

## “Call for inputs – Gender and Toxics”

Submission on behalf of [Child Rights International Network \(CRIN\)](#)

28 March 2024

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### About CRIN

1. CRIN is a creative human rights organisation focused on children's rights. We press for rights – not charity – and campaign for a genuine shift in how governments and societies view and treat under-18s.
  2. This submission draws on the research CRIN conducts on hazardous substances at the [UN level](#) and in the [European Union](#). It also draws on CRIN's position on the issue of [bodily autonomy](#).
  3. This submission focuses on children's rights within the context of the Special Rapporteur's forthcoming report.
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### Introduction

4. The gender dimension of exposure to toxics is very often neglected or completely absent from decision making across the globe. As Women Engage for a Common Future (WECF) stressed in 2016, “legislation to inform and protect women and men from chemical related health risks is weak in many countries. A specific policy focus on women with their different circumstances and needs in their role of protecting children from hazardous chemicals during their first months and years of development, is mostly non-existent”.<sup>1</sup>
5. Persons identifying as women and girls are the most affected by gender discrimination. In many parts of the world, their voices are stifled. They are denied the right to a voice, to education and sometimes the right to play.
6. From a gender perspective, harmful impacts of toxics present several aspects:
  - Specifics of reproductive and endocrine systems, as well as the particular susceptibility during windows of development amplify the harmful impacts of toxics on women and girls.

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<sup>1</sup> WECF Report, [Women and Chemicals: The impact of hazardous chemicals on women - A thought starter based on an experts' workshop](#), 2016.

- Persons identifying as women and girls face systemic discrimination, which magnifies harms caused by the exposure. Being socially classified as a woman leads to fall under a social category coming with a set of roles, norms, expected behaviours, as well as violence and marginalising patterns. This intimately exacerbates the particular vulnerability to environmental degradation, and risks posed to health and human rights.
7. **Terminology and acknowledgements:** sex refers to different biological and physiological characteristics, such as reproductive organs, chromosomes and hormones. Using the terms women, men, female, male does not presume the gender identity of individuals and places no normative assumptions on bodies.<sup>2</sup>
  8. *Gender* refers to the socially constructed roles. These depend on social, economic, political and cultural contexts.<sup>3</sup> Gender(s) are fluid, with constantly changing identities, expressions, and attitudes towards them. There is no one 'correct' understanding, and even what is progressive today could become outdated or oppressive.<sup>4</sup>
  9. While this submission particularly focuses on the harms caused to persons identifying as girls, more research should be conducted and compiled to address the impacts of hazardous chemicals on male body and persons identifying as boys. They also experience discriminatory patterns and specific biological harms, including on fertility and development.<sup>5</sup>

## Gender and toxics: a children's rights approach

### *Equality and non-discrimination*

10. Right-based approaches to gender reflect internationally agreed human rights principles in policy and practice.<sup>6</sup> The human rights principles most relevant to gender issues are non-discrimination, participation and equality of opportunity. These are all recognised rights for children in the Convention on the Rights of the Child (UNCRC) and underpinned by the Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW).
11. The CEDAW is a legally binding text requiring the elimination of discrimination on the basis of sex in the enjoyment of civil, political, economic, social and cultural rights.<sup>7</sup> This includes establishing laws and policies to protect women and girls against

<sup>2</sup> Wen and WECF, [Gender Just Chemicals Policy](#), 2021.

<sup>3</sup> CRIN Archives, [A Rights Based Approach to Gender](#).

<sup>4</sup> Ibid.

<sup>5</sup> See for example Khodasevich, D. et al., Associations between prenatal phthalate exposure and childhood epigenetic age acceleration, August 2023; Euronews, Research into falling sperm counts finds 'alarming' levels of chemicals in male urine samples, Jun 2022; Cohen-Eliraz, L. et al., Prenatal exposure to phthalates and emotional/behavioral development in young children, September 2023.

<sup>6</sup> CRIN Archives, [A Rights Based Approach to Gender](#).

