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

Note by the Secretary-General

The Secretary-General has the honour to transmit to the General Assembly the report of the Special Rapporteur on the implications for human rights of the environmentally sound management and disposal of hazardous substances and wastes, Baskut Tuncak, submitted pursuant to Human Rights Council resolution 36/15.

* A/73/

¹ <http://www.who.int/airpollution/en/>

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

Summary

In his first report to the General Assembly, the Special Rapporteur on the implications for human rights of the environmentally sound management and disposal of hazardous substances and wastes introduces the mandate, highlights recent activities, and offers recommendations for ongoing international discussions. The Special Rapporteur explains the link between the mandate and achieving the Sustainable Development Goals, and brings to the fore the need for a stronger, more comprehensive global framework to protect human health from a toxic environment to help address the injustices resulting from divergent standards of protection between countries. The Special Rapporteur offers recommendations for the post-2020 framework for toxic chemicals and waste that in his view would strengthen the ability of the global community to protect human rights from toxic exposures and highlights the potential contribution of the business and human rights discourse to the issues at hand.

I. Introduction

1. This mandate is in large part about the extent to which we have a right to control the entry of hazardous substances and wastes into our bodies. The vast majority of the global population lives on the wrong side of a toxic divide, exposed without their consent to hazardous substances and wastes that increase their likelihood of developing diseases and disabilities throughout their lives. For example, 91 percent of the world's population lives in areas that exceed WHO guidelines for air pollution.¹

2. Pollution is estimated to be the largest source of premature death in the developing world², approximately three times more than HIV-AIDS, tuberculosis and malaria combined. Air pollution kills 8 million people annually, amounting to 1 in 9 deaths, with 4.2 million deaths from ambient outdoor air and 3.8 million from exposure to smoke from dirty cook-stoves and fuel.³ Workers continue to be exploited by exposure to unsafe levels of toxic chemicals and other hazardous substances. Over two million workers die every year from occupational diseases, nearly one million from toxic exposures alone.⁴ Many of the figures of death, disease and disability are believed to be an underestimation. The transfer of polluting industries, manufacturing activities and supply chains from wealthier countries to those with lower levels of protection contribute greatly to these adverse impacts on life and health.⁵

3. Improved technologies and methodologies have helped to visualize the pervasive nature of our invisible and incessant exposure to hazardous substances in the air we breathe, the water we drink, the food we eat, our homes and the places we work, as well as the countless products we consume. Through these advancements, our understanding of the adverse impacts of hazardous substances and wastes on our "right to ... adequate conditions of life"⁶ has expanded, and a misperception of so-called harmless exposures uncovered.

4. It is now well demonstrated that babies around the world are born "pre-polluted."⁷ Over 200 hazardous substances have been detected in umbilical cords and the placenta, including toxic constituents of consumer products, food packaging, and air pollution. Not only are children exposed during sensitive periods to a multitude of substances with known and unknown toxicity from a plethora of sources, but they are also exposed at higher levels than adults.⁸ Millions of children are deprived their right to maximum development by exposure to hazardous substances before they can even begin to exercise their fundamental right to be heard.⁹

5. Over time, exposure levels of concern have been revised lower as investigators have used more sensitive measures and better study designs.¹⁰ For example, before the mid-1960s, a blood lead level above 60 µg/dL was considered toxic. By 1978, the defined level of toxicity had declined 50% to 30 µg/dL. Since then the "safe" level of exposure has progressively been revised lower. Today national bodies, such as the U.S. Centers for Disease Control and the WHO, consider there to be no safe level of childhood lead

¹ <http://www.who.int/airpollution/en/>

² Lancet Commission on Pollution and Health

³ <http://www.who.int/airpollution/en/>. See also A/HRC/30/40.

⁴ A/HRC/39/48.

⁵ See e.g. Nature Communications, volume 8: 738 (2017)

⁶ In 1972, the Stockholm Conference on the Human Environment declared the common conviction that people have "the fundamental right to freedom, equality and adequate conditions of life, in an environment of a quality that permits a life of dignity and well-being, and [...] bears a solemn responsibility to protect and improve the environment for present and future generations."

⁷ A/HRC/33/41

⁸ A/HRC/33/41

⁹ UN Convention on the Rights of the Child

¹⁰ Lead is a poison that affects virtually every system in the body, particularly harmful to the developing brain and nervous system of fetuses and young children.
<https://www.cdc.gov/nceh/lead/publications/books/plpyc/chapter2.htm>

exposure, with exposure of 5 µg/dL associated with neurobehavioral damage.¹¹ It was estimated in 2016 that lead exposure globally accounted for 540,000 deaths and 13.9 million years of healthy life lost.¹²

6. Through other advancements, we have a clearer picture of the intricate subtleties of how chronic exposure to a multitude of toxic substances during childhood and other sensitive periods of development can manifest over time into various adverse health outcomes, such as cancer, diabetes, birth defects, reduced intelligence and learning disabilities, as well as asthma and other respiratory diseases. Experiments have demonstrated that exposures to combinations of substances at levels not predicted to have adverse effects can result in adverse effects. This has cast doubt on the conventional paradigm that seeks thresholds for no observed adverse effects as the basis for defining safety.

7. Seemingly with every passing day we continue to uncover the myriad of ways we are subjected to a vast human experiment of incessant exposure to toxic substances, contrary to the clear right not to be subject to scientific experimentation without consent.¹³ Reports continue to illustrate trends of increasing incidences of health impacts arising from exposure to hazardous substances, but leave unanswered which exposure or exposures are responsible.¹⁴ Illustrating the existential dimension of the problem is the decades of evidence of declining sperm counts observed in countries around the globe.¹⁵

8. Exposure to hazardous substances is fundamentally about the right to life, non-discrimination and the right to bodily integrity, and dependent on the realization of everyone's right to information, meaningful participation, freedoms of association and assembly, and the right to an effective remedy, among others.¹⁶

9. The issue of exposure is also deeply interwoven with the discourse on our rights to health, to safe food and water, adequate housing, and to safe and healthy working conditions, as well as a healthy environment, to name a few. However, in relation to the above rights, it must be emphasized that the UN Committee on Economic Social and Cultural Rights interprets the obligations and responsibilities of duty-bearers as being to prevent and minimize exposure to hazardous substances and to respect the individual's right to bodily (physical) integrity.¹⁷

10. What we know today, including existing evidence of harm, knowledge of risks, and the inherent uncertainties, requires a human rights-based approach that emphasizes the duty and responsibilities of States and businesses to prevent and minimize exposure. While science plays an essential role in advancing protection from exposure, a perverse version of a "science-based approach" has served to prevent progress in many cases regarding the prevention and minimization of exposure¹⁸, contrary to human rights standards.

11. There are ample opportunities to reduce avoidable and unjustified exposures to hazardous and potentially hazardous substances. Both from technological and policy perspectives, we have the tools to prevent and minimize exposure, often at levels below what is identified as a health risk.¹⁹ The particularly heinous nature of the exploitation of workers and communities through exposure is that there are almost always alternatives to prevent or minimize exposure. Solutions to this abuse of human rights are available, should States choose to compel businesses to adopt them.

12. To this end, efforts by States to move towards a "non-toxic environment" for present and future generations are commendable. Such initiatives are highly compatible with the

¹¹ <http://www.who.int/ceh/publications/leadguidance.pdf>

¹² <http://www.who.int/news-room/fact-sheets/detail/lead-poisoning-and-health>

¹³ ICCPR

¹⁴ See e.g. U.S. EPA, *America's Children and The Environment*

¹⁵ See e.g. <https://doi.org/10.1093/humupd/dmx022>

¹⁶ See e.g. A/HRC/36/41.

