concerns regarding the harmful effects of Canadian extractive industries (see sect. V below).⁷¹

- 48. Systemic racism has contributed to the overrepresentation of indigenous and racialized people in the criminal justice system.⁷² Furthermore, as they live on the fringes of protection from toxics, indigenous and racialized communities are more likely to be exposed because they lack enforceable environmental rights, typically do not have the political or financial means to challenge powerful polluting industries and often face societal pressures to accept such industries because of the need for employment, among other factors. Adding insult to injury, "lifestyle choices" associated with poverty are cited to dismiss, discredit and even blame victims of discriminatory toxic exposure who develop diseases and disabilities, instead of placing the burden on polluting actors to demonstrate that they did not contribute to adverse health impacts.
- 49. For example, some indigenous peoples living amid the oil sands in Alberta are in relative poverty, which begs the question as to whether the oil sands industry is really as beneficial to the local communities as has been postulated.⁷³
- 50. There are very limited mappings of the intersection of pollution and poverty in Canada. The commitment of Ontario to developing an online platform for public community reporting is welcome.⁷⁴ While civil society has tried to fill that gap,⁷⁵ that has not sufficed and a parliamentary committee has recently called for mandatory, robust mapping at the federal level to support the identification of hotspots requiring priority attention. The Canada Centre for Mapping and Earth Observation could be helpful in such an initiative.

C. Age

- 51. Every child has the right to life and Canada must ensure to the maximum extent possible the survival and development of the child.⁷⁶ Canada has an obligation to prevent childhood exposure to toxics, including through consumer products and contaminated air, water and food, to ensure the full realization of children's rights.⁷⁷
- 52. Children are more likely than adults to absorb toxic contaminants. Children living in poverty, in substandard housing conditions and with lower nutrition levels, are even more prone. Rehildren in indigenous communities, which tend to be relatively poor, face elevated risks of exposure compared to children in non-indigenous communities. Studies have revealed that in northern Canada children in indigenous communities, whose diet relies heavily on wild foods, had higher blood mercury levels compared with other populations. Moreover, the impact of toxic chemicals on malnourished children is even more acute than on children with proper nutrition. Identifying and protecting children whose bodies bear such enormous toxic burdens must be a priority.
- 53. Canada has an obligation to provide every child the opportunity to be heard. All children capable of forming their own views should be supported to express those views in

⁷¹ CERD/C/CAN/CO/21-23, paras. 21–22.

www.justice.gc.ca/eng/rp-pr/jr/jf-pf/2019/may01.html.

⁷³ Brenda L. Parlee, "Avoiding the resource curse: indigenous communities and Canada's oil sands", World Development, vol. 74 (October 2015), pp. 425–436.

⁷⁴ Submission by the government of Ontario (2019); www.ontario.ca/page/open-default-new-way-forward-ontario.

⁷⁵ See https://cela.ca/wp-content/uploads/2019/07/633B_PWSES_TOfacts.pdf.

⁷⁶ Convention on the Rights of the Child, art. 6.

⁷⁷ A/HRC/33/41.

⁷⁸ www.cps.ca/en/documents/position/lead-toxicity.

Margo Lianne Greenwood and Sarah Naomi de Leeuw, "Social determinants of health and the future well-being of Aboriginal children in Canada", *Paediatrics and Child Health*, vol. 17, No. 7 (August–September 2012), pp. 381–384.

⁸⁰ Catherine McLean Pirkle, Gina Muckle and Melanie Lemire, "Managing mercury exposure in northern Canadian communities", *Canadian Medical Association Journal*, vol. 188, No. 14 (October 2016), pp. 1015–1023; submission by Keepers of the Athabasca (2019).

fulfilment of this right.⁸¹ From visiting communities in Canada such as Sarnia, where children are born "pre-polluted" and are exposed to toxic substances during crucial periods of development, before they can voice their views, it is clear that more efforts need to be made by the Government to ensure that every child is afforded the opportunity to fully enjoy his or her rights.

D. Gender

- 54. Discrimination based on gender is a crucial consideration in discussions on protection from toxic exposure. An improved focus on gender analyses of adverse health impacts is necessary for a gendered approach to addressing toxic exposure.
- 55. Environmental health policies in Canada inadequately address the root causes of the differential impacts on men and women, including the physical, biological, social and environmental factors, thereby running the risk of exacerbating inequality and discrimination. 82 Government programmes have identified the need for enhanced communication efforts focusing on women of childbearing age, including in the more northern areas of Saskatchewan, as well as in Manitoba, Ontario and Quebec. Such recognition is a positive step towards addressing the gender inequalities that persist and aggravate the impacts of toxic exposure across Canada.
- 56. Varying gender roles contribute to the differentiated burdens and impacts of toxic exposure.⁸³ Yet, the Canadian Environmental Protection Act inadequately factors this in, as male models for toxics exposure dominate research and various chemicals inordinately affecting women, including many endocrine-disrupting chemicals, are not classified as toxic.⁸⁴
- 57. The intrinsic hazards of toxic chemicals pose gendered risks, such as miscarriages and reduced sperm count, as well as various cancers. For example, the neurotoxic effects on children of heavy metals such as lead and mercury can differ by gender. ⁸⁵ In addition, consideration of the different levels of exposure between genders is necessary. For example, in Canada, men are more exposed to toxics such as asbestos (in the construction industry) ⁸⁶ and women to endocrine-disrupting chemicals in plastics, raising their relative risk to developing cancer and other health conditions. ⁸⁷ The exposure of female consumers to toxic chemicals in cosmetic products and the intense exposure, predominantly of female workers, at beauty salons offer further examples. ⁸⁸ Indigenous women endure some of the highest levels of exposure in Canada. ⁸⁹

⁸¹ A/HRC/33/41.