<sup>7</sup> CEDAW, Article 2.

discrimination and abolishing all existing laws, policies, customs, and practices which are discriminatory.<sup>8</sup> In 1993, the Vienna Declaration reiterated that “human rights of women and the girl-child are an inalienable, integral and indivisible part of universal human rights.”<sup>9</sup>

12. The UNCRC prohibits discrimination unequivocally, irrespective of the child’s or a child’s parent’s or legal guardian’s race, colour, sex, language, religion, political or other opinion, national, ethnic or social origin, property, disability, birth or other status.<sup>10</sup> Education of the child shall also “be directed to preparation for responsible life in a free society, in the spirit of (...) equality of sexes”.<sup>11</sup>
13. The Sustainable Development Goals aim to eliminate gender disparities in education and ensure equal access to education<sup>12</sup>, end all forms of discrimination against all women and girls everywhere<sup>13</sup>, and adopt and strengthen sound policies and enforceable legislation for the promotion of gender equality and the empowerment of all women and girls at all levels<sup>14</sup>.
14. At a regional level, the EU Strategy on the Rights of the Child recognises that “every child in Europe and across the world should enjoy the same rights and live free from discrimination and intimidation of any kind”, and stresses that children continue to suffer from socio-economic exclusion and discrimination.<sup>15</sup> The Strategy warns that “gender stereotypes, in particular, limit boys’ and girls’ aspirations and create barriers to their participation and life choices.”<sup>16</sup>
15. To uphold these frameworks, policies and legislation must fully assess and address the amplified impacts toxics can have on persons identifying as women and girls, and the enjoyment of their rights.

### ***Right to bodily integrity***

16. Everyone, including children, has the right to autonomy and self-determination over their own body. This is the principle of bodily integrity, which upholds everyone’s right to be free from acts against their body which they have not consented to. Children’s enjoyment of their bodily autonomy and integrity is significantly more restricted compared to adults’, largely because of paternalism and assumptions about their presumed immaturity and lack of capacity based on their young age.
17. Forms of discrimination based on their sex, gender identity, race, ethnicity, disability and socioeconomic status, exacerbate the problem and certain groups of children, including trans, intersex and children identifying as girls, will face an even greater risk

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<sup>8</sup> [Convention on the Elimination of All Forms of Discrimination Against Women \(CEDAW\)](#), Youth friendly version.

<sup>9</sup> [Vienna Declaration and Programme of Action](#), paragraph 18.

<sup>10</sup> UNCRC, Article 2.

<sup>11</sup> UNCRC, Article 29.1.d.

<sup>12</sup> SDGs, Target 4.5

<sup>13</sup> SDGs, Target 5.1

<sup>14</sup> SDGs Target 5.c

<sup>15</sup> EU Commission, [The EU Strategy on the Rights of the Child, COM\(2021\) 142 final](#), March 2021.

<sup>16</sup> Ibid.

of violations of their bodily integrity, including those caused by the exposure to toxics.<sup>17</sup> Toxic trespass, as the exposure and contamination of children's bodies to toxic and hazardous chemicals without their consent, is a violation of the principle of bodily integrity, entailing breaches of their rights to health and freedom from harm. Furthermore, exposure to toxics is an act of violence against children, to both their health and the environment. In 2023, the UN Committee on the Rights of the Child ("The Committee") stressed that "environmental degradation (...) is a form of structural violence against children and can cause social collapse in communities and families".<sup>18</sup>

18. Children are particularly vulnerable to such exposure, and are not in a position to express consent to being exposed to harmful substances. The period where exposure is the most harmful occurs before birth and after birth at the earliest stages of life, when children are unable to speak up for and defend themselves, or give consent. Former SR on toxics Baskut Tuncak explained that human exposure to toxic substances constitutes an intrusion, whether it is acute poisoning or low level exposure to toxic substances. He emphasised that "childhood exposure to toxics occurs without the child's (or parent's) consent."<sup>19</sup> Children continue to be born "pre-polluted," and are denied their right to bodily integrity before they can even walk.<sup>20</sup>

## **Exposure to toxics: amplified harms to women and girls**

19. This submission addresses gender-based discrimination related to toxics, with a particular focus on the impact exposure to toxics can have on women and girls. It is important to note that there is currently a lack of data regarding the exposure of trans and intersex people to toxics, as raised in 2021 by WECF and WEN.<sup>21</sup> This gap in research must be acknowledged and further work should be conducted on this topic.