¹⁷ CESCR General Comments 14 and 18

¹⁸ David Michaels, *Doubt is their Product* (2008)

¹⁹ A/HRC/36/41

State's duty to respect, protect and fulfil the many interrelated and interdependent human rights implicated by hazardous substances and wastes. For example, Sweden's national objective of a non-toxic environment, adopted by the Government with the participation of civil society and businesses, seeks to ensure "total exposure to chemical substances via all sources of exposure is not harmful to people or biodiversity."²⁰ It also seeks to ensure that knowledge and information is available and accessible, consistent with the right to information.²¹ And, it seeks to ensure the remediation of contaminated sites, which is part of an effective remedy.²² An EU-wide non-toxic environment strategy, due in 2018, presents a welcome opportunity to help to close many protection gaps for children and other vulnerable groups.²³

13. However, more is required, nationally, regionally and globally. The exposure of the most vulnerable in society to toxic exposure is a global problem, in which we are all, to some degree complicit, whether as policy makers, employers or consumers.

II. Recent activities of the mandate

14. This is the first report of the mandate to the UN General Assembly since the establishment of the mandate in 1995 by the former Commission on Human Rights. Over the years, the mandate has evolved through successive resolutions of the Human Rights Council to examine the impacts of hazardous substances and wastes throughout their lifecycle, from extraction to production, use, emission and final disposal. The mandate has examined issues of both occupational health and environmental health perspectives. The most recent reports of the current mandate holder to the Human Rights Council are summarized below.

A. Reports to the UN Human Rights Council

1. Workers' rights (2018)²⁴

15. Exploitation can take many forms. A particularly vicious form of exploitation is the exposure of workers to toxic substances.

16. In September 2018, the Special Rapporteur presented a report highlighting the global crisis confronting workers exposed to toxic chemicals. In the report, he outlined key challenges and proposed 15 principles intended to help States, businesses and other key actors protect workers from toxic occupational exposures and to provide remedies for violations of their rights. The report includes a detailed annex on various cases addressed by the mandate since 2007.

17. Global estimates from the International Labour Organization show that over 2,780,000 workers die from unsafe or unhealthy conditions of work each year. Despite clear human rights obligations relating to the protection of their health, workers around the world find themselves in the midst of a crisis—it is estimated that that one worker dies at least every 30 seconds from exposure to toxic chemicals, pesticides, radiation and other hazardous substances. Yet incidences of exposure are grossly underreported in some contexts and countries.

18. Every worker has the right to dignity, ethical treatment and respect, and protection from conditions of work that are dehumanizing or degrading. The right to safe and healthy

²⁰ <http://www.swedishepa.se/Environmental-objectives-and-cooperation/Swedens-environmental-objectives/The-national-environmental-objectives/A-Non-Toxic-Environment/Specifications-for-A-Non-Toxic-Environment/>

²¹ *ibid.*

²² *ibid.*

²³ <http://ec.europa.eu/environment/chemicals/non-toxic/pdf/NTE%20main%20report%20final.pdf> page 122.

²⁴ A/HRC/39/48

work is a right in itself; however, it also encompasses many other interrelated and interdependent human rights of workers, including the rights to life, to health, to bodily (physical) integrity and security of the person. They are indivisible from the rights to information, meaningful participation, freedoms of expression assembly and association, as well as the right to an effective remedy.

2. Good practice guidelines (2017)²⁵

19. In September 2017, the Special Rapporteur delivered a long-standing request of the Human Rights Council: a report on good practices. The guidelines to good practices intend to help States, businesses, civil society, trade unions and other key actors identify and address key problems that give rise to human rights abuses due to toxics.

20. The guidelines build off the UN Guiding Principles on Business and Human Rights (UNGPs), recognizing that the challenges presented are most typically related to business conduct. Thus, the report is divided in three sections, namely the duties of States, responsibilities of businesses, and access to justice and remedy, concluding with recommendations with respect to each.

3. Pesticides and the right to food (2017)²⁶

21. The mandate holder collaborated with the Special Rapporteur on the right to food to provide a clearer account of global use of hazardous pesticides in agriculture and its impact on human rights.

22. The report found that while scientific research confirms the adverse effects of pesticides, proving a definitive link between exposure and human diseases or conditions, or harm to the ecosystem presents a considerable challenge. It notes, that this challenge has been exacerbated by a systematic denial, fuelled by the pesticide and agroindustry, of the magnitude of the damage inflicted by these chemicals, and aggressive, unethical marketing tactics that remain unaddressed.

23. The report notes with concern the problem of double standards of protection from pesticides between countries. Many of low- and middle-income countries continue to use hazardous pesticides banned by high-income countries, which in some cases continue to export hazardous pesticides for the production of agricultural products that are then imported back. This transfer of polluting industries and hazardous work is exploitation. The volume of pesticide consumption in developing countries is large and has rapidly increased with regular reports of serious impacts to health of workers, local communities and ecosystems.

24. Without or with minimal use of toxic chemicals, it is possible to produce healthier, nutrient-rich food, with higher yields in the longer term, without polluting and exhausting environmental resources. The solution requires a holistic approach to the right to adequate food that includes phasing out dangerous pesticides and enforcing an effective regulatory framework grounded on a human rights approach, coupled with a transition towards sustainable agricultural practices that take into account the challenges of resource scarcity and climate change.

25. To this end, the report recommends States work toward a comprehensive, binding treaty to regulate hazardous pesticides throughout their life cycle, taking into account human rights principles. In the interim, it also recommends several good practices for States at the national level.

4. Rights of the child and childhood exposure (2016)²⁷

26. In 2016, the Special Rapporteur described the urgent need for States and businesses to meet their obligations and responsibilities under the UN Convention on the Rights of the

²⁵ A/HRC/36/41

²⁶ A/HRC/34/48

²⁷ A/HRC/33/41

Child regarding air, water and soil pollution, as well as the presence of toxic chemicals in food and consumer products. The report clarifies that States have a human rights obligation to first and foremost prevent childhood exposure to pollution and toxic substances, with mitigation measures only if prevention is not possible.

27. Children today are born “pre-polluted” with numerous contaminants that impact on their rights to survival and development, to be heard, to physical integrity and to health, to name but a few. Representative studies have measured hundreds of toxic and otherwise hazardous chemicals in children in-utero and after birth through their mother’s exposure. Exposure to toxics and pollution continues incessantly after birth. While the studies primarily come from certain countries, every child in every country is a victim of this “toxic trespass” to varying degrees. Many of these exposures are trans-boundary in origin, including emissions to air and water and global production, consumption and disposal patterns, requiring global action.

28. Paediatricians refer to a “silent pandemic” of disability and disease associated with exposure to toxics and pollution during childhood, much of which do not manifest themselves for years or decades after exposure. Over one million child victims die prematurely before the age of 5 each year, with estimates of pre-mature death from air pollution alone exceeding 500,000. However, this is only the tip of the iceberg, with countless millions affected by preventable diseases and disabilities such as cancer, diabetes, learning disabilities and birth defects later in life. These health impacts exert massive economic costs on governments and individuals, which questions arguments against stronger protections simply because of possible impacts on economic growth.

