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**Conference of the Parties to the Minamata Convention on Mercury**
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Item 5 of the provisional agenda*

**International cooperation and coordination**

# Report on the mercury-related activities of relevant international bodies**

## Note by the secretariat

1. In paragraph 2 (c) of article 24 of the Minamata Convention on Mercury, the Convention includes among the functions of its secretariat the function of coordination, as appropriate, with the secretariats of relevant international bodies, particularly other chemicals and waste conventions.

2. Since the entry into force of the Convention on 16 August 2017, numerous international entities have engaged in mercury-related activities. In order to bring those efforts to the attention of the Conference of the Parties, the secretariat invited those entities to submit reports on their activities for consideration by the Conference of the Parties. The reports are set out in the annexes to the present note, as follows: the report of the United Nation Development Programme (UNDP) (annex I), the report of the secretariat of the Aarhus Convention, its Protocol on Pollutant Release and Transfer Registers (PRTRs) (annex II), the report of the Secretariat of the UNECE Convention on Long-range Transboundary Air Pollution (CLRTAP or the Air Convention) (annex III), the report of the United Nations Children's Fund (UNICEF) (annex IV), and the report of the Inuit Circumpolar Council (ICC) (annex V). The reports are presented as received, without formal editing.

3. The reports set out in the annexes to the present note should be read alongside a number of other reports, including the report of the Executive Director of the United Nations Environment Programme to the Conference of the Parties to the Minamata Convention on Mercury at its sixth meeting (UNEP/MC/COP.6/INF/30), the report of the Council of the Global Environment Facility to the Conference of the Parties to the Minamata Convention on Mercury at its sixth meeting (UNEP/MC/COP.6/INF/13), the report on activities undertaken within the Global Mercury Partnership of the United Nations Environment Programme (UNEP/MC/COP.6/INF/33), the joint report on cooperation and coordination between the secretariats of the Minamata Convention on Mercury and of the Basel, Rotterdam and Stockholm conventions (UNEP/MC/COP.6/INF/29); the report of the World Health Organization and the International Labour Organization (UNEP/MC/COP.6/INF/31), the report on activities undertaken within the Global Framework on Chemicals – for a Planet Free of Harm from Chemicals and Waste (UNEP/MC/COP.6/INF/34), and the update on the Intergovernmental Science-Policy Panel on Chemicals, Waste and Pollution (UNEP/MC/COP.6/INF/35).

* UNEP/MC/COP.6/1/Rev.1.

** The document has not been formally edited.

# Annexes

# Annex I

## United Nations Development Programme and the Minamata Convention on Mercury

1. UNDP has been active in the area of supporting countries' mercury reduction efforts since the 1970s, when it administered the UN Revolving Fund for Natural Resources Exploration (UNRFNRE) from 1975 to 1995 and implemented a number of artisanal and small-scale gold mining (ASGM) projects financed by the revolving fund.

2. UNDP has continued assisting developing countries and countries with economies in transition in their efforts to reduce the use and release of mercury with the financial support of the Global Environment Facility (GEF). Such efforts have mainly focused on the extractives sector, by supporting the phase-out of mercury used in mining to extract gold, and on the health sector, where UNDP supports the phase-out of mercury-containing medical devices and the reduction of mercury emissions.

3. To assist countries meet their commitments under the Minamata Convention and reduce releases of mercury from various sectors and release sources, UNDP supports countries in:

(a) Conducting Minamata Initial Assessment (MIA) activities and ASGM National Action Plans (NAPs).

(b) Reducing emissions of mercury and mercury compounds to the atmosphere from point sources (e.g. coal-fired industrial boilers, incinerators, smelting and roasting processes used in the production/recycling of non-ferrous metals).

(c) Phasing out mercury-containing products in the healthcare sector (e.g. thermometers, blood pressure meters, dental amalgam, etc.).

(d) Lifecycle management (LCM) of mercury, mercury-containing products and wastes (including treatment and storage).

(e) Reducing and eliminating the use of mercury in ASGM, and minimizing mercury releases to the environment from mining and processing.