### ***Specific health impacts of toxics on women and girls***

20. Scientific research has well-documented the specific impacts of exposure to toxics on women and girls. Hazardous chemicals undoubtedly present disproportionate impacts on women.<sup>22</sup>
21. Biological determinants differ between men and women. Women and girls are more affected because they face different exposure routes and have specific susceptibility to chemicals. The most critical phases of development ('windows of susceptibility')

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<sup>17</sup> CRIN, [Issues - Bodily integrity](#)

<sup>18</sup> Committee on the Rights of the Child, [General Comment No. 26 on children's rights and the environment, with a special focus on climate change](#), CRC/C/GC/26, August 2023.

<sup>19</sup> [Report of the SR on the implications for human rights of the environmentally sound management and disposal of hazardous substances and wastes. A/HRC/33/41](#), August 2016, Section D. Right to physical and mental integrity.

<sup>20</sup> Ibid.

<sup>21</sup> Wen and WECF, [Gender Just Chemicals Policy](#), 2021.

<sup>22</sup> Shadaan, R. and Murphy, M., [Endocrine-Disrupting Chemicals \(EDCs\) as Industrial and Settler Colonial Structures: Towards a Decolonial Feminist Approach](#), Catalyst Journal - Feminism, theory, technoscience, 2020; Wen and WECF, [Gender Just Chemicals Policy](#), 2021.

are notably the perinatal period, puberty, pregnancy, lactation and menopause. During those critical windows, “women are more vulnerable to influences from the environment”<sup>23</sup>, including toxics.

22. Hazardous chemicals, such as endocrine disrupting chemicals (EDCs), are particularly harmful to women and girls. In 2012, a scientific review emphasised occupational exposures in producing plastics and health risks to workers, particularly women.<sup>24</sup> It uncovered heightened rates of breast cancer amongst women in the plastics sector, exposed to chemicals identified as mammary carcinogens and EDCs, in an environment heavily contaminated with dust and fumes. “The nature of these exposures in the plastics industry places women at disproportionate risk, underlining the importance of gender”, the review concluded.
23. Contamination can pass from one generation to the next. Regarding maternal exposure, although the CRC’s definition of the child does not include the developing foetus, the Committee has explained that “the care that women receive before, during and after their pregnancy has profound implications for the health and development of their children”.<sup>25</sup> Former SR Baskut Tuncak stressed that “cases of children born with disabilities because their mothers worked with toxic chemicals before or during pregnancy, or harmed by toxic residues brought into the home from work (“take-home exposures”) by their parents or others illustrate the importance of protecting not only women and girls of reproductive age, but the population at large”.<sup>26</sup>
24. Environmental Historian Nancy Langston conducted a case study on diethylstilbestrol (DES) in 2010, of particular relevance to gender perspective and transgenerational impacts of exposure. DES is an EDC and carcinogen which was prescribed to women for use in all pregnancies, miscarriage prevention and alleviating symptoms of menopause, while there was no science supporting its safe use. In 1971, it was discovered that several women suffered from rare vaginal cancers and that their mothers had taken DES during their pregnancies.<sup>27</sup> Scientific research then demonstrated the links with DES, since “especially if exposure occurs during prenatal development; at pharmaceutical levels, there is a low but significant increase (< 0.01%) in cancer in young women who were exposed before birth, [...]”.<sup>28</sup> Failing to uphold the precautionary principle, public authorities authorising the use of DES and companies selling it were responsible for contaminating generations of women.