5. Right to information (2015)

29. In September 2015, the current Special Rapporteur presented his first full thematic report to the UN Human Rights Council, on the right to information.²⁸ Information is an enabler of many human rights implicated by hazardous substances and wastes. Information is crucial to preventing human rights violations and abuses resulting from exposure to hazardous substances and wastes and realizing the right of victims of exposure to an effective remedy. However, vital information on hazardous substances and wastes is frequently unavailable and inaccessible, including their hazardous properties, exposure levels and incidences of diseases and other adverse health impacts.

30. The enjoyment of the right to information is critical in the context of toxics, in order to prevent adverse impacts, to ensure the realization of the right to freedom of expression and to enable individuals and communities to participate in decision-making processes and to seek and obtain remedy. Health and safety information about toxic chemicals must never be confidential. Information must be available, accessible, functional and consistent with the principle of non-discrimination in order for human rights to be respected, protected, enjoyed and fulfilled. Despite notable improvements in many countries over recent decades, the right to information remains insufficiently realized in the area of hazardous substances and wastes, particularly with respect to protecting the most vulnerable from adverse impacts of exposure, whether from consumer products, at the workplace or via food, water, air or other sources.

31. The report clarifies the duties and responsibilities of States and businesses regarding the right to information in order to protect human rights affected by toxics. States are duty-bound to generate, collect, assess and update information; effectively communicate such information, particularly to those disproportionately at risk of adverse impacts; ensure confidentiality claims are legitimate; and engage in international cooperation to ensure that foreign Governments have the information necessary to protect the rights of people in their territory. In discharging their duty to conduct human rights due diligence, businesses are responsible for identifying and assessing the actual and potential impacts of hazardous substances and wastes, either through their own activities or as a result of their business

²⁸ A/HRC/30/40

relationships; to communicate information to other businesses, governments and the public effectively.

B. Illustrative cases

32. Through communications to States and businesses, as well as country visits, the mandate has worked on a number of cases illustrating the impacts of toxics and pollution throughout the lifecycle of consumption and production. These impacts are visible across various economic sectors, and industrial activities. They illustrate violations and/or abuse of various human rights, particularly of the most vulnerable in society, including the rights of the child, older persons, workers, indigenous peoples, the poor, migrant and minority communities, among others. The categories are hard to define, as the issues and sectors are often interlinked.

1. Air pollution

33. Air pollution is a major source of exposure to hazardous substances and largely, in essence, wastes. In 2017, the Special Rapporteur issued a statement calling for strong, urgent action by States, including legislation and enforcement of corporate accountability, to ensure that people around the world can enjoy the human rights to life and health in environments free from contamination.²⁹ The call was instigated by the findings of the Special Rapporteur during several country visits, as well as the estimates by the WHO of 8 million pre-mature deaths due to air pollution, and previous investigations into the realization of the rights of the child.

34. During his visit to the Republic of Korea, the Special Rapporteur was deeply disturbed by the case of “humidifier sterilizers” marketed and sold without adequate investigation of their risks to human health and life.³⁰ Unknowingly, consumers added the toxic product to water tanks of humidifiers, hugely popular in Korea, resulting in toxic indoor air. The chemical mixture was marketed on the premise that it would promote health and well-being.

35. The actual number of victims is unknown and is still being evaluated. As of December 2015, the Government had recognized that 95 people had died and 221 had suffered adverse health impacts after inhaling hazardous chemicals, mostly young children, pregnant women and the elderly. At present over 1300 claims of death, disability and disease are alleged as a result of inhalation exposure.³¹ The largest seller of the humidifier sterilizers was the Korean subsidiary of a UK pharmaceutical company that certainly should have known the risks of inhaling chemical substances without evidence of health or safety, regardless of the fact that it was in compliance with certain laws at the time. While a few companies have apologized, the mandate remains concerned regarding the inadequate accountability of the chemical companies who sold the chemical ingredients to companies marketing the humidifier sterilizers.

36. During various country visits, the issue of outdoor air pollution and its adverse health impacts, particularly for women of reproductive age, children and older persons, has been of grave concern. During his 2017 visit, the Special Rapporteur observed how air pollution continues to plague the United Kingdom.³² Over 40,000 premature deaths per year were estimated to occur in the country, with over 9,000 in London alone.

37. Recently, a mother delivered a 100,000-signature petition calling for a new inquest into her daughter's death, which she believes to be due to her daughter's exposure to air pollution. Ella died in February 2013 after suffering from extreme asthma and seizures for

²⁹ Subsequently endorsed by several other Special Rapporteurs and Independent Experts of the U.N. Human Rights Council

<https://www.ohchr.org/EN/NewsEvents/Pages/DisplayNews.aspx?LangID=E&NewsID=21222>

³⁰ A/HRC/33/41/Add.1

³¹ <https://www.healthrelief.or.kr/home/main.do>

³² A/HRC/36/41/Add.2

three years. During that time local air pollution levels breached EU legal limits. It is important to note, that permissible exposure limits in EU Member States for various air pollutants currently exceed levels recommended by the WHO. The case is important in many respects, including the challenge faced by victims of air pollution to establish a sufficient causal linkage between health impacts and air pollution exposure to access an effective remedy.

2. Contaminated land

38. The situation faced by Roma, Ashkali and Egyptian families displaced during the Kosovo conflict, whom the UN housed in camps constructed on lead-contaminated toxic wasteland between 1999 and 2013 is of concern to the Special Rapporteur. The affected communities, including children, continue to suffer from long-term, serious damage to their health as a result of poisoning. They continue to live in conditions of economic hardship and social deprivation, hampering their access to adequate medical services. The Special Rapporteur addressed an open letter to the UN Secretary General concerning his 2017 decision to establish a Trust Fund charged with implementing community-based assistance projects, which would benefit the affected communities, inquiring about the progress and functioning of the Trust Fund. Despite expressions of political support by UN Member States, no financial contribution has yet been received by the international community. The Special Rapporteur calls on the UN and its Member States to mobilize the necessary resources without further delay.

3. Water pollution and contamination

39. In 2016, the mandate sent a joint communication³³ to the US Government and issued a public statement³⁴ with several mandates regarding the situation of children suffering from lead contamination in Flint, Michigan and elsewhere in the country. The case raised grave concerns regarding the injustice of pollution and contamination borne by poor and minority communities, not only in Flint, but also across the country.

40. The Special Rapporteur issued numerous communications and statements regarding the water pollution from the Formosa Ha Tinh Steel Plant in April 2016 in Vietnam. The resulting pollution discharge killed large volumes of fish on which local communities depended, both for sustenance and their livelihoods. Of grave concern is the harassment, detention and imprisonment of dozens of local journalists, bloggers and human rights defenders for expression of concern regarding the impacts of pollution and unhealthy working conditions, as well as the need for effective remedies. The Special Rapporteur together with other mandate holders addressed letters to the Vietnamese Government, including regarding the conviction and sentencing of two human rights defenders, in what appeared to be retaliation for legitimate human rights work related to pollution caused by the toxic waste discharge.³⁵

4. Agricultural production

41. The Special Rapporteur has been concerned about the impacts of pesticides and other hazardous substances used in and produced for agriculture, which raises concerns of exposure resulting from air pollution and water contamination, as well as direct exposures, particularly of workers.