4. UNDP has provided, or is providing support, to a total of 42 countries to implement mercury-related projects through national, regional and global projects. UNDP's activities are underpinned by a social and environmental safeguards framework, which includes an assessment of their impact on the human rights of the communities they serve. UNDP's total mercury portfolio amounts to US$ 178 million in GEF grants (see Table 1 and Table 2).

5. UNDP, with GEF grants and often in partnership with WHO and the international NGO, Healthcare Without Harm (HCWH), has either supported or has been supporting 27 countries, in phasing-out mercury-containing medical devices, introducing cost-effective alternatives, improving the management of mercury-containing wastes, preparing awareness raising materials on the dangers of mercury, preparing guidance materials, and conducting training on the use of alternatives and on mercury spill management. This has helped protect the health of thousands who work in the healthcare sector (the majority of whom are women) as well as the protection of the environment from toxic mercury releases.

6. UNDP is also participating in the "PlanetGOLD Programme", which is a programmatic approach led by the UN Environment Programme (UNEP) to tackle the use of mercury in the ASGM sector. As the lead implementing agency for eight countries (Colombia, Ecuador, Ghana, Honduras, Indonesia, Kenya, Peru, and Suriname), UNDP aims to develop and connect responsible ASGM producers to international markets through transparent supply chains. Another key objective is to increase the access of small-scale miners and their communities to investment and finance for social and environmentally-friendly practices. Direct funding from the GEF for these eight countries is US$38.4 million, with co-financing from governments, sustainable finance institutions and the private sector. The Indonesia project was the first UNDP planetGOLD project completed in 2023, and the project supported the production of 2.23 tonnes of mercury-free gold and the formalization of 17 miner groups and 2 miners' cooperatives. The Peru project was completed in 2024 and achieved several of its goals, including the prevention of 17 tons of mercury from being released into the environment and the production of 1,609 kg of mercury-free gold. The Colombia Project operationalized two gender-focused financial mechanisms to support mercury-free mining, with USD 8.5 million available. Community-led funds benefited most women.

7. An important recent GEF approval includes the “Global Elimination of Mercury in Non-ferrous Metals Initiative (GEMINI)”, where UNDP will collaborate with the UN Environment Programme (UNEP) and UN Industrial Development Organization (UNIDO) to support six countries to eliminate mercury emissions from the non-ferrous metals industry reducing mercury emissions by 37.48 metric tonnes. As the lead implementing agency, UNDP will support the governments of India and Mexico to reduce an expected 24 metric tonnes of mercury pollution across both countries.

8. UNDP’s key approaches to assisting countries to advance the sound management of mercury include:

(a) Advocacy and Awareness Raising – Campaigning among stakeholders, decision-makers and population groups at risk on the importance of mercury reduction, phase-out and its management.

(b) Capacity Building – Identification of innovative and successful practices; policy, regulatory and institutional enhancements to help countries put in place mercury management systems; identification of financing needs and options; application of lessons learned and experiences from other countries; and development and application of guidelines and tools to facilitate the management and monitoring of mercury.

(c) Technical Assistance – Supporting countries in identifying and introducing Best Environmental Practices (BEP) and Best Available Technologies (BAT), along with customized training for their use and application, which have proven successful elsewhere and will help address national challenges and constraints with regards to the sound management of mercury.

(d) Monitoring – Assisting countries to assess their situation relating to mercury and tracking their progress towards reducing its use and releases.