### ***Pollution, discrimination and poverty: interconnected factors of marginalisation and oppression***

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<sup>23</sup> WECF Report, [Women and Chemicals: The impact of hazardous chemicals on women - A thought starter based on an experts' workshop](#), 2016

<sup>24</sup> Dematteo, R., [Chemical Exposures of Women Workers in the Plastics Industry with Particular Reference to Breast Cancer and Reproductive Hazards](#), Journal of Environmental and Occupational Health Policy, December 2012.

<sup>25</sup> CRC, [General Comment no. 15: The right of the child to the enjoyment of the highest attainable standard of health](#), 2013.

<sup>26</sup> Ibid.

<sup>27</sup> Smith, EK. et al., [Higher incidence of clear cell adenocarcinoma of the cervix and vagina among women born between 1947 and 1971 in the United States](#), Cancer Causes Control, 2012.

<sup>28</sup> Langston, N., [Toxic Bodies: Hormone Disruptors and the Legacy of DES](#), Environ Health Perspect, October 2010.

25. Exposure to toxics follows and feeds into a pattern of systemic discrimination, environmental racism and gender inequality. As mentioned by the High Commissioner on Human Rights (OHCHR) and the UN Environment Programme (UNEP), pollution - including from hazardous substances - “disproportionately affects persons, groups and peoples in vulnerable situations reflecting both historical and ongoing discrimination, racism, and power imbalances that have given rise to powerful social movements for environmental justice”.<sup>29</sup> UNEP and the OHCHR stressed that “by disproportionately affecting already marginalised groups including children, indigenous peoples, persons with disabilities, women and girls, and persons living in poverty, hazardous substances threaten State obligations and commitments related to non-discrimination and equality”.<sup>30</sup>
26. The SR on human rights and the environment David Boyd has warned of the environmental injustices that culminate in “sacrifice zones”.<sup>31</sup> Here, “vulnerable and marginalised groups bear a disproportionate burden”.<sup>32</sup> Since gender is a factor of marginalisation, it is intrinsically connected to and exacerbates the impacts of living in sacrifice zones. Children suffering from exposure in sacrifice zones tend to also endure other forms of pollution in a disproportionate way. Between countries, those with the lowest income tend to be most affected by pollutants in general. Weaker regulations in poorer countries allow toxicity to persist and accumulate where children live, learn and play, and poorer health associated with economic deprivation reduces resilience, particularly when children are malnourished. 92% of pollution-related deaths occur in low- and middle-income countries.<sup>33</sup>
27. In 2023, a review paper from the United States analysed the “disparities in toxic chemical exposures and associated neurodevelopmental outcomes”<sup>34</sup>, and found that exposure to neurotoxicants disproportionately harms racial and ethnic minority and low-income children. Emphasising links between racial inequities, environmental exposures, and illnesses, the review also outlined that “associations with adverse neurodevelopmental outcomes were found in 58% studies (...) with worse outcomes only in girls”.<sup>35</sup> One of the analysed studies indeed showed associations between prenatal PBDE exposure (cord blood) and poor working memory only among girls.<sup>36</sup>
28. An investigation also revealed that “black women face disproportionate risks from largely unregulated toxic substances in beauty and personal care products”.<sup>37</sup>

<sup>29</sup> OHCHR, UNEP, [Human rights and hazardous substances: Key messages](#), July 2021.

<sup>30</sup> Ibid.

<sup>31</sup> [Report of the SR on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment. A/HRC/49/53](#), January 2022.

<sup>32</sup> Ibid.

<sup>33</sup> Global Alliance on Health and Pollution, [Pollution and health: A global public health crisis](#), Update to the 2017 Lancet Commission on Pollution and Health; EU Commission, [Chemicals Strategy for Sustainability](#), October 2020.

<sup>34</sup> Dickerson, A., [Invited Perspective: Still Beating the Drum—Environmental Health Disparities and Neurodevelopment. Environmental Health Perspectives](#), Ellickson, K. et al., [Disparities in Toxic Chemical Exposures and Associated Neurodevelopmental Outcomes: A Scoping Review and Systematic Evidence Map of the Epidemiological Literature](#), Environmental Health Perspectives Volume 131, Issue 9, September 2023

<sup>35</sup> Ibid.