42. Exposure of children using or otherwise exposed to pesticides and other toxic substances at work is one of the worst forms of child labor. This is a major concern that is repeatedly brought to the attention of this mandate from cases around the world. A related concern is the exposure of women of reproductive age to pesticides and other toxic

³³ USA 1/2016, the letter and the State reply can be found here

<https://spcommreports.ohchr.org/TmSearch/Results>

³⁴ <https://www.ohchr.org/en/NewsEvents/Pages/DisplayNews.aspx?NewsID=17139&LangID=E>

³⁵ Letter and the reply of the Vietnamese Government,

<https://spcommreports.ohchr.org/TMResultsBase/DownloadPublicCommunicationFile?gId=23672;>

<https://spcommreports.ohchr.org/TMResultsBase/DownloadFile?gId=87450>

chemicals at work, potentially during early stages of pregnancy, before they even know they are pregnant, subjecting their children to the risk of various adverse health impacts. In a recent communication regarding tobacco production in Zimbabwe, at least 10 foreign companies were identified as sourcing tobacco from farms where children are reportedly using or mixing pesticides. These tobacco companies are based in China, Germany, Japan, Switzerland, the United Arab Emirates, the United Kingdom, and the United States of America.

43. During a recent visit to Sierra Leone, the Special Rapporteur observed that environmental impact assessments of a large-scale palm oil plantation, owned and operated by a Europe-based corporation, were devoid of meaningful information about pesticides use and their volumes from which to determine potential environmental and occupational risks. The Special Rapporteur was informed that the pesticides used include those disallowed from use in Europe and elsewhere, and was concerned by the limited capacity of the government to monitor potential impacts of their use on health and water resources.

5. Extractive industries

44. The mandate continues to address numerous cases of alleged human rights violations and abuses due to extractive industries. In most cases, there are strong transnational links, whether foreign-owned operators or resources that are processed and used in global supply chains.

45. These cases illustrate inadequate conduct of human rights diligence for hazardous substances and wastes. In the case of the Mariana (also referred to as Samarco or Rio Doce) disaster, concerns were raised regarding the insufficiency of efforts to prevent what some have described as Brazil's worst environmental disaster. The flood of waste following the rupture of the dam killed at least 18 people and affected the lives of millions of people living along the 800 km Rio Doce watershed.³⁶ The mandate was particularly concerned with the lack of transparency by authorities and companies in disclosing crucial information regarding the danger posed by the dam to local communities and the unjustified statements after that the waste spilled did not pose a health risk. Concerns continue to be raised regarding substantive and procedural aspects of the settlement and remedy process, including insufficient participation by affected communities and the inadequate progress made.

46. In 2016, the mandate undertook an unofficial visit to Peru to assess the situation of the indigenous peoples in the Amazon who continue to grapple with decades of toxic waste left by oil companies in their territories, which has been the subject of various communications by the mandate. The Special Rapporteur remains concerned that the Argentina-based Pluspetrol has not fulfilled its obligation to remediate both its own oil contamination and the contamination left by its predecessor in Lot 192 (formerly Lot 1 A/B) decades ago. New agreements were reached for continued extraction without the completion of remediation and pipelines for oil transportation are in desperate need of replacement, with over 50 alleged incidences of rupture and further contamination in the past three years alone.

6. Chemical industries

47. Manufacturers of industrial chemicals, pesticides, pharmaceuticals and other chemical products have been linked with human rights abuses resulting from the toxicity of their products, from unsafe conditions at facilities to widespread human contamination resulting from the inevitable pollution, contamination and waste produced by their products. Over several decades, the global chemical industry has grown at astronomical rates, particularly in low and middle-income countries.³⁷ The protection gaps and resultant impacts are apparent.

³⁶ <https://spcommreports.ohchr.org/TMResultsBase/DownloadPublicCommunicationFile?gId=14484>

³⁷ UNEP, *Global Chemicals Outlook* (2012)

48. In 2015, a series of explosions in China killed at least 173 people, and resulted in over 700 non-fatal injuries. Large quantities of industrial chemicals were stored near residential areas without the knowledge of residents and regulators, and first-responders entered the building without information about the type and amounts of chemicals stored. The Special Rapporteur called for tighter regulation and enforcement, highlighting the need for further realization of the right to information regarding hazardous substances.³⁸

49. Many of the cases illustrate the challenge of securing an effective remedy, even in the clearest of correlations between business activities and impacts. In 1984, a toxic chemical leak killed over 6000 people living near a toxic pesticide production facility in the town of Bhopal, India. Nearly 35 years after the disaster, the mandate continues to receive information on ongoing contamination of water and other resources. The inability of the community to gain access to an effective remedy, and the impunity of various companies implicated in the disaster, including those that acquired the facility but deny any responsibility for the clean-up, is a seminal example of the exploitation of lower standards of protection in developing countries and the inordinate challenge facing victims to access an effective remedy.

50. The Special Rapporteur welcomed a 2014 announcement of the Indian Government to reconsider the official figures of people affected by the Bhopal disaster, and to provide additional compensation. However, financial compensation alone is not an effective remedy and will not stop the ongoing human rights violations of Bhopal's toxic legacy. Information is provided regularly to the mandate of new victims of the Bhopal disaster who are born every day, and suffer life-long from adverse health impacts. The Special Rapporteur has called on all parties to ensure an effective remedy for the victims.³⁹

7. Manufacturing and consumer products

51. Concerns have also been raised regarding exposure to toxic chemicals in the context of the manufacture, use and disposal of common consumer products, such as electronics, clothing, cosmetics, cleaning products, detergents and other consumer products.

52. For example, after an 11-year campaign for justice and accountability by victims, their representatives and other human rights defenders, Samsung Electronics recently agreed to arbitration over the case of 150-250 deceased and sickened workers who allege their health has been affected by exposure to toxic substances in the manufacture of certain electronic products in the Republic of Korea.⁴⁰ Although a positive step, this is only one company in one industry in one country. The ILO estimates 160 million cases of occupation diseases are reported annually. The absence of effective remedies for perhaps millions of workers exploited by exposure around the world is of grave concern.

8. Nuclear radiation

53. Under the mandate, nuclear waste from military activities and energy production has been a topic of concern. The former Special Rapporteur undertook a mission to the Marshall Islands to examine the contamination resulting from years of nuclear weapon testing.⁴¹ The current mandate holder has also addressed the issue during a recent country visit to Kazakhstan, where approximately 400 nuclear bombs were detonated during tests by the former Soviet Union.⁴²

54. Seven years after the nuclear disaster in Fukushima, actions for the reconstruction and revitalization of Fukushima are in full implementation process, with evacuation orders lifted for most of the areas. In March 2017, housing subsidies reportedly stopped to be

³⁸ <https://www.ohchr.org/EN/NewsEvents/Pages/DisplayNews.aspx?NewsID=16332>

³⁹ <https://www.ohchr.org/EN/NewsEvents/Pages/DisplayNews.aspx?NewsID=15335&LangID=E>

⁴⁰ <https://www.ohchr.org/en/NewsEvents/Pages/DisplayNews.aspx?NewsID=23476&LangID=E>, See also, Country mission report Republic of Korea

http://ap.ohchr.org/documents/dpage_e.aspx?si=A/HRC/33/41/Add.1

⁴¹ <https://daccess-ods.un.org/TMP/8919626.47438049.html>

⁴² http://ap.ohchr.org/documents/dpage_e.aspx?si=A/HRC/30/40/add.1

provided to self-evacuees, who fled from areas other than the government-designated evacuation zones.