⁸² http://bccewh.bc.ca/wp-content/uploads/2012/05/2013 RethinkingWomenandHealthyLiving.pdf.

⁸³ Sarah Lewis and Dayna Nadine Scott, "Regulating toxics: sex and gender in Canada's chemicals management plan", Osgoode Legal Studies Research Paper Series (2014).

⁸⁴ See http://acsqc.ca/sites/default/files/feminist_statement_on_cepa.pdf; Sarah Lewis and Dayna Nadine Scott, "Regulating toxics".

www.ncbi.nlm.nih.gov/pubmed/16996054.

⁸⁶ www.carexcanada.ca/profile/asbestos-occupational-exposures; www.inspq.qc.ca/en/publications/ 1374.

⁸⁷ See www.saicm.org/Portals/12/documents/meetings/IP1/Beyond-2020-Women-and-chemical-safety-24-Jan-2017.pdf.

www.ncbi.nlm.nih.gov/pubmed/16996054; Ami R. Zota and Bhavna Shamasunder, "The environmental injustice of beauty: framing chemical exposures from beauty products as a health disparities concern", American Journal of Obstetrics and Gynecology, vol. 217, No. 4 (October 2017); Jessica S. Helm and others, "Measurement of endocrine disrupting and asthma-associated chemicals in hair products used by Black women", Environmental Research, vol. 165 (August 2018), pp. 448–458.

⁸⁹ www.afn.ca/uploads/files/rp-enviro_health_and_women.pdf; www.fnfnes.ca/docs/FNFNES_draft_technical_report_Nov_2__2019.pdf.

E. Workers

- 58. Unquestionably, some workers experience a unique and elevated risk of chemical exposure. In Canada, occupational diseases and disabilities due to such exposure pose a major challenge to the fulfilment of workers' rights. Recent estimates show that, nationally, over 2.9 million workers are exposed to carcinogens and other hazardous substances at work, which is an underestimation. The exposure that many workers endure is much higher than the exposure levels of the general population. Often, for the substances in question, there is no safe level of exposure.
- 59. There remains significant opportunity for action, including on the intersectionality of occupational exposure for some subpopulations, 91 including persons of different genders, racialized persons, indigenous people and workers living in poverty, who are already in situations of vulnerability and are more likely to hold precarious positions than other workers. 92 All these factors further entrench their vulnerability to exposure to toxics.
- 60. The Chemicals Management Plan could help to better protect workers (see para. 8 above). Under the Plan, Canada does not recognize workers as a vulnerable population, despite workers being one of the groups most vulnerable to toxic chemicals. Furthermore, the Plan does not account for occupational exposure in risk assessments, which results in chemicals being misclassified as non-toxic because the general public is not exposed to the same degree as workers. While progress has been made to assess the risks posed by over 3,000 chemicals to the general public, the levels of exposure and corresponding risks to workers have not been adequately evaluated.
- 61. Many cases of occupational disease-related deaths remain unrecorded due to various challenges, including lack of data and of accurate health reports. ⁹⁵ The fact that diseases are often diagnosed decades after employment poses a significant challenge for victims seeking compensation, ⁹⁶ especially for latent occupational diseases such as mesothelioma, asbestosis and lung cancer, which result from asbestos exposure. ⁹⁷ Asbestos exposure is the leading cause of occupational death in Canada.
- 62. While health care is available and accessible to many in Canada, it can reduce individuals' motivation to pursue judicial remedies, which artificially lowers recorded incidences and does not contribute to improvements in prevention or accountability. In Canada, mesothelioma is a compensable disease, yet less than 50 per cent of potential claimants do not pursue their rights through reporting; they incorrectly believe that at the time they were exposed none of the duty bearers knew of asbestos' potential harm to workers. Without concerted efforts to raise awareness and provide support in accessing the justice system to pursue compensation, such victims' rights are left unfulfilled.

F. People and peoples outside Canada

63. The groups that are disproportionately affected by business activities in Canada⁹⁹ are the same groups subjected to the effects of these activities abroad. In these respects, Canada

⁹⁰ www.carexcanada.ca/CAREX_Health_Care_Package_Oct_2019.pdf.

⁹¹ www.canada.ca/en/health-canada/services/chemical-substances/consulting-future-chemicals-management-canada/what-we-heard-defining-vulnerable-populations.html.

 $^{^{92}\} www.lco\text{-cdo.org/wp-content/uploads/2013/03/vulnerable-workers-final-report.pdf.}$

www.canada.ca/en/health-canada/corporate/about-health-canada/accountability-performance-financial-reporting/evaluation-reports/evaluation-phase-chemicals-management-plan-2011-2012-2015-2016.html#exsum.

⁹⁴ Ibid.

⁹⁵ www.uregina.ca/business/faculty-staff/faculty/file_download/2019-Report-on-Workplace-Fatalities-and-Injuries.pdf.

⁹⁶ www.cia-ica.ca/docs/default-source/2015/215005e.pdf.

⁹⁷ Ibid

⁹⁸ http://cansav.ca/compensation; www.asbestos.com/mesothelioma/canada/.