Table 1: **UNDP's Mercury Portfolio**

| **Country** | **Project Title** | **GEF Grant*** | **Status** | **Expected Closing Date** | **Mercury Targets (MT)** |
|---|---|---|---|---|---|
| Argentina | Environmentally Sound Management of POPs, Mercury and other Hazardous Chemicals in Argentina | $ 8,930,250 | Under implementation | Aug-26 | 350 MT of mercury contaminated waste eliminated |
| China | Demonstration of production phase-out of mercury-containing medical thermometers and sphygmomanometers and promoting the application of mercury-free alternatives in medical facilities in China | $ 16,000,000 | Under implementation | Aug-27 | 75 |
| Colombia | Reducing UPOPs and mercury releases from healthcare waste management, e-waste treatment, scrap processing and biomass burning. | $ 5,800,000 | Operational Completion | Completed | 0.3 |
| Ecuador | National Programme for the environmental Sound Management and Life cycle management of Chemical substances | $ 8,490,000 | Financial Completion | Completed | 2 |
| Egypt | Protect human health and the environment from unintentional releases of POPs originating from incineration and open burning of health care- and electronic-waste. | $ 4,100,000 | Financial Completion | Completed | NA |
| Eswatini | Lifecycle approach in healthcare sector and other value chains | $ 4,935,000 | Under implementation | Apr-30 | 2 |
| Global (Argentina, India, Latvia, Lebanon, Philippines, Senegal, Viet Nam) | Demonstrating and Promoting Best Techniques and Practices for Reducing Health-Care Waste to Avoid Environmental Releases of Dioxins and Mercury | $ 10,326,455 | Financial Completion | Completed | NA |
| Colombia | PlanetGOLD | $ 6,000,000 | Operational Completion | Completed | 20 |
| Indonesia | PlanetGOLD | $ 6,720,000 | Financial Completion | Completed | 15 |
| Kenya | PlanetGOLD | $ 4,200,000 | Under implementation | Dec-25 | 1.5 |
| Peru | PlanetGOLD | $ 3,990,000 | Operational Completion | Completed | 15 |
| Ghana | PlanetGOLD | $ 4,400,000 | Under implementation | Sep-27 | 9 |
| Honduras | PlanetGOLD | $ 4,000,000 | Under implementation | Nov-27 | 8 |
| Suriname | PlanetGOLD | $ 5,250,000 | Under implementation | Nov-27 | 8 |
| Ecuador | PlanetGOLD | $ 4,000,000 | Under implementation | Dec-28 | 10 |

| Country | Project Title | GEF Grant* | Status | Expected Closing Date | Mercury Targets (MT) |
|---|---|---|---|---|---|
| Honduras | Environmental Sound Management of Mercury and Mercury Containing Products and their wastes in Artisanal Small-scale Gold Mining and Healthcare. | $ 2,600,000 | Financial Completion | Completed | 1 |
| India | Global Elimination of Mercury in Non-ferrous metals initiative in India | $ 15,740,000 | Hard Pipeline | N/A | 15.5 |
| Indonesia | SIRENE - Reducing the Supply Chain of Mercury and Mercury-contained products in Indonesia | $ 6,590,000 | Under implementation | Jun-30 | 20 |
| Kazakhstan | NIP update, integration of POPs into National planning and promoting sound healthcare waste management in Kazakhstan | $ 3,400,000 | Financial Completion | Completed | 0.036 |
| Kyrgyzstan | Protect Human Health and the Environment from Unintentional Releases of POPs and Mercury from the Unsound Disposal of Healthcare Wast | $ 1,425,000 | Financial Completion | Completed | 0.16 per year |
| Mexico | Global Elimination of Mercury in Non-ferrous metals initiative in Mexico | $ 9,750,000 | Hard Pipeline | N/A | 8.22 |
| Panama | Environmentally sound management of hazardous wastes containing POPs and Mercury | $ 2,730,000 | Under implementation | Dec-27 | 0.35 |
| Peru | Environmentally sound management of PCBs, Mercury and Toxic Chemicals in Peru | $ 4,725,000 | Under implementation | Oct-28 | 3 MT of mercury waste |
| Regional (Ghana, Madagascar, Tanzania, Zambia) | Reducing UPOPs and Mercury Releases from the Health Sector in Africa | $ 6,453,195 | Financial Completion | Completed | NA |
| Regional (Mauritius, Seychelles, Comoros, Maldives) | Implementing Sustainable Low and Non-Chemical Development in SIDS (ISLANDS): Indian Ocean component | $ 13,000,000 | Under implementation | July-27 | 1.573 |
| Uruguay | Environmental Sound Life-Cycle Management of Mercury Containing Products and their Wastes | $ 3,713,400 | Financial Completion | Completed | Disposal of 0.033 kg of mercury waste and reduce mercury by 0.073 kg per year. |
| Viet Nam | Reduce the impact and release of mercury and POPs in Vietnam through lifecycle approach and green labeling | $ 4,600,050 | Under implementation | Sep-28 | 0.658 |

