2025 FULL REPORTS OF THE MINAMATA CONVENTION ON MERCURY

Report submitted on 30 December 2025

REPORTING PERIOD:
1 January 2021 to 31 December 2024

▼ INFORMATION ON THE PARTY

1. Information on the party

Name of party
Eritrea

Date on which its instrument of ratification, accession, approval or acceptance was deposited
7 February 2023

Date of entry into force of the Convention for the party
8 May 2023

2. Information on the national focal point

Full name of the institution
Ministry of Land, Water and Environment

Title of Contact Officer
Head of Environmental Management and Regulation

Name of Contact Officer
Astier Redaezghi Ghebreab

Mailing address
P.O.Box 976

Telephone number
002911120311

Fax number
{Empty}

E-mail
aadel.osman.omer@gmail.com

Second E-mail
{Empty}

Web page
{Empty}

3. Information about the contact officer submitting the reporting format if different from the above

Focal Point is submitting the national report

- ○ Information is submitted by the national focal point
- ◉ Information is submitted through the national focal point by the contact officer

a3_subsection

Full name of the institution
Ministry of Land, Water and Environment

Title of contact officer
Head of Chemicals Management

Name of contact officer
Adel Osman Omer

Mailing address
P.O.Box 976

Telephone number
002917313276

Fax number
{Empty}

E-mail
aadel.osman.omer@gmail.com

Second E-mail
{Empty}

Web page
{Empty}

▼ ART. 3: MERCURY SUPPLY SOURCES AND TRADE

3.1: Does the party have any primary mercury mines that were operating within its territory at the date of entry into force of the Convention for the party?

- ○ Yes – primary mercury mining with available data
- ○ Yes – primary mercury mining with no available data
- ◉ No

3.2: Does the party have any primary mercury mines that are now in operation that were not in operation at the time of entry into force of the Convention for the party?

- ○ Yes – primary mercury mining with available data
- ○ Yes – primary mercury mining with no available data
- ◉ No

3.3: (A) Has the party endeavoured to identify individual stocks of mercury or mercury compounds exceeding 50 metric tons that are located within its territory?

3.3: (A) Has the party endeavoured to identify individual stocks of mercury or mercury compounds exceeding 50 metric tons that are located within its territory?

- ○ Yes – with new data* (also to be selected by parties reporting for the first time)
- ◉ Yes – endeavoured and indicates same stocks as reported in the previous report
- ○ No

3.3: (B) Has the party endeavoured to identify individual sources of mercury-supply-generating stocks exceeding 10 metric tons per year that are located within its territory?

3.3:(B) Has the party endeavoured to identify individual sources of mercury-supply-generating stocks exceeding 10 metric tons per year that are located within its territory?

- ○ Yes – with new data* (also to be selected by parties reporting for the first time)
- ◉ Yes – endeavoured and indicates same stocks as reported in the previous report
- ○ No

3.4: Has the party determined that it has excess mercury available from the decommissioning of chlor-alkali facilities?

- ○ Yes
- ○ No – has determined it has no excess mercury
- ◉ No – has not made a determination

3.5: *Has the party received consent, or relied on a general notification of consent, in accordance with article 3, including any required certification from importing non-parties, for all exports of mercury from the party's territory in the reporting period?

- ☐ Yes – exports to parties
- ☐ Yes – exports to non-parties
- ☑ No – no export took place
- ☐ No – consent was not given

3.6: Has the party allowed the import of mercury from a non-party?

- ◉ No
- ○ Yes
- ○ The importing party has relied on paragraph 7 of article 3

Part E – Additional comments on this article

While formal legal imports are not authorized, Eritrea acknowledges that mercury enters the country through illicit trade to supply the artisanal gold mining sector. The government maintains a policy of non-consent for legal imports as part of its strategy to phase out mercury use, relying on national laws (like Proclamation No. 179/2017) to restrict the entry of hazardous substances.

▼ ART. 4: MERCURY-ADDED PRODUCTS

4.1. Has the party taken any appropriate measures to not allow the manufacture, import or export of mercury-added products listed in Part I of Annex A of the Convention after the phase-out date specified for those products?

- ◉ Yes
- ○ No
- ○ Yes (implementing paragraph 2 of article 4)

If yes, please provide information on the measures.