⁹⁹ Committee on Economic, Social and Cultural Rights, general comment No. 24 (2017).

has a duty to ensure that Canadian businesses do not abuse the rights of victims in other countries, regardless of race, colour, nationality or other distinction. 100

- 64. One global trend is the export of toxic impacts from wealthier countries like Canada with relatively stronger environmental health protections to poorer countries with lower standards of protection. Exporting hazardous substances and wastes from developed countries to developing countries is a form of international environmental discrimination. ¹⁰¹ Through the action or inaction of the State and businesses, the rights of individuals and communities where such exposure takes place are not equally respected. Those most seriously affected are the poor, who often face inordinate challenges in obtaining recourse and pursuing protection. ¹⁰² Stricter regulations and the cost of managing such wastes in the country that generated it being higher than in the importing countries is no excuse for placing the safety and health of the populations in the destination country at risk. ¹⁰³
- 65. Various extraterritorial impacts of Canadian businesses activities on human rights in the context of toxics were raised, in addition to the impacts of Canadian businesses in Canada discussed in other parts of this report. An evaluation of these cases suggests that Canada does not fully uphold its obligations concerning the extraterritorial impacts of Canadian businesses, embodied in part through the failure to implement sufficient measures to ensure accountability for these companies in a vast number of cases. ¹⁰⁴ Certain Canadian companies are implicated in the intentional release of toxic waste, tailings dam failures, in the start of activities without the meaningful participation, let alone the free, prior and informed consent, of indigenous peoples and in other conduct resulting in the exploitation and abuse of human rights of workers and local communities (see sect. V below).

III. Rights to information, participation and free, prior and informed consent

A. Rights to information and participation

- 66. The right to information is crucial for protecting the human rights of all people. ¹⁰⁵ Information must be available and accessible in an appropriate and usable form, including to those most vulnerable. ¹⁰⁶
- 67. Non-personal health and safety information should never be confidential.¹⁰⁷ Various stakeholders, however, have reported the tendency for information to be withheld from the public to protect commercial interests.¹⁰⁸ For example, various interlocutors stressed that maintaining confidentiality of information in respect of the chemical properties and constituents of mixtures used in pesticide spraying hindered efforts to address the associated health and safety risks.
- 68. The legal framework should better empower the public to demand health- and safety-related information on hazardous substances from industry, and to ensure that such

¹⁰⁰ Ibid

Rozelia S. Park, "An examination of international environmental racism through the lens of the transboundary movement of hazardous wastes", *Indiana Journal of Global Legal Studies*, vol. 5, No. 2 (1998).

¹⁰² E/CN.4/2004/46 and Corr.1.

Laura A. Pratt, "Decreasing dirty dumping? A reevaluation of toxic waste colonialism and the global management of transboundary hazardous waste", William and Mary Environmental Law and Policy Review, vol. 35, No. 2 (2011).

E/CN.4/2003/56/Add.2, E/C.12/CAN/CO/6, A/HRC/38/48/Add.1, CERD/C/CAN/CO/19-20 and CRC/C/CAN/CO/3-4.

¹⁰⁵ A/74/480 and A/HRC/30/40.

¹⁰⁶ A/HRC/30/40.

¹⁰⁷ A/74/480 and A/HRC/30/40.

www.canada.ca/content/dam/eccc/documents/pdf/pded/cbi-flowchart/Confidential-business-information-approach.pdf.

information is made publicly available.¹⁰⁹ The Special Rapporteur notes that Toronto has passed the first "community right-to-know by-law", which obliges local business to disclose the toxic chemicals used in their processes.¹¹⁰

- 69. Canada has made certain positive steps to ensure the availability of health data. ¹¹¹ The Health Canada platform on maternal-infant research on environmental chemicals is contributing towards improved understanding of the impact of chemicals on the health of children and vulnerable populations. ¹¹² Ongoing research raises important questions about policies based on "acceptable" exposure levels for children, considering the impacts of even very low levels of toxic exposure. ¹¹³
- 70. The Special Rapporteur was encouraged to learn that 71 per cent of Canadian children understand complex environmental issues, including issues related to nuclear waste and air pollution, and that 81.5 per cent of children 12–17 years old feel confident to express their own ideas and opinions.¹¹⁴
- 71. Canada already generates data on health inequalities, recognizing their existence and increases in certain instances. Measures to address such inequalities include developing environmental policies and decision-making, monitoring, integrating an equity-sensitive approach, strengthening collaboration between environmental and health entities, concentrating more on exposure hotspots when implementing environmental laws, carrying out targeted interventions that address the needs of vulnerable populations, giving due regard to procedural rights in environmental matters and securing the participation of disadvantaged populations in decision-making processes.¹¹⁵
- 72. Unfortunately, no socioeconomic mapping has been done by the Government of the proximity of sources of exposure to toxics with indigenous peoples or others at elevated risk, such as low-income or minority communities. Disaggregated data, including economic and social indicators for ethnic minority groups, indigenous peoples and non-citizens, 116 consistently collected and maintained, would support monitoring and evaluation regarding actions to achieve environmental justice. 117 For example, comprehensive health studies have not been undertaken on all communities affected by the oil sands in Alberta by either the federal or the provincial authorities. That said, the Special Rapporteur notes, however, the attempt made by Alberta to conduct a comprehensive health study about a decade ago.
- 73. Initiatives such as the Northern Participant Funding Program, which supports the informed engagement of indigenous governments and other northerners in the environmental and socioeconomic assessment processes established under land claims agreements in three territories, are promising, as are similar programmes supporting indigenous participation in federal environmental assessments in the provinces.¹¹⁸ It may be useful to scale up such initiatives for socioeconomically disadvantaged populations and to implement them throughout Canada.
- 74. Neither the Canada Consumer Product Safety Act nor the Canadian Environmental Protection Act require producers to identify, on labels for non-food consumer products,

¹⁰⁹ A/74/480 and A/HRC/30/40.