Table 2: **Enabling Activities (EAs)**

| **Country** | **Title** | **GEF Grant** |
|---|---|---|
| Georgia | Minamata Initial Assessment | $ 200,000 |
| Global (Bangladesh, Guinea Bissau, Mauritania, Mozambique, Samoa) | Minamata Initial Assessment | $ 1,000,000 |
| Guyana | Minamata Initial Assessment | $ 200,000 |
| Seychelles | Minamata Initial Assessment | $ 199,100 |
| Panama | Minamata Initial Assessment | $ 400,000 |
| Serbia | Minamata Initial Assessment | $ 200,000 |
| Malaysia | Minamata Initial Assessment | $ 250,000 |
| Montenegro | Minamata Initial Assessment | $ 200,000 |
| Bosnia & Herzegovina | Minamata Initial Assessment | $ 200,000 |
| Jordan | Minamata Initial Assessment | $ 200,000 |
| Azerbaijan | Minamata Initial Assessment | $ 200,000 |
| Ghana | Minamata Initial Assessment | $ 200,000 |
| Kazakhstan | Minamata Initial Assessment | $ 400,000 |
| Albania | Minamata Initial Assessment | $ 200,000 |
| India | Minamata Initial Assessment | $ 1,000,000 |
| Argentina | Minamata Initial Assessment | $ 400,000 |
| Suriname | Artisanal and Small-Scale Gold Mining (ASGM) National Action Plan (NAP) | $ 500,000 |
| Morocco | Minamata Initial Assessment | $ 200,000 |
| Suriname | Minamata Initial Assessment | $ 200,000 |

***** Indicates total GEF project grants, which includes amount allocated for mercury reduction among other chemicals activities.

# Annex II

## Effective public access to information, public participation in decision-making and access to justice in environmental matters through implementing the Aarhus Convention, its Protocol on Pollutant Release and Transfer Registers (PRTRs) and the Minamata Convention in synergy

1. Effective public access to information, public participation in decision-making and access to justice together with information systems specifying sources and quantities of emissions and releases of pollution, are among the supporting elements that facilitate effective governance models and transparency in the context of implementing multilateral environmental agreements and related frameworks and initiatives. Integrating these elements in related activities can help for instance making policies evidence-based and more effective and enable decision-making that drives change and improves for example the quality of air and water – supporting also the respective human rights.

2. The Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters (Aarhus Convention) and the Protocol on Pollutant Release and Transfer Registers (Protocol on PRTRs) [1] are well-recognised and established tools that support environmental management and decision making across sectors. They provide a solid framework for governments to engage the public and other stakeholders effectively. Both treaties are open for accession by any United Nations Member State.

**User-friendly access to information and digitalization**

3. Importantly, implementing the Aarhus Convention and its Protocol on PRTRs, supports countries with the development of modern digital environmental information system and the digital public infrastructure through guidance material, exchange on experience on the topic and harmonized approaches regarding design and structure for disseminating environmental information. [2] Digital infrastructure, such as promoted through these instruments is a key element to effectively solve some of the challenges we are facing for example in implementing the whole of government and whole of society approach. Advancing modern digital infrastructure has multiple benefits and can also help to better conserve the institutional memory in the relevant authorities and other organizations, supporting capacity building activities and knowledge transfer.

**Linkages with the Minamata Convention**

4. Activities related to implementing the Aarhus Convention and the Protocol on PRTRs directly relate to the implementation of the Minamata Convention, including concerning articles 5 (manufacturing processes in which mercury or mercury compounds are used), 7 (artisanal and small-scale gold mining), 8 (emissions), 9 (releases), 12 (contaminated sites), 18 (public information, awareness and education) and 19 (research, development and monitoring). In the same way, progress in implementing related activities under the Minamata Convention also further the implementation of the Aarhus Convention and the Protocol on PRTRs respective objectives, including to contribute to the protection of the right of every person of present and future generations to live in an environment adequate to his or her health and well-being, and to contribute to the prevention and reduction of pollution of the environment.