<sup>36</sup> Cowell, WJ. et al., [Associations between prenatal and childhood PBDE exposure and early adolescent visual, verbal and working memory](#), 2018.

<sup>37</sup> Inside Climate News, [Black women face disproportionate risks from largely unregulated toxic substances in beauty and personal care products](#), November 2023.

Moreover, stores located in low-income areas were found to be more likely to sell potentially toxic hair care products<sup>38</sup>, and products marketed to women and girls of colour were found to contain chemicals associated with increased cancer risk compared to those marketed to white women.<sup>39</sup> Scented period products and pads, scent-altering douches and wipes - which often contain toxics - also disproportionately expose people of colour, older people and those with lower educational attainment, as the study demonstrated.<sup>40</sup>

29. In 2024, a study outlined racial and ethnic disparities in exposure to phthalates, as it revealed that out of more than 6,000 pregnancies, Black and Hispanic/Latina women had phthalate levels that were up to 148% higher than White women. Research concluded that lowering phthalate levels in Black and Hispanic/Latina women to the levels found in White women could reduce the risk of premature birth by an estimated 13% in Black women and 9% in Hispanic/Latina women.<sup>41</sup>

### **Tackling the roots of gender-based discrimination**

30. Protecting marginalised children, including those identifying as girls, is not only a matter of mitigating the impact of toxics, it also requires prevention and remedy. The drivers of marginalisation must be faced, such as the gender discrimination that is baked into laws, including in chemicals assessment and management procedures. In a children's rights context, non-discrimination is not only a right, but also a general principle informing the realisation of all other rights.
31. Gender discrimination and stereotypes faced by children are not the same depending on their age, their social status and/or where they live. One way to assess this is to differentiate data not just by sex, but also by age, ethnicity, economic status, geographic origin and other markers. This can help to eliminate disparities in legislation, social policy and resource allocation caused by social disadvantage. By empowering all girls and boys with their human rights, we can alleviate some of the worst kinds of abuse of children.
32. Rights based approaches can go a long way to effecting behavioural change and promoting respect for each others' rights, dignity, diversity and equality. Greater respect for the full range of children's human rights, including their bodily autonomy and integrity, is key. There needs to be recognition that the decision about one's body should rest with the individual and be taken by them when they are old enough and have capacity to give their free, prior and informed consent - or to refuse it.
33. States do not efficiently protect children from toxics, and leave the door open for businesses to pollute and extensively harm women and girls. States should adopt a

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<sup>38</sup> Chan, M. et al., [Evaluating Neighborhood-Level Differences in Hair Product Safety by Environmental Working Group Ratings among Retailers in Boston, Massachusetts](#), September 2023.

<sup>39</sup> EHN, [More than 900 common chemicals linked to breast cancer risk: Study](#), January 2024.

<sup>40</sup> EHN, [Scented period products bring worrisome toxic exposures. Who's most at risk?](#), December 2023.

<sup>41</sup> EHN, [Addressing racial disparities in phthalate exposure could reduce the risk of preterm birth](#), January 2024.

wide range of measures, which includes preventing exposure from happening in the first place, adopting laws and policies prioritising the protection of children, women and girls of reproductive age, and other at-risk groups,<sup>42</sup> holding companies accountable for environmental and health harms, and ensuring that women are not exposed to toxics in their workplaces.<sup>43</sup>

34. Greater understanding of children's bodily integrity should acknowledge that it is not just about freedom from violence, but also the right to access information or services that contribute to the freedom to make informed and autonomous decisions about one's body without restrictions. This also includes addressing the conditions that allow or deny the freedom to make autonomous decisions about oneself, such as poverty, discrimination and systems of oppression.

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<sup>42</sup> [Report of the SR on the implications for human rights of the environmentally sound management and disposal of hazardous substances and wastes. A/HRC/33/41](#), August 2016.

<sup>43</sup> Ibid.