55. Following the nuclear disaster, Japan raised the acceptable level of radiation for residents in Fukushima from 1 mSv/year to 20 mSv/year. The Universal Periodic Review mechanism of the Human Rights Council recommended that the Government of Japan return acceptable levels of exposure to those before Fukushima. The Special Rapporteur has raised concerns with the Government on both the situation confronting residents, including children and women of reproductive age, who may return to areas above 1 mSv/yr, as well as concerns regarding the exposure of workers involved in the remediation of the prefecture. The death of a remediation worker from lung cancer was recently recognized as resulting from exposure to radiation.

9. Waste

56. The issue of waste disposal, particularly the export of waste from wealthy countries to poorer countries, is a core element of the mandate. Perhaps no case illustrates the incredulous audacity of certain businesses to exploit vulnerable communities quite like the case of the Probo Koala. The owners of the ship, essentially a manufacturing facility, contracted a company of no repute to dispose of its toxic waste because they could not find a suitable price in Europe. The waste was disposed in and around the city of Abidjan, Cote d'Ivoire during the night, killing nearly 20 people and leaving tens of thousands seeking medical help for their exposure.⁴³

57. The mandate has examined for many years the situation surrounding the export of end-of-life ships for recycling and disposal (shipbreaking) in previous reports and country visits.⁴⁴ For example, the European Union does not permit titanic, toxic ships to be dismantled directly on their beaches by poorly equipped workers; but, legal loopholes in the EU Ship Recycling Regulation that enable this double standard to perpetuate in some of the world's poorest communities.

58. During a recent country visit to Denmark, the mandate was alerted about cases involving the Danish shipping company Maersk, which in the view of the Special Rapporteur was at one point among the leaders in responsible ship recycling. Several years ago the company had a policy prohibiting the practice of dismantling its ships on beaches in Asia under abhorrent conditions, which it recently and unfortunately reversed for seemingly unjustified reasons. In a specific case, a UK-registered radioactive ship, the North Sea Producer, co-owned with the Brazilian company Odebrecht, arrived in Bangladesh via the United Kingdom for dismantling on beaches by poorly trained, equipped and monitored workers, posing a serious risk to the rights of local communities and workers.

59. The issue of urban landfills and the threats posed to life and health continues to also be raised to the mandate. During his mission to Sierra Leone, the Special Rapporteur was alarmed by the presence of a large landfill in the heart of Freetown, the most populated city of the country. He witnessed the women, and children, living inside the dump, eating meat from animals fed with potentially toxic waste; and the informal operations of waste pickers risking health and life to scale walls of waste to scavenge scraps for recycling and recovery. He encouraged the international community to support Sierra Leone to address the problems created by unsustainable global consumption and production patterns.⁴⁵

III. Implementing the SDGs and protecting human rights from toxic exposures

⁴³ http://ap.ohchr.org/documents/dpage_e.aspx?si=A/HRC/12/26/Add.2

⁴⁴ http://ap.ohchr.org/documents/dpage_e.aspx?si=A/HRC/12/26

⁴⁵ <https://www.ohchr.org/EN/Issues/Environment/ToxicWastes/Pages/Visits.aspx>

60. Among the UN Sustainable Development Goals (SDGs), exposure to hazardous substances and wastes is present throughout the text, although not as prominently as one would expect given the magnitude of the issue. Hazardous substances and wastes implicate all seventeen of the SDGs. For example, people in poverty (SDG 1) often bear the brunt of toxic pollution, and reductions in exposure are required to achieve health targets (SDG 3). Responsible consumption and production depend on reducing the release of chemicals and wastes to air, water, and soil with an aim to minimize their adverse impacts on human health and the environment (SDG 12), and safe work requires the protection of workers from occupational exposures (SDG 8). SDG 2 includes ensuring access to safe food and SDG 6 includes improving water quality by minimizing the release of hazardous chemicals and materials.

61. To achieve the SDGs, in particular to lower the burden of non-communicable diseases, States and businesses must prevent and minimize human exposure to hazardous substances. But beyond the SDGs, protection against exposure is incumbent on all States under international human rights law. As described below, two opportunities exist for States to help ensure collective action.

A. Post-2020 framework for toxic chemicals and waste

62. As the rates of disease, disability and death attest, protection of human health from exposure to hazardous substances is a global challenge in urgent need of global action. Central to this is the global control of toxic chemicals and pesticides throughout their lifecycle to protect human rights and ensure sustainability.

63. Efforts over the past several years have been largely confined to a set of narrow treaties for specific substances and stages of industrial activity. Over the years, global treaties for “chemicals and wastes” have evolved into the primary global instruments on environmental health in relation to pollution, toxic chemicals and wastes. There is ample room for their continued implementation.

64. However, even if fully implemented, the scope of existing global agreements on toxic substances is grossly inadequate to protect human health from the vast majority of hazardous substances of global concern. Less than 0.1 % industrial and agricultural chemicals with known intrinsic health hazards are regulated through their lifecycle under these existing instruments.⁴⁶ Even if existing conventions for toxic chemicals were fully implemented, thousands of chemicals of global concern would not fall within their scope.

65. At the 2002 World Summit on Sustainable Development, States recognized the need for a framework at the global level to achieve the sound management of chemicals. The Strategic Approach to International Chemicals Management (SAICM) was established in 2006, intended to fill the protection gap left by the current patchwork of global treaties for chemicals and wastes, which omit thousands of hazardous substances. While some progress was made under SAICM, there appears unanimous agreement that we are long way from achieving even the least ambitious definition of sound chemicals management.

66. There is an urgent need for a stronger, more comprehensive global framework to protect human health from a toxic environment to help address the injustices resulting from divergent standards of protection between countries. Solutions are available to eliminate and reduce exposure to toxic substances, but international cooperation and strong global standards are required to ensure that these existing opportunities to help ensure sustainable development and protect human rights.

67. The mandate of SAICM is set to expire in 2020. This presents an opportunity to craft a meaningful agreement on environmental health, protecting people from exposure to toxic substances found in contaminated water, food and air, as well as consumer products,

⁴⁶ A very conservative estimate based on existing classifications. Thousands of industrial chemicals have not been thoroughly assessed and classified for the health hazards they may present.

such as furniture, cosmetics, building materials and toys. This opportunity is essential to the realization of numerous internationally recognized human rights.

68. The Special Rapporteur offers recommendations for the post-2020 framework (future framework) on toxic chemicals and waste that in his view would strengthen the ability of the global community to protect human rights from toxic exposures.

1. A requirement that States have effective national systems

69. Under SAICM's 2006 Dubai Declaration on International Chemicals Management, States, businesses and civil society all explicitly recognized that exposure to toxic chemicals and hazardous wastes is a human rights issue. They committed themselves to "respecting human rights and fundamental freedoms, understanding and respecting ecosystem integrity and addressing the gap between the current reality and our ambition to elevate global efforts to achieve the sound management of chemicals."

70. This important statement only captures one aspect of the State's duty under human rights law, namely the duty to respect human rights. However, the duty of States is not only to refrain from interfering with or curtailing the enjoyment of the multitude of human rights implicated by toxic chemicals and wastes, but also to actively protect those rights against violation or abuse by third parties, including businesses. This duty to protect human rights is clearly reflected in the UN Guiding Principles on Business and Human Rights, endorsed by the UN Human Rights Council in 2011.