5. The Aarhus Convention establishes Parties' obligations to guarantee:

(a) Public access to information by ensuring that public authorities collect, provide access to upon request (article 4) and disseminate environmental information (article 5) to the public routinely and in case of threats to human health and the environment. This information includes, inter alia, any information on the state of the environment, including air and atmosphere, and factors affecting or likely to affect the environment such as emissions and releases of mercury and mercury compounds;

(b) Public participation in decision-making on activities that may have significant effect on the environment (article 6 and Annex I, including within environmental impact assessment and

[1] See https://unece.org/environmental-policy-1/public-participation and https://unece.org/environment-policy/public-participation/key-guidance-material.

[2] See https://unece.org/environment-policy/publications/recommendations-more-effective-use-electronic-information-tools.

permitting procedures) and during the preparation of plans, programmes, policies (article 7) and legislation (article 8) relating to the environment, in particular with regard to mining, relevant manufacturing processes, waste management and pollution matters;

(c) public access to review procedures (article 9) relating to information requests, decisions, acts and omissions subject to public participation procedures or contravening national law relating to the environment, including with regard to mercury and waste management and pollution matters;

(d) protection of members of the public exercising their rights in conformity with the Convention against penalization, persecuted or harassed in any way for their involvement (article 3 (8)).

6. The Protocol on PRTRs may contribute to the prevention and reduction of emissions and releases of mercury through the establishment of coherent and integrated PRTR systems (article 1). Mercury is listed in the Protocol's annex II, with the obligation for owners and operators of facilities to report and disseminate data on related releases and transfers (article 7 (1)–(2) and (5)), including disposal and recovery operations. In addition, any other significant emissions and releases of mercury can be covered as releases from diffuse/small point sources in PRTRs (article 4 and 7 (4) and (7)–(8)). Data related to mercury pollution are collected and disseminated through different PRTR systems.

**Meetings**

7. National focal points to the Aarhus Convention and the Protocol on PRTRs and other stakeholders discuss topics that are relevant for the Minamata Convention on Mercury. This includes for example the fourth Global Round Table on PRTRs (Geneva, 20-21 November 2024)[3] where linkages between the two instruments were presented.[4] In addition, issues related to using the PRTR systems for reporting to different international agreements, including the Minamata Convention, are also discussed regularly during the meetings of the Working Group of the Parties to the Protocol.[5]

8. The Task Force on Access to Information at its fifth and sixth meetings (Geneva, 9-10 November 2023 and 5-6 November 2024) [6] discussed several legislative and practical measures to tackle greenwashing, the lack of reliable data on environmental footprints and the use of chemicals, minerals and metals and other challenges hindering the public's ability to make informed environmental choices and consume sustainably. The participants shared the shared experiences in promoting access to product information, sustainable chemistry, product eco-design, digital product passports and green claims verification.

9. Furthermore, the Task Force on Access to Justice under the Aarhus Convention at its sixteenth meeting (Geneva, 18–19 February 2025) gathered representatives of Governments, supreme courts, other independent review bodies, international organizations, international financial institutions, non-governmental organizations, academia and other stakeholders, to discuss access to justice in cases related to chemicals and wastes, including mercury and among other topics. Various challenges were identified in these areas with regard to standing, jurisdiction, limitation periods, timeliness and fairness of existing procedures, costs, burden of proof, access to relevant expertise, use of scientific knowledge and adequate and effective remedies, including injunctive relief.

10. The Task Force also explored tools to promote effective access to justice such as: (a) multi-stakeholder dialogues to remove existing barriers; (b) dissemination of information on access to review procedures, collection of relevant data and statistics and access to relevant case law using e-justice initiatives, modern digital technologies and other tools; (c) capacity-building and specialization of judiciary and other legal professionals; and (d) alternative dispute resolutions methods. The Task Force encouraged Parties, in cooperation with stakeholders and partner organizations, to extend e-justice initiatives to environmental cases, and to promote public participation in the design, testing and implementation of such initiatives. The experience of multidisciplinary specialized teams and joint

[3] See https://unece.org/environmental-policy/events/fourth-global-round-table-prtrs.