¹¹⁰ Submission by Joanna Mestre (2019).

¹¹¹ A/74/480 and A/HRC/30/40.

www.canada.ca/en/health-canada/services/environmental-workplace-health/environmental-contaminants/human-biomonitoring-environmental-chemicals/maternal-infant-research-environmental-chemicals-mirec-study/findings.html.

Bruce Lanphear, "Low-level toxicity of chemicals: no acceptable levels?", PLOS Biology, vol. 15, No. 12 (December 2017).

www.canada.ca/content/dam/phac-aspc/documents/services/publications/science-research/key-health-inequalities-canada-national-portrait-executive-summary/key_health_inequalities_full_report-eng.pdf.

www.euro.who.int/__data/assets/pdf_file/0018/404640/WHO-report-SUMMARY-ENG-WEB.pdf?ua=1.

¹¹⁶ CERD/C/CAN/CO/21-23.

¹¹⁷ E/CN.4/2003/56/Add.2 and CERD/C/CAN/CO/21-23.

¹¹⁸ www.rcaanc-cirnac.gc.ca/eng/1545150205116/1547478360408.

substances that are carcinogenic or otherwise toxic.¹¹⁹ Without such information, consumers cannot fully realize their right to know the toxic properties of the products they purchase.¹²⁰ Reform of the Canadian Environmental Protection Act should include mandatory labelling of chemicals of concern¹²¹ on various consumer products, including cosmetics, to implement the right to know for all in Canada.

75. Reports of insufficient public participation in the review of the Canadian Environmental Protection Act, including of inadequate consideration of civil society input, are concerning. All stakeholders should have guaranteed participation in the formulation and implementation of environmental law, including the Canadian Environmental Protection Act. Furthermore, where a substance has been banned by other countries, citizen enforcement action should be envisioned so that members of the public can initiate a review of substances of concern – and call for enforcement when violations of the Canadian Environmental Protection Act occur, on a public interest basis and without the requirement to show specific actual environmental damage. Periodic reviews of the National Pollutant Release Inventory are also useful, upholding the principle of public participation.

B. Freedom of expression

- 76. The Special Rapporteur reiterates his utmost concern about repeated reports of harassment, prosecution and persecution of defenders of indigenous and environmental rights. 122 The Special Rapporteur heard of scientists discredited for highlighting the impacts of toxic industries, as well as threats, arrests and acts of intimidation of youth and elders exercising their rights to be heard and to freedom of expression. He was repeatedly told that community members do not feel free to express their health concerns for fear of not being protected and of suffering other negative consequences.
- 77. For example, hundreds of people were allegedly arrested for peacefully protesting against the proposed Trans Mountain Pipeline Expansion Project, some of whom received jail sentences as lengthy as five months. Indigenous women have reportedly gone missing after alleging health impacts from oil sands operations. The chilling effect of such actions can be telling of a trend to preserve the status quo. Moreover, Canadian businesses are repeatedly alleged to be implicated in attacks against human rights defenders outside Canada, which is of grave concern.

C. Free, prior and informed consent

- 78. Current constitutional protections of indigenous peoples' rights, including in relation to the duty to consult, do not adequately implement the standards for consultation and consent set out in the United Nations Declaration on the Rights of Indigenous Peoples. Canada should ensure that State and non-State actors cooperate in good faith with indigenous peoples and obtain their free, prior and informed consent when taking measures that may affect them, including for the storage or disposal of hazardous materials on their lands or territories.¹²³
- 79. It was appreciated that the federal Government and certain provinces had stated that they were working to improve adherence to the principle of seeking and obtaining the free, prior and informed consent of affected populations in Canada by moving beyond consultation towards partnership and collaboration with indigenous peoples. In November 2019, British Columbia passed landmark legislation developed with indigenous peoples' participation to

www.ourcommons.ca/Content/Committee/421/ENVI/Reports/RP9037962/envirp08/envirp08-e.pdf; https://cela.ca/wp-content/uploads/2019/07/CEPA-CCSPA-Cosmetics-Regs-Briefing-Note.pdf.

www.ourcommons.ca/Content/Committee/421/ENVI/Brief/BR8603235/br-external/BoydDavide.pdf

www.canada.ca/content/dam/eccc/documents/pdf/cepa/FollowUpCepaReport-eng.pdf.

¹²² Submission by the Union of British Columbia Indian Chiefs (2019).

¹²³ See articles 19 and 29 of the Declaration.

implement the United Nations Declaration on the Rights of Indigenous Peoples.¹²⁴ This is a tremendous achievement, and one to be emulated in other provinces and federally.