71. Every State has an existing obligation under international law to have effective systems in place to protect people against toxic exposures. By virtue of their commitments under international treaties to protect the rights to life, to health, to safe water and food, to adequate housing, to safe and healthy working conditions, among others, every State has an obligation to have systems that prevent and minimize exposure to toxic substances.

72. For example, over 190 States recognize the right to health in one or more human rights treaties.⁴⁷ Under this right, States have an obligation to take steps towards "the prevention and reduction of the population's exposure to harmful substances such as radiation and harmful chemicals ... that directly or indirectly impact upon human health."⁴⁸ Furthermore, States are required to adopt positive measures to protect the right to life,⁴⁹ including effective measures to prevent and safeguard against hazards that threaten the lives of human beings.⁵⁰ States must take all possible measures to reduce infant mortality and to increase life expectancy, especially in adopting measures to eliminate malnutrition and epidemics.⁵¹ The UN Convention on the Rights of the Child contains an explicit obligation on States to protect children's health from pollution and contamination.

73. Under SAICM, States, businesses, international organizations and civil society participants agreed upon a set of eleven "basic elements" of a national system for sound chemicals management to prevent and reduce exposure to toxic substances. These basic elements, including legislation, regulation and enforcement, are necessary to respect, protect and fulfil the rights to life and health, among many others.

74. However, the policy framework of SAICM does not contain any obligation on States to have such systems in place, and many States still lack effective systems to protect life and health from toxic exposures. Such a national system is neither optional nor a luxury, but rather a necessary and fundamental duty of the State. The future framework for chemicals and wastes should contain a clear obligation on States to have effective systems in place to protect against toxic exposures.

⁴⁷ CESCR, CRC, WHO Constitution.

⁴⁸ CESCR, general comment 14

⁴⁹ See Human Rights Committee, general comment No. 6 (1982) on the right to life, para. 5.

⁵⁰ See E/CN.4/Sub.2/1994/9 and Corr.1, para. 175.

⁵¹ See Human Rights Committee, general comment No. 6, para. 5. While the Committee states that it would be "desirable" for States to take all possible measures, the evidence is now much stronger that States must take all possible measures to respect, protect and fulfil.

2. A periodic review mechanism

75. Good governance is essential for environmental health at any level, and essential elements of good governance are the principles of transparency and accountability.⁵²

76. SAICM is rightly criticized for its unsatisfactory reporting and review mechanism of national efforts on sound chemicals management,⁵³ as “no institution is responsible for exercising strategic oversight and monitoring with respect to chemicals and waste management.”⁵⁴ Statistics on reporting reveal limited reporting rates of States.⁵⁵ These weak reporting and review mechanisms prevent supervisory or oversight roles within the existing structure of SAICM in achieving the 2020 Goal.⁵⁶ In part for the lack of accountability, States have been reluctant to commit substantial resources to SAICM since its inception in 2006.

77. Although sound chemicals management is a target of the SDGs, the review process of the SDGs does not address the problem of insufficient oversight and monitoring for SAICM if it continues beyond 2020, or for any future framework for chemicals and wastes. There are concerns that the SDG Follow-up and Review (FUR) architecture is based on voluntary national reviews and peer-reviewed soft guidance.⁵⁷ The process also has inadequate representation and participation of civil society, as government-appointed representatives primarily undertake reviews.⁵⁸ Furthermore, States do not benefit from country-specific recommendations, which could provide tailor-made suggestions on SDG implementation and measures to improve chemicals management in light of national circumstances.⁵⁹

78. Further reinforcing the need for a periodic reporting and review mechanisms is that international treaties to protect against exposure to hazardous substances and wastes lack effective reporting, compliance and review mechanisms. Many countries continue to fail to meet their reporting commitments.⁶⁰ It was noted recently that up to 60% of States do not meet reporting requirements under the Basel and Stockholm Conventions.⁶¹ Both the Stockholm and Rotterdam Conventions do not have compliance mechanisms, and the Basel conventions requirements are considered weak.

79. A periodic assessment of efforts by States and non-State actors on chemicals management under a the future framework for chemicals and wastes would help ensure that progress is being made toward the sound management of chemicals, and thus to the realization of human rights and to the achievement of SDGs.⁶² The existence of such an accountability mechanism under the future framework may help to mobilize resources from donors. However, an accountability mechanism necessitates the existence of clear obligations on States in the future framework on chemicals and wastes, such as to have

⁵² Honkonen and Khan, *Chemicals and Waste Governance Beyond 2020: Exploring Pathways for a Coherent Global Regime* (Nordic Council of Ministers, 2017), page 32 <http://norden.diva-portal.org/smash/get/diva2:1061911/FULLTEXT01.pdf>

⁵³ *ibid*, page 6, 56, 58

⁵⁴ *ibid*, page 75

⁵⁵ Terekhova, Vickers, & Koekkoek, 2016. Indicators of progress and monitoring. Integrated. National Implementation of SDGs and International Chemicals and Waste Agreements. International Expert and Stakeholder Workshop.

⁵⁶ SAICM, SAICM/IP.2/INF.14, page 6 http://www.saicm.org/Portals/12/documents/meetings/IP2/IP_2_INF_14_Governance_CGS_f.pdf; Geneva Academy, *Economic, Social and Cultural Rights and Sustainable Development Goals* (Research Brief May 2018) <https://www.geneva-academy.ch/joomlatools-files/docman-files/Research%20Brief%20Economic,%20Social%20and%20Cultural%20Rights%20and%20SDGs.pdf> (hereafter Geneva Academy)

⁵⁷ *Ibid*.

⁵⁸ Center for Governance and Sustainability, SAICM, SAICM/IP.2/INF.14

⁵⁹ Geneva Academy, page 3

⁶⁰ <https://unstats.un.org/sdgs/files/report/2017/TheSustainableDevelopmentGoalsReport2017.pdf>

⁶¹ <https://chemicalwatch.com/24151/international-treaties-monitoring-compliance>

⁶² Honkonen and Khan, page 32

effective national systems in place, to submit national action plans and to provide periodic update for review of national progress toward the sound management of chemicals.

80. In this regard, the Special Rapporteur believes a system similar to the Universal Periodic Review (UPR) of the UN Human Rights Council would be of great value to the post-2020 framework for chemicals and waste.⁶³ The UPR is a unique, comprehensive, and universal reporting and review process that involves an objective and non-confrontational review of all UN Member States' performance under several different human rights treaties, with an inclusive multi-stakeholder participatory approach.⁶⁴ Both the international regimes for toxic substances and human rights are similar in that they are each comprised of several individual international instruments with varying degrees of legal character. The creation of a periodic review under the future framework for chemicals and wastes could create synergies across various UN initiatives, including the FUR mechanism of the SDGs.⁶⁵

81. Under a UPR-like peer-review process for chemicals and wastes, each State would declare actions taken to develop effective systems for toxic chemicals and wastes in meeting their international obligations.⁶⁶ States could report on actions taken towards reducing toxic exposure, and other States and stakeholders may evaluate these steps and offer recommendations for improvement and follow-up.

82. While the UPR is a State-driven peer-review process, participation of various stakeholders including NGOs and NHRIs is considered a critical component of the mechanism. The review is based on three categories of documents: a national report by the State concerned, prepared through a broad consultation process at the national level with all relevant stakeholders; a summary of the State's interactions with treaty bodies, special procedures, and other relevant UN documents; and information from other stakeholders.⁶⁷ The participatory approach of the UPR is highly compatible with the participatory nature of SAICM.