[4] See https://unece.org/sites/default/files/2025-02/2_Minamata_Global_PRTR_Roundtable_Minamata_20Nov2024_0.pdf.

[5] See https://unece.org/environment-policy/public-participation/prtrs-working-group-parties.

[6] See https://unece.org/environmental-policy/events/Aarhus_PP_8TFAI_API_workshop and https://unece.org/environmental-policy/events/ninth-meeting-task-force-access-information-under-aarhus-convention.

investigation teams for environmental cases, in particular regarding illegal artisanal and small-scale gold mining, was also explored.[7]

**Up-coming events**

11 The eighth session of the Meeting of the Parties to the Aarhus Convention, the fifth session of the Meeting of the Parties to the Protocol on PRTRs, their joint High-level Segment and associated meetings will take place in the Assembly Hall, Palais des Nations, Geneva from 17 to 21 November 2025.

12. The events will provide a platform for Parties, Signatories, international organizations, civil society and other stakeholders to discuss achievements and challenges in effectively engaging the public in promoting environmental democracy, digital transformation, circular economy and sustainable development.

[7] See https://unece.org/environmental-policy/events/sixteenth-meeting-task-force-access-justice-under-aarhus-convention.

# Annex III

## Contribution of CLRTAP Bodies – TF HTAP and MSC-E – to the Effectiveness Evaluation of the Minamata Convention

1. The UNECE Convention on Long-range Transboundary Air Pollution (CLRTAP or the Air Convention, unece.org/environmental-policy-1/air) is an international treaty aimed at protecting human health and the environment from air pollution, including long-range transboundary pollution caused by multiple contaminants across the pan-European region. Among its eight protocols, the Protocol on Heavy Metals specifically targets the adverse effects of toxic metals, including mercury. Practical work related to the assessment of mercury pollution under the Air Convention is carried out within the European Monitoring and Evaluation Programme (EMEP). This work is implemented by the EMEP scientific centres – the Chemical Coordinating Centre (CCC), responsible for monitoring, and the Meteorological Synthesizing Centre – East (MSC-E), responsible for modelling – as well as through the Task Force on Hemispheric Transport of Air Pollution (TF HTAP).

2. TF HTAP is an international scientific cooperative initiative under the Air Convention, aimed at improving the understanding of intercontinental air pollution transport across the Northern Hemisphere and globally. TF HTAP fosters scientific collaboration in areas such as emission inventories and projections, analysis of ambient monitoring and remote sensing data, global and regional modelling, and impact assessment. One of the main streams of the research activities under TF HTAP is focused on assessment of mercury pollution on a global scale.

3. To strengthen cooperation between the Air Convention and the Minamata Convention on Mercury, a new research initiative – the Multi-Compartment Mercury Modelling and Analysis Project (MCHgMAP) – was recently launched under TF HTAP. This initiative brings together experts and tools to improve understanding of the links between mercury emissions, environmental behaviour, and exposure risks to humans and ecosystems. MCHgMAP integrates models of the atmosphere, oceans, land, and global mercury budgets, while promoting collaboration among emissions reporting, monitoring, and modelling communities. The aim is to enhance data quality and support informed global policy decisions. Currently, MCHgMAP operates as part of the Integrated Analysis Subgroup of the Open-Ended Scientific Group (OESG) under the Minamata Convention's Effectiveness Evaluation framework.

4. A key challenge in evaluating the effectiveness of the Minamata Convention is assessing how successful global efforts have been in reducing mercury pollution from human activities – both atmospheric emissions and releases to land and water. Due to the limited and uneven geographical coverage of existing monitoring networks, which are mostly concentrated in continental regions, environmental modelling plays a vital role. It helps identify the main drivers of mercury levels and trends in the environment and can project future pollution under different policy scenarios.