- 80. Indigenous peoples have had to make significant efforts to compel some project proponents to consult them and even greater efforts to compel the Government to carry out its duty. For example, indigenous and civil society organizations have repeatedly expressed concern about the fact that a pesticide categorized as probably carcinogenic (glyphosate) was applied by aerial spraying in and around indigenous peoples' reserves and traditional lands without consultation or consent. They have reportedly not received any response from the Government.
- 81. Various interlocutors highlighted that project proponents often do the bare minimum to fulfil their duty to consult, thus rendering indigenous peoples inadequately informed for decision-making processes. This has happened in respect of projects involving the following, among others: pesticides spraying in general and its impacts on workers, the environment, water and human health; the extractive industries operating in the Atlantic region; fracking, affecting the community of Penobsquis in New Brunswick; the Alton Gas project, where grass-roots leaders from the Mi'kmaq First Nation are concerned about the consequences of asserting their treaty rights; the Sisson Brook mine, in the area of the Nashwaak watershed, New Brunswick; the pulp and paper mill in Abercrombie, Nova Scotia; the impacts of dumping effluent into Boat Harbour on the Mi'kmaq reserve; and offshore drilling in the waters of the North Atlantic.
- 82. While in some cases consultation with indigenous peoples has improved, the example of the Muskrat Falls hydroelectric project has raised questions regarding the extent of such improvements. Pecifically, concerns were raised regarding the meaningful participation of two affected First Nations, the risk of methylmercury contaminating traditional foods and negatively affecting health, the unaddressed risk of dam failure and the flooding of sites containing toxic military waste. Pec
- 83. While Canada withdrew its objections to the United Nations Declaration on the Rights of Indigenous Peoples in 2016 and committed itself to its implementation, ¹²⁷ there is inadequate execution at the national level. The principle of seeking and obtaining the free, prior and informed consent of affected communities should be applied nationally. The Principles Respecting the Government of Canada's Relationship with Indigenous Peoples appear promising, ¹²⁸ yet further efforts are necessary, including by non-State actors. A positive example is provided by the Canadian Nuclear Safety Commission, which strives to better engage indigenous peoples, including through its Participant Funding Program. ¹²⁹ Initiatives such as the Indigenous Centre of Expertise for Cumulative Effects Assessment and Management present opportunities for action. ¹³⁰ In considering the implementation of the principle of seeking and obtaining free, prior and informed consent, including at the federal level, an "indigenous-informed relational approach" should be paramount. ¹³¹

IV. Access to justice and remedies

84. Every victim of a violation or an abuse of human rights related to toxic exposure has the right to justice and to an effective remedy. 132 This may include restitution, compensation,

www2.gov.bc.ca/gov/content/governments/indigenous-people/new-relationship/united-nations-declaration-on-the-rights-of-indigenous-peoples.

Submission by the Innu Nation (2019); www.muskratfallsinquiry.ca/files/Volume-1-Executive-Summary-Key-Findings-and-Recommendations-FINAL.pdf.

¹²⁶ Ibid. See also the submission by the Ontario-Muskrat Solidarity Coalition (2019).

www.aadnc-aandc.gc.ca/eng/1309374407406/1309374458958.

www.justice.gc.ca/eng/csj-sjc/principles.pdf.

www.nuclearsafety.gc.ca/eng/pdfs/reports/compendium-of-indigenous-consultation-and-engagement-eng.pdf.

¹³⁰ www.aadnc-aandc.gc.ca/eng/1553539034821/1553539063871.

¹³¹ Terry Mitchell and others, "Towards an indigenous-informed relational approach to free, prior, and informed consent", *International Indigenous Policy Journal*, vol. 10, No. 4 (October 2019).

¹³² General Assembly resolution 60/147.

rehabilitation, satisfaction, guarantees of non-repetition, remediation of contamination or an apology. Binding legal standards, enforcement and the rule of law are basic prerequisites.

- 85. Access to justice remains a considerable challenge, particularly for victims of chronic exposure and vulnerable groups. Obstacles include information asymmetries, an unjust burden of proof on victims and the limited availability of class actions and legal aid. The courts remain the preserve of Canadians with sufficient financial resources, leaving out disgruntled rights holders with inadequate capacity to pursue legal avenues, further embedding them in disadvantaged positions. The overlapping jurisdictions among the territories, the provinces and the federal Government, notwithstanding the cross-jurisdictional impacts of toxic exposure, contribute to the lack of clarity on the proper forum for seeking justice. Indigenous women have found it especially difficult to pursue discrimination cases for various reasons, including jurisdictional confusion and because the particular form of discrimination experienced is not clearly delineated under the Canadian Human Rights Act. Act.
- 86. There appears to be a pervasive trend of inaction by the Government in the face of existing health threats from decades-long historical and current environmental injustices and the cumulative impacts of toxic exposure on indigenous peoples. The case of Grassy Narrows and White dog is emblematic of indigenous communities being denied truth, justice, remedies and accountability for decades. The failure to provide these communities with an effective remedy for 50 years, still enduring the impacts of 10 tons of highly toxic mercury dumped in their rivers legally and without their consent, is a clear case of discrimination and a gross violation of their human rights under the International Covenant on Civil and Political Rights. The failure to investigate claims of aerial spraying of glyphosate on indigenous territories and lands illustrates the systemic challenge that continues today.
- 87. Initiatives such as the Contaminated Sites On-Reserve Program, the First Nations Waste Management Initiative and the Northern Contaminants Program present opportunities for action, including on waste management and decontamination. ¹³⁷ Scaling up such programmes may be useful for achieving greater involvement of indigenous peoples. Improving capacity and increasing institutional support to marginalized communities towards self-governance and for strengthening their own mechanisms established to address environmental protection should be prioritized.
- 88. Other cases have raised questions about compliance and enforcement. For example, the selenium pollution from coal mines in the Elk Valley has raised concerns about lack of compliance with water quality guidelines at the provincial and federal levels, resulting in transboundary pollution from British Columbia into the United States of America. Government and industry efforts should strengthen compliance and enforcement mechanisms to prevent the repetition of similar incidences.
- 89. The 2014 Mount Polley tailings dam disaster has illustrated the need for enhanced accountability measures to help prevent recurrence. Canada has the second-highest number of tailings dams in the world (256), and has the fifth-highest number of upstream dams categorized as high-risk. Preventable dam failures may occur in the future, especially without sufficient early detection mechanisms at the federal and provincial levels, including independent and dedicated investigation, compliance and enforcement teams. 139