83. The UPR has helped to strengthen national level coordination, through involvement of various state entities in national coordination mechanisms for reporting and follow-up.⁶⁸ Success of the UPR is shown through concrete results at national levels, where UPR recommendations feed into national development initiatives,⁶⁹ for example through legal reforms and national action or implementation plans.⁷⁰ Such coordination between governmental and non-governmental entities in various sectors including health, trade, agriculture, and environment, is crucial for protection of health and the environment from toxic substances.

84. A key outcome of the UPR process is the conclusions and recommendations, as well as voluntary commitments of the State concerned, which together contribute to national implementation strategies and provide a basis for improved performance nationally.⁷¹ These recommendations may identify key issues and provide guidance for implementation.⁷² They support follow-up because they address critical gaps in implementation emerging in light of existing human rights obligations, national context,⁷³ and political commitments through previous UPR cycles.⁷⁴ As States are required to report on steps taken to implement

⁶³ The idea was suggested by the Center for Governance and Sustainability in March 2018, SAICM/IP.2/INF.14, and others. Regarding the application of a peer-review under the Convention on Biological Diversity, see Ulloa, A. M., Jax, K. and Karlsson-Vinkhuyzend, S. I. 2018. Enhancing implementation of the Convention on Biological Diversity: A novel peer-review mechanism aims to promote accountability and mutual learning. *Biological Conservation* 217: 371-376

⁶⁴ <https://www.ohchr.org/EN/HRBodies/UPR/Pages/UPRMain.aspx>;

⁶⁵ Geneva Academy

⁶⁶ <https://www.ohchr.org/EN/HRBodies/UPR/Pages/UPRMain.aspx>

⁶⁷ A/HRC/RES/5/1

⁶⁸ HRC 37, Annual high-level panel discussion on human rights mainstreaming

⁶⁹ The Danish Institute for Human Rights, page 34

⁷⁰ HRC 37, Annual high-level panel discussion on human rights mainstreaming

⁷¹ A/HRC/RES/5/1 para 1; A/HRC/RES/5/1 para 4; Geneva Academy, page 3

⁷² https://www.ohchr.org/Documents/HRBodies/UPR/SDGs_2030_Agenda.pdf

⁷³ A/RES/60/251, para 5(e); A/HRC/RES/5/1 para 3

⁷⁴ HRC37, Annual high-level panel discussion on human rights mainstreaming

previous recommendations, the periodic review process promotes progressive development in the areas identified for further action. The post-2020 framework for chemicals and waste process should accommodate a structure that allows for State-specific recommendations.

85. The UPR system not explicitly include responsibilities of businesses in the context of respect of human rights. However, while implementation of UPR recommendations primarily rests on the State, relevant stakeholders also have a responsibility to implement relevant commitments.⁷⁵ This allows for provision for responsibilities of businesses related to the State in question, including those in relation to exposure to toxic chemicals, which could benefit from emphasis in such an accountability mechanism.

3. A updated definition of a chemical of “global concern”

86. Today, chemicals of global concern are those toxic industrial chemicals and hazardous pesticides used, produced and released by global supply chains. States should recognize that a “chemical of global concern” includes the full lifecycle of toxic substances used, produced and released by global supply chains, in addition to those that travel significant distances through the environment and migratory species.

87. The production, use and release of toxic substances in global supply chains are resulting in trans-boundary impacts. Industrial chemicals are used in international supply chains to manufacture products for export, such as textiles, electronics, furniture and building materials, hazardous pesticides applied to produce food and other products for consumption in other countries. These industrial chemicals and pesticides themselves are often traded across borders. And they are often the toxic by-products of consumption and production, whether from the extraction of natural resources such as metals, minerals and petroleum, energy generation or waste disposal.

88. However, the vast majority of toxic chemicals with trans-boundary impacts are excluded from consideration from global measures because they do not travel long distances through environmental media. For example, the criteria for listing a substance under the 2001 Stockholm Convention necessitate evidence of long-range environmental transport through wind, water or migratory species.⁷⁶ As a result, perhaps thousands of toxic substances that do not easily degrade, accumulating in people and wildlife, are excluded from the scope of the Convention. Many of these substances pose a serious and unnecessary threat to numerous human rights, particularly of children. A similar, narrow interpretation of what constitutes a substance of global concern was recently articulated in the 2013 Minamata Convention.⁷⁷

89. This woefully outdated and narrow perspective of what constitutes a chemical of global concern is enabling the exploitation of workers and local communities, particularly in developing countries and emerging economies that produce much of the products that the world consumes. Complex and opaque global supply chains continue to exploit lower standards of human health and environmental protection, leading to rampant abuses of human rights.

4. A mechanism to phase-out chemicals of global concern

90. Duties and responsibilities to prevent exposure to toxic substances extend beyond borders. The transboundary transfer of toxic production and disposal to countries with lower levels of protection should be considered a form of exploitation if reasonable measures are not taken to protect those at risk.

91. Reasonable measures include global standards for the production, use and disposal of hazardous substances. However, States have intentionally excluded many chemicals of concern from the scope of existing treaties, preventing the development of global standards for thousands of toxic substances that remain in use around the world. This has enabled the

⁷⁵ A/HRC/RES/5/1 para 33

⁷⁶ Stockholm Convention, annex D

⁷⁷ Minamata Convention, preamble

transboundary transfer of toxic production and disposal to countries with lower levels of protection, creating costly challenges for States and businesses to trace supply chains to ensure that the rights of workers and communities are not abused by exposure to toxic substances.

92. There are grave concerns that various companies are exploiting workers and particularly children in some countries by exposing them to toxic risks they would not allow for workers back home. Exposing children to toxic substances at work is indefensible. States are obliged to take reasonable measures to prevent and minimize exposure to toxic substances that occur outside their territories and that give rise to infringements of applicable rights due to the activities of business entities over which they can exercise control and that are reasonably foreseeable.⁷⁸ There are numerous toxic substances that should be subject to global bans or restrictions, and though with well-characterized risks to life, health and development, are still produced and used in global supply chains, despite the availability of safer alternatives. An international instrument should be developed to phase-out these chemicals of global concern.

93. Special Rapporteurs have called for the creation of a treaty to prohibit the production and use of certain substances and classes of substances that present serious and in many cases unnecessary risks. For example, the Special Rapporteur on the Right to Food and this mandate, in their report on the impacts of pesticides in food and agricultural production on workers and communities, concluded that the “international community must work on a comprehensive, binding treaty to regulate hazardous pesticides throughout their life cycle, taking into account human rights principles.”⁷⁹ They recommended that “[s]uch an instrument should: (a) Aim to remove existing double standards among countries that are particularly detrimental to countries with weaker regulatory systems; (b) Generate policies to reduce pesticide use worldwide and develop a framework for the banning and phasing-out of highly hazardous pesticides; (c) Promote agroecology; [and] (d) Place strict liability on pesticide producers.”⁸⁰ This mandate has also urged the global community to develop a global treaty for toxic industrial chemicals.⁸¹

94. States should seize the opportunity of ongoing discussions to develop a new global instrument by 2030 that would ensure that chemicals of global concern are identified and the process of phase-out or effective restriction has begun.

5. Greater attention to both the gendered impact of exposure to toxic substances and its disproportional impact on children

95. Equality and non-discrimination are fundamental to human rights law.⁸² All individuals are equal as human beings and by virtue of this and the inherent dignity of each person must have equal protection from toxics. States have elevated duties to protect those who are disproportionately impacted by toxic exposures under international human rights law.