5. The Meteorological Synthesizing Centre – East (MSC-E) participates in the MCHgMAP project, contributing to the development of the assessment programme and coordination of the atmospheric modelling activities at all stages of the project. Specifically, MSC-E has been involved in designing the overall model simulation and analysis framework, formulating the multi-model experiments, and specifying the output requirements, which were recently published in a white paper: https://gmd.copernicus.org/articles/18/2747/2025/gmd-18-2747-2025.html. In addition, MSC-E developed a harmonised approach for estimating mercury exchange between the atmosphere and the ocean, ensuring consistent application across the project. It also contributes to the analysis and reporting of the model assessment results.

# Annex IV

## Upcoming UNICEF and Minamata Convention Secretariat Mercury and Children report

1. UNICEF and the Secretariat of the Minamata Convention on Mercury are developing a report on 'Mercury and Children' that will be available in 2026. The report will provide an introduction to mercury and children, sources and routes of exposure, health impacts including burden of disease, mercury in the human body and the environment, reference values, and key exposure sources (e.g., fish/seafood, ASGM, dental amalgam, skin lightening creams). The report also provides recommendations to policymakers and caregivers. The report highlights the following:

**Children in the Minamata Convention**

2. Children are particularly vulnerable to mercury pollution though a global, comprehensive assessment of their situation has yet to be performed. Such is needed given that children are recognized in the Introduction of the Minamata Convention booklet: "Mercury is recognized as a substance producing significant neurological and other effects, with concerns expressed particularly about the effects on unborn children and infants.". Also, the Convention text Preamble mentions: *Aware of the health concerns, especially in developing countries, resulting from exposure to mercury of vulnerable populations, especially women, children, and, through them, future generations.*

**Mercury's impacts on Children – What we Know.**

3. Scientific evidence from historical events and modern research has firmly established that mercury poses both acute and chronic health risks to children. There is strong consensus that:

- Acute exposure to high levels of any mercury compound can be fatal to children.
- Chronic fetal exposure to methylmercury is linked to adverse neurodevelopmental outcomes.
- Fish and seafood (along with contaminated rice and certain marine mammal tissues) are major dietary sources of methylmercury. While these foods may offer important nutritional and cultural benefits to children, they complicate risk management.
- Children living and working in ASGM communities are at risk of mercury intoxication, including neurological impairment.
- Vulnerable and sensitive populations—such as Indigenous Peoples, pregnant women, and newborns—face heightened risks due to specific exposure pathways as well as behavioural/physiological factors.

4. The current body of evidence concerning mercury's impacts on children worldwide is robust and justifies global action to combat mercury pollution, such as through the Minamata Convention. However, with continued research our scientific understandings evolve and public health concerns continue to grow:

- Today, nearly all children worldwide—from the prenatal stage through adolescence—are exposed to some level of mercury. Once in the body, the smallest amount of mercury can interact with biomolecules and impede vital cellular functions. There is likely no safe level of mercury in our bodies.
- Beyond neurodevelopment, there are growing studies demonstrating that mercury can affect a child's cardiovascular, immune, metabolic, and other physiological systems. As such, the impacts of mercury on a child's overall health are likely much greater than we can currently estimate.
- Mercury exposure occurs in combination with other toxic substances as well as non-chemical stressors (e.g., nutrition) and factors (e.g., genetics), and the cumulative effects in the real-world are poorly resolved. Further, there can be long latencies between exposure to mercury and adverse health outcomes.
- The issue of mercury pollution is not slowing down as emissions continue to rise in many areas. Further, mercury risks to populations are now being influenced by climate change.

5. Continued research and public health efforts are essential to protect children from mercury pollution, especially in a world that is complex, varied, and ever-changing.

**Why are Children Vulnerable?**

6. Children are especially vulnerable to mercury pollution due to their unique physiological, developmental, and behavioral characteristics. During pregnancy, mercury, particularly in its

methylmercury form, can cross the placenta and interfere with fetal development. This is a critical period marked by rapid organogenesis and neurodevelopment, including processes like neural cell migration, synaptogenesis, and myelination. Mercury disrupts these processes by binding to sulfhydryl groups in proteins, generating oxidative stress, and interfering with ion channels, potentially leading to long-term cognitive and motor impairments.