www.cba.org/CBAMediaLibrary/cba_na/images/Equal%20Justice%20-%20Microsite/PDFs/EqualJusticeFinalReport-eng.pdf; www.justice.gc.ca/eng/rp-pr/csj-sjc/jsp-sjp/op00_2-po00_2/op00_2.pdf.

www.chrc-ccdp.gc.ca/eng/content/honouring-strength-our-sisters-increasing-access-human-rightsjustice-indigenous-women-and.

A/HRC/38/48/Add.1, para. 49, A/HRC/10/7/Add.3, A/HRC/18/35/Add.1 and E/C.12/CAN/CO/4-E/C.12/CAN/CO/5.

¹³⁶ Submissions by the Asubpeeschoseewagong Netum Anishinabek (2019) and Lynda Collins (2019).

Submission by Crown-Indigenous Relations and Northern Affairs Canada (2019); www.sac-isc.gc.ca/eng/1583779185601/1583779243216.

https://graphics.reuters.com/MINING-TAILINGS1/0100B4S72K1/index.html.

¹³⁹ https://news.gov.bc.ca/releases/2015MEM0030-002119.

- 90. Remediation remains a widespread concern. Concerns have been raised regarding the inadequacy of financial guarantees from polluting enterprises for site clean-up and remediation, leaving so-called contaminated orphan sites. The National Orphaned/Abandoned Mines Initiative is a welcome step. ¹⁴⁰ Efforts by Quebec and British Columbia to ensure that polluters pay for the closure and remediation of contaminated sites are encouraging. ¹⁴¹ Thousands of such sites remain across Canada, however, particularly in Alberta, with considerable concern that the public and future generations will bear the Can\$ 100 billion price of restoration, monitoring and remediation. ¹⁴²
- 91. The Special Rapporteur was concerned to hear allegations that the aforementioned acts of intimidation and harassment against human rights defenders have not been properly investigated. For example, it was alleged that the Government still has not fully investigated the disappearance of an indigenous woman who raised concerns of exposure to toxic pollution from oil sands operations.

V. Extraterritorial impacts of business enterprises

92. The obligations of Canada to ensure that companies respect human rights, including its duty to prevent exposure to toxics and help provide remedies to those affected by Canadian business activities, do not stop at the country's territorial borders.¹⁴³

A. Waste exports

- 93. In the case of waste exports, certain Canadian companies have shipped waste to a number of countries in Asia, in apparent contravention of the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal. Despite repeated protests in importing countries, the Government of Canada has been unable to compel the business involved to return the waste, which was finally repatriated to Canada only five years later.¹⁴⁴ Illegal shipments to Malaysia have also been reported.¹⁴⁵
- 94. Only 9–11 per cent of Canadian plastic waste is recycled, ¹⁴⁶ and there are concerns that plastic recycling is technically a myth. There is an urgent need to dramatically decrease consumption and use of plastics in Canada. Despite global regulation on plastic waste exports under the Basel Convention, the only way to minimize externalized impacts on people throughout the lifecycle of plastics is by reducing their consumption and production.

B. Extractive industries

- 95. A perpetual pattern of human rights abuses by Canadian extractive industries operating abroad is undeniable. The limited efforts of the State to deter well-documented and widespread abuses has inspired much of the need for global standards on business and human rights.
- 96. Worrying reports have raised the issue of the complicity of the Government of Canada in these abuses. The Special Rapporteur is troubled by reports of the extent to which the Government may be extending financial and political support to weaken or impede

www.abandoned-mines.org/en/; submission by Arn Keeling, John Sandlos and Caitlynn Beckett (2019).

 $^{^{141}\} https://thenarwhal.ca/environmental-stain-bc-announces-clean-up-2000-oil-gas-wells/.$

www.cdhowe.org/sites/default/files/attachments/research_papers/mixed/ Commentary_%20492_0.pdf; www.policyschool.ca/wp-content/uploads/2017/03/Inactive-Oil-Wells-Muehlenbachs-1.pdf.

¹⁴³ A/74/480.

 $^{{\}it www.wcel.org/blog/canada-should-stop-opposing-un-ban-exporting-waste-developing-countries.}$

www.greenpeace.org/canada/en/qa/6971/media-briefing-canadas-plastic-waste-export-trends-following-chinas-import-ban/.

www.canada.ca/content/dam/eccc/documents/pdf/pded/plastic-pollution/Science%20Assessment%20 Plastic%20Pollution.pdf; www.iisd.org/sites/default/files/publications/plastic-waste-canada.pdf.

enforcement of environmental health laws and laws protecting environmentally sensitive areas of host States. Overseas diplomats allegedly pressure host States to refrain from strengthening environmental standards to protect human rights, including threats of legal action under international investment agreements.