96. Biological differences between men and women, such as physiological and hormonal differences, create differing susceptibilities to the effects of exposure to toxic chemicals.⁸³ Women, are more likely to store higher levels of environmental pollutants in their tissues than those found in men. During pregnancy, lactation and menopause, women’s bodies undergo changes that may increase their susceptibility to health impacts from toxic exposures. Furthermore, due to differences in social roles, including occupational and household roles and prevailing harmful gender stereotypes, women and men are exposed differently to toxic chemicals with respect to, among other things, the substances encountered and the degree of exposure.

⁷⁸ CESCR, general comment No. 24, paras. 30–32.

⁷⁹ A/HRC/34/48

⁸⁰ A/HRC/34/48

⁸¹ See e.g. A/HRC/21/48; A/HRC/36/41/Add.1, A/HRC/33/41/Add.2, A/HRC/39/48/Add.2.

⁸² See e.g. UDHR, art. 2

⁸³ UNDP, *Chemicals and Gender*, Gender Mainstreaming Guidance Series (2011).

97. The age at which one is exposed to toxic substances is a critical factor in whether the exposure may result in adverse health impacts. Childhood exposure to toxics is interrelated with the gender dimension of the issue.

98. The future framework for chemicals and wastes should have a special focus on the gendered impact of exposure, and on childhood exposure. It may wish to create specific obligations for States to take expedited action on well-characterized threats to life and health regarding children and different genders, without waiting for the development of national, regional or global mechanism to phase-out such threats, such as lead-in-paint.

B. Business and human rights initiatives

99. For over 23 years, this mandate has received and responded to grave allegations of human rights violations and abuses due to business activities. Most of these have transnational links, and most are—unsurprisingly—abuses of the rights of the most vulnerable, including the poor in countries of all levels of development; indigenous peoples; women, and children; migrants and minorities, among others.

100. A common denominator under many emblematic business and human rights cases is toxic pollution and contamination. These have traversed the lifecycle hazardous substances, implicating sectors from extractive industries, to manufacturing of industrial chemicals, pesticides and consumer products, to food and agricultural production, to energy generation, to transportation, and to waste disposal, among others. These cases have often illustrated accountability gaps for victims; but, in virtually every case, the tragedy has equally illustrated the gross failure of States and businesses to prevent violations and abuses.

101. Since 2015, all of this mandate's reports to the Human Rights Council discuss the duties and responsibilities of States and businesses regarding toxic chemicals, pollution and other hazardous substances and wastes. In the same vein, the principles on protecting workers from toxic exposures, which the Special Rapporteur suggested in his 2018 report, are intended for use in various discussions on business and human rights, as well as discussions in other fora.

102. There are an increasing number of efforts to compel businesses to conduct human rights due diligence. Following the endorsement of the UN Guiding Principles on Business and Human Rights (UNGPs) in 2011, France has made human rights due diligence mandatory, while many others have adopted National Action Plans (NAPs) encouraging businesses to carry out human rights due diligence.⁸⁴ There are also efforts driven by business associations through their internal processes calling for their members to put in place human rights due diligence, thereby supporting State-led initiatives in this direction.

103. Despite these efforts, many industries have not adequately implemented the UNGPs with respect to toxic chemicals and pollution. Some major chemical industry associations and several member companies have not implemented such a requirement as part of Responsible Care, despite its outgrowth from a seminal case of human rights violation, the 1984 tragedy in Bhopal. In the course of meeting with businesses during country visits during the past four years, the Special Rapporteur has only personally encountered one chemical company undertaking human rights due diligence.

104. Various industry-wide initiatives across a number of industries and sectors are provided by companies in response to communications about alleged human rights abuses and violations. These are presented as being the equivalent to human rights due diligence. Some have elements that have considerable merit and are commendable. However, the majority of these initiatives follow neither the letter of the UNGPs nor the spirit of human

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<https://www.ohchr.org/Documents/Issues/Business/Session18/CompilationNAPReferencesToDi%20ligence.pdf>

rights in general. Many do not adequately consider toxic chemical and pollution related risks.

105. In July 2018, an Intergovernmental Working Group established by the Human Rights Council produced a zero-draft of a new treaty to “regulate, in international human rights law, the activities of transnational corporations and other businesses.” This is a welcome development from the perspective of the mandate, which may help to address some of the impacts of toxic chemicals in global supply chains, and the systemic challenges facing victims who struggle to access an effective remedy.

106. Studies suggest that only the smallest fraction of victims of exposure to hazardous substances are able to access remedies.⁸⁵ Major obstacles to accountability and remedy include the unreasonably high burden of proof, the long latency periods for consequences to manifest in some cases and the difficulty in establishing causation; substantial information gaps with respect to the identification of hazards, measurement of exposure and specification of the epidemiological impacts; possible exposure to a multitude of different substances in various occupational settings and over a working lifetime; and the provisions of contractual relationships between suppliers and purchasers which can shift responsibility up or down a supply chain.

107. Far too many countries rely to an unreasonable extent on the prospect of legal liability and reputational damage to prevent and mitigate harm from toxic exposures resulting from business activities. However, a “damage and sue” model of enforcement is not human rights prevention. Far too often, penalties and fees for violations simply amount to a cost of doing business, not prevention.

108. Solutions exist to make tremendous advancements in reducing the burden of disease through the prevention of exposure, which is required to realize the rights to life and health, among many others. States are failing to sufficiently compel businesses to adopt safer alternatives, instead enabling companies to exploit the most vulnerable, such as women, and children, particularly those living in poverty, to the cruelty of unnecessary and unjustifiable exposures to toxics and the suffering that it brings.

109. States should compel all businesses in their territory or jurisdiction to actively monitor, identify and prevent human rights violations. Compliance with the law alone should not be viewed as sufficient for the risks businesses create of exposure to hazardous substances. Legislation for toxic chemicals and pollution in general continues to lag behind the pace of innovation and economic expansion, resulting in many of the grave impacts described above. Traceability and transparency are crucial elements of human rights due diligence, and must be ensured to the throughout supply and value chains. Furthermore, States should ensure that human rights due diligence includes toxic chemical and pollution risks.

IV. Conclusions and Recommendations

110. **A broader, more detailed discussion is needed on human rights and exposure to hazardous substances, bringing in all relevant considerations, including ethical and medical perspectives. The Special Rapporteur aims help develop a more robust discussion on what is an acceptable level of exposure in the coming years.**

111. **The global community should adopt an international instrument to prevent and minimize toxic exposures. Such an instrument could be under the so-called “post-2020 framework for chemicals management.” It should contain:**

- (a) A definition of a substance of global concern based on presence in global supply and value chains;**
- (b) An explicit obligation on every State to have effective systems to prevent and minimize toxic exposures;**

⁸⁵ A/HRC/39/48

(c) A universal periodic review or other mechanism of State efforts to prevent and minimize toxic exposures;

(d) A mechanism to phase-out chemicals of global concern;

(e) Obligations for States to take expedited action on well-characterized threats to life and health regarding children and different genders.

112. States should support and actively engage in the development of legally binding instruments on businesses at national, regional and global levels. The Special Rapporteur encourages;

(a) States to compel businesses to include toxic chemicals and pollution risks in their human rights due diligence to identify, monitor, prevent and mitigate impacts to human rights

(b) Inclusion of the proposed principles in the Rapporteur's 2018 report to the Human Rights Council on workers' rights