7. In early childhood, vulnerability is heightened by immature metabolic and immune systems, which limit the body's ability to detoxify and eliminate mercury. Children also consume more air, water, and food per unit body weight than adults, increasing their internal exposure. Their natural behaviors, such as playing on contaminated ground or mouthing objects, further elevate risk, especially in environments like artisanal and small-scale gold mining (ASGM) sites.

8. Adolescents remain at risk due to ongoing brain development, hormonal changes, and increased risk-taking behaviors. Additional risks include use of mercury-containing products (e.g., skin-lightening creams), and occupational exposure through child labor. Caregivers also influence exposure through dietary choices and household contamination, underscoring the multifaceted nature of mercury vulnerability in children.

**Key Report Findings**

9. Mercury pollution poses a serious and widespread threat to children's health and development. Children worldwide are exposed to mercury every day, from contaminated food sources such as fish and seafood to unsafe living/work environments like artisanal and small-scale gold mining (ASGM) communities. Many are exposed in the womb at levels that may lead to lifelong neurological harm. Damages go beyond the brain, and exposure of children to the chemical is associated with damage to the cardiovascular and immune systems. Damages also go beyond childhood years, with effects persisting into adulthood and even impacting future generations. Mercury pollution is linked to poverty, inequality, and child labour. Even though its health, economic, and social costs are high, solutions exist.

10. The Minamata Convention represents a global commitment to take action now. Through policy reform, safer practices, educational programs, and international cooperation, progress can be made to protect children from mercury pollution.

# Annex V

## Submission by the Inuit Circumpolar Council (ICC)

1. The Inuit Circumpolar Council has been and continues to be very engaged in the Minamata Convention on Mercury. The engagement started with the negotiation sessions (OEWG and INCs) and continues with attendance of COPs (where ICC has participated in and organized side events and/or Knowledge Labs) and involvement in the intersessional work, such as effectiveness evaluation efforts. In its work ICC is highlighting Inuit priorities and concerns, the importance of Indigenous self-determination, and adherence to human rights. ICC is also very involved in research and monitoring efforts in the Arctic, and is connecting research done in the Arctic, often co-led by Indigenous Peoples, with international decision-making processes, such as the Minamata Convention. For example, ICC is a member of the Canadian Northern Contaminants Program, which is funding contaminant research in the Canadian Arctic and is co-managed by Canadian Arctic Indigenous Peoples together with Canadian federal and sub-national government departments. This information and data are then used in Arctic Council's Arctic Monitoring and Assessment Programme (AMAP), for example to develop assessments on the state of the Arctic environment, which feed into the UN-related work, including assessments on human health, mercury, POPs, Chemicals of Emerging Concern, and Climate Change. ICC is a Permanent Participant of Arctic Council and is very engaged in AMAP; among other things, ICC has co-led work on human health and mercury, which is additionally published in peer-reviewed international journals. Examples of ICC's work that are of relevance to the Minamata Convention can be found in the Annex below.

2. Further of great interest to the Minamata Convention is the development of ICC's Circumpolar Inuit Protocols for Equitable and Ethical Engagement, which outline how Inuit need to be involved in research and monitoring efforts in the Arctic. These protocols can be found on the ICC Canada website: https://www.inuitcircumpolar.com/project/circumpolar-inuit-protocols-for-equitable-and-ethical-engagement/).

**Published literature of interest to the Minamata Convention on Mercury**

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2. Houde, M., Krümmel, EM, Mustonen T. et al. 2022. Contributions and perspectives of Indigenous Peoples to the study of mercury in the Arctic. Science of The Total Environment; 841,156566. https://doi.org/10.1016/j.scitotenv.2022.156566

3. Houde, M., Krümmel, EM., et al. 2021. Chapter 9: What are Indigenous Peoples' contributions and perspectives to the study of mercury in the Arctic? In: AMAP Assessment 2021: Mercury in the Arctic. Arctic Monitoring and Assessment Programme (AMAP), Tromsø, Norway. 324 pp. Available at https://www.amap.no/documents/doc/amap-assessment-2021-mercury-in-the-arctic/3581

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