- 97. Certain Canadian mining companies are using, or propose to use, practices not permitted in Canada. For example, Barrick Gold's riverine tailings disposal of mine waste at the Porgera Joint Venture Mine in Papua New Guinea affects an 800-km fish-bearing river system. In Canada, environmental standards effectively prohibit such unrestrained disposal. Studies have recorded high levels of heavy metals in the waste, presenting health risks, and legal analyses have found the Canadian corporation in breach of its responsibility to respect the Porgerans' right to water.¹⁴⁷
- 98. Differences in political power between Canadian-based companies and individuals and communities in countries in which they operate elicit concern.¹⁴⁸ At the Marlin Mine in Guatemala, affected communities, including indigenous peoples, reportedly suffer mental health impacts from the long battle against the operation of the mine and the uncertainty of the future physical health consequences they may develop from contaminated water.¹⁴⁹
- 99. In the Peruvian Amazon, the Frontera Energy corporation began servicing an oil and gas concession (Block 192) on indigenous territories in 2015, relying on a dilapidated pipeline. ¹⁵⁰ The pipeline was known for many years before 2015 to leak and rupture. Evidence suggests that indigenous peoples in these territories have elevated blood levels of heavy metals above recommended limits. ¹⁵¹ Since then, there have been at least 65 oil spills from the pipeline. Frontera is clearly contributing to the incessant abuse of indigenous rights from the contamination, and failing to uphold its responsibilities under the Guiding Principles on Business and Human Rights to help secure an effective remedy. To the contrary, it continues to pump oil well aware of the impacts that will result with the next rupture.

C. Canadian Ombudsperson for Responsible Enterprise

- 100. In an effort to help address abuses by Canadian businesses operating abroad, the Office of Canadian Ombudsperson for Responsible Enterprise was established in 2018.
- 101. The establishment of that Office is generally welcome. The Ombudsperson has the potential to use economic and other incentives to compel Canadian businesses to prevent and provide redress for abuses in their operations. Yet, the originally envisioned role of the Ombudsperson has not materialized, in particular regarding the extent of investigative powers and the timeliness of investigations. For example, the Office of the Ombudsperson carries out an advisory, not investigative, role and its position suggests that it does not operate truly independently of the Government. The Office lacks an adequate budget for the magnitude of its task. Reports of lack of consultation with affected communities for investigative missions are of concern. To date, the Office has not taken up a single case, bringing into question its ability to adequately carry out an urgent mandate in a timely and effective manner. It is critical that the Office be given the powers, funding and independence required to fulfil its mandate and promise.
- 102. Policy interest among various government representatives, in adherence with the Guiding Principles on Business and Human Rights, is noteworthy. Yet, marginal efforts have been made to establish a national action plan on business and human rights, while various

https://ac4.earth.columbia.edu/sites/default/files/content/2019%20Knuckey%2C%20 Hoffman%2C%20Fisher%20and%20Russo%20Red%20Water%20Report%20-%20FINAL.pdf.

¹⁴⁸ Committee on Economic, Social and Cultural Rights, general comment No. 24.

 $^{^{149}\} www.amnesty.org/download/Documents/4000/amr340022014en.pdf.$

¹⁵⁰ https://politicsofpoverty.oxfamamerica.org/righting-the-many-wrongs-at-perus-polluted-oil-block-192/.

www.defensoria.gob.pe/wp-content/uploads/2018/10/Informe-de-Adjunt%C3%ADa-N%C2%BA-001-2018-DP-AMASPPI-PI.pdf; https://observatoriopetrolero.org/analisis-toxicologico-en-el-lote-192-niveles-de-plomo-por-encima-del-limite-permitido/.

countries and the European Union are now making progress towards mandatory human rights due diligence requirements.

VI. Conclusions and recommendations

A. Conclusions

- 103. In various ways, Canada has made welcome improvements to addressing human rights violations and abuses from exposure to toxic substances. Just as there are recent examples of shortcomings, there are also examples of new energy employed in finding ways to prevent pollution, seek and obtain informed consent and work in partnership with indigenous peoples and other groups disproportionately affected by toxic exposure. Nevertheless, much work still needs to be done and deep concerns remain unaddressed.
- 104. It was clear from the visit that many communities in Canada continue to suffer from exposure to toxic substances. Some key concerns that persist include the limited degree of protection of human health and ecosystems under various pieces of legislation and the lack of environmental information and monitoring in areas of high risk. Long delays in or absences of health impact assessments persist for affected communities. Inadequate compliance with and enforcement of laws and policies, and other systemic obstacles to access to justice, in particular for cases involving health impacts due to chronic exposure, increases the reluctance of victims to seek fulfilment of their right to an effective remedy.
- 105. The prevalence of discrimination in Canadian laws and policies regarding the application of regulations on hazardous substances and wastes is clear. There exists a pattern in Canada whereby marginalized groups, and indigenous peoples in particular, find themselves on the wrong side of a toxic divide, subject to conditions that would not be acceptable in respect of other groups in Canada. A natural environment conducive to the highest attainable standard of health is not treated as a right; unfortunately, for many in Canada today, it is an elusive privilege.
- 106. Similarly, communities in States hosting Canadian business enterprises endure enormous burdens that would not be acceptable in Canada. The impacts on these communities are compounded by the inordinate power imbalance between low- and middle-income countries and Canadian corporations.
- 107. In general, Canada must better acknowledge that decisions, actions and inactions regarding toxic pollution have profoundly affected the health of exposed communities, including indigenous peoples. Reconciliation through a process of building trust, establishing and maintaining healthy relationships and entrenching respect for indigenous peoples is essential for the realization of indigenous peoples' rights, including in the context of toxics.
- 108. These needs can be met through legal recognition of the human right to a healthy environment, including the duty of Canada to prevent exposure to hazardous substances.
- 109. Overall, Canada should take action through a precautionary approach, to mitigate the consequences of continued exposure and to allow timely regulatory processes to take their course, while protecting local populations.
- 110. Despite the challenges, the Special Rapporteur was left with the impression that Canadians deeply value their environment. Canada has the financial means and technical capacity to be on the path of sustainable development and to view a healthy environment as more than a privilege. The Special Rapporteur remains optimistic that Canada will embrace the many opportunities to transition to a cleaner, healthier and more equitable economy. The well-being of people and peoples, not only in Canada but around the world, depends on it.

B. Recommendations

- 111. The Special Rapporteur recommends that the Government of Canada:
- (a) Recognize the right to a healthy environment in its legislation, eventually, through a constitutional amendment, and ensure that that right includes the duty to prevent exposure to hazardous substances;
- (b) Ratify the Amendment to the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal and establish mechanisms for its implementation;¹⁵²
- (c) Bring federal, provincial and territorial legislation fully into line with the United Nations Declaration on the Rights of Indigenous Peoples; 153
- (d) Ensure that environmental standards on reserves are as strong as or stronger than the standards on neighbouring provincial, territorial and federal lands, to ensure equal protection for indigenous persons;
- (e) Use the leverage it has, as the largest investor in various megaprojects, including the Muskrat Falls dam and the Trans Mountain Pipeline Expansion Project, to review procedures to ensure that they are compatible with the United Nations Declaration on the Rights of Indigenous Peoples and address the safety concerns of provincial governments;
- (f) Amend the federal Impact Assessment Act to require consideration of the impacts of proposed projects and policies on human rights, particularly the rights of vulnerable populations;
- (g) Establish legally binding and enforceable health-based standards for air quality and drinking water quality;
- (h) Improve the capacity of the Canadian Human Rights Commission to initiate investigations and pursue environmental and human rights-based initiatives, including on toxic exposure, including through budgetary allocations and research promotion;
- (i) Consider potential environmental and health risks in developing regulatory criteria for the treatment and discharge of process-affected water, including in respect of oil sands;
- (j) Review federal, provincial and territorial laws to prevent upstream mine waste dams from placing downstream communities at risk of exposure, require independent panels to review extractive industry projects and apply best practices on mine tailings safety;
- (k) Set clear and ambitious timelines to phase out industrial chemicals and pesticides that are prohibited in other OECD member States;
- ${\rm (l)} \qquad \hbox{Prohibit the export to non-OECD countries of industrial chemicals and pesticides whose use is banned in Canada;}$
- (m) Increase traceability and transparency of chemicals in products to protect, inter alia, the rights of the child and reproductive health;
- (n) Fully incorporate the Convention on the Rights of the Child in policies and procedures related to toxics and ratify its Optional Protocol on a communications procedure;
- (o) Require the protection of vulnerable populations at all stages of the review of the Canadian Environmental Protection Act and categorize chemicals as toxic based on their hazard, not their risk;

¹⁵² See also E/CN.4/2003/56/Add.2.

¹⁵³ See also E/C.12/CAN/CO/6, para. 14.

- (p) Include workers as a vulnerable group under its Chemicals Management Plan and expeditiously re-evaluate previously assessed substances from the perspective of individual workers' exposure to toxics;
- m (q) Ensure that mine-related regulatory structures incorporate robust planning for mine closures before projects have been developed or assessed, and enforce strict financial penalties to ensure industry accountability for the long-term care of mines;
- (r) Take stringent measures to halt economic and political support to business enterprises operating abroad where human rights abuses are reported;
- (s) Respect concerns expressed regarding the risk of harm, including where host countries have established no-go zones for resource extraction, to guarantee accountability and ensure access to justice for people affected by the activities of Canadian enterprises abroad;
- (t) Implement legal requirements for robust mandatory human rights due diligence and provide redress where activities of business enterprises both at home and abroad are associated with impacts of toxic exposure, with a cause of action for victims both in the host country and in Canada;
- (u) Expand the mandate of Office of the Canadian Ombudsperson for Responsible Enterprise to include other economic sectors, providing additional investigative powers, including the ability to compel the provision of documents and testimony, and providing the resources required for it to carry out its mandate;
- (v) Revise the avenues available to access justice, to give full effect to the justiciability of economic, social and cultural rights through the court system in Canada, engaging civil society and indigenous peoples in that revision;
- (w) Conduct continuous national and regional cumulative environmental and socioeconomic assessments, including environmental health inequality assessments, and facilitate environmental justice mapping;
- (x) Establish a sound environmental justice framework based on the principles of procedural justice, geographic justice and social justice;
- (y) Involve indigenous peoples and other population subgroups in self-assessments to complement assessments by members of other population subgroups.
- 112. The Special Rapporteur recommends that business enterprises in Canada:
- (a) Invest in technologies to phase out chemicals of concern and increase the traceability and transparency of chemicals in products, especially consumer products;
- (b) Take proactive measures to prevent environmental harm and respect concerns of risk of harm, including where host countries have put in place no-go zones for resource extraction;
- (c) Implement robust and transparent human rights due diligence and provide redress when activities, whether carried out in Canada or abroad, cause, contribute to or are linked with impacts of toxic exposure. These processes should oblige business enterprises to undertake human rights risk assessments in respect of their activities throughout the supply chain.

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