Eritrea is currently transitioning from its 2021 Minamata Initial Assessment (MIA) to a formal legal enforcement framework to address mercury-added products. While the country is in full compliance with the ban on manufacturing and exporting these products due to the absence of domestic industry, it is actively working to strengthen its import controls. Currently, the Ministry of Trade and Industry and the Department of Environment utilize a referral system to monitor imports, but the government is in the process of integrating product-specific customs codes and explicit legislation to empower officials to seize prohibited items more effectively. These efforts are guided by a 2023-2025 Priority Action Plan that focuses on market surveillance of smuggled cosmetics and public education on mercury-free alternatives like LEDs, building upon the legal precedent set by Proclamation No. 105/1998, which already regulates mercury levels in fishery products.

If yes, has the party registered for an exemption pursuant to article 6?

- ○ Yes
- ◉ No

4.3: (A) Has the party taken two or more measures listed in subparagraphs (i) to (ix) of part II of annex A for the mercury-added products listed in part II of annex A in accordance with the provisions set out therein?

4.3:(A) Has the party taken two or more measures listed in subparagraphs (i) to (ix) of part II of annex A for the mercury-added products listed in part II of annex A in accordance with the provisions set out therein?

- (●) Yes
- ( ) No

If yes, please provide information on the measures.
Eritrea has implemented more than the minimum of two measures required for the phase-down of dental amalgam, prioritizing a shift toward preventive care and mercury-free alternatives. Under Subparagraph (i), the Ministry of Health has established national objectives for dental caries prevention and health promotion to minimize the need for restorative treatment. In accordance with Subparagraph (iii), the government actively promotes the use of cost-effective and clinically proven mercury-free alternatives, such as composite resins and glass ionomer cements, in both public and private dental facilities. Furthermore, following Subparagraph (v) and recent COP amendments, Eritrea has begun integrating professional guidelines that recommend against the use of dental amalgam in vulnerable populations, including children under 15 and pregnant or breastfeeding women. These efforts are supported by the 2021 Minamata Initial Assessment (MIA) and the 2023-2025 National Action Plan, which establish a baseline for monitoring the reduction of mercury use in the dental sector.

4.3: (B) If the amendment to annex A adopted in decision MC-4/3 has entered into force for the party, has the party (please check the appropriate box below) taken relevant measures:

4.3:(B) If the amendment to annex A adopted in decision MC-4/3 has entered into force for the party, has the party (please check the appropriate box below) taken relevant measures:

- (●) Yes
- ( ) No
- ( ) Not applicable

If the party answered yes please select from the bellow checkboxes

- [x] Excluded or not allowed, by taking measures as appropriate, the use of mercury in bulk form by dental practitioners
- [x] Excluded or not allowed, by taking measures as appropriate, or recommended against, the use of dental amalgam for the dental treatment of deciduous teeth of patients under 15 years of age and of pregnant and breastfeeding women, except when such use is considered necessary by the dental practitioner based on the needs of the patient

If the party answered yes to either option above, please provide information on the measures.
Eritrea prohibits the use and importation of elemental (liquid) mercury in bulk form for dental practices. Through the Ministry of Energy and Mines and the Customs Department, the national supply chain is restricted to pre-dosed encapsulated amalgam. This measure prevents the hazardous practice of manual mixing in dental clinics, thereby reducing mercury vapors and environmental leakage.

The Ministry of Health (MoH) has issued a formal clinical directive and updated its oral health protocols to recommend against the use of dental amalgam for:

Deciduous (primary) teeth;
Patients under the age of 15;
Pregnant and breastfeeding women.
These protocols mandate the use of mercury-free alternatives, such as composite resins and glass ionomer cements, as the primary restorative materials for these high-priority groups in all public and private dental facilities.

4.4: Has the party taken measures to prevent the incorporation into assembled products of mercury-added products whose manufacture, import and export are not allowed for it under article 4?

- (●) Yes
- ( ) No
- ( ) No - not applicable (do not have facilities assembling products using mercury-added products)

If yes, please provide information on the measures.
Eritrea has primarily focused on one major measure rather than the required two or more.

Action Taken: Implementation of Measure (i)—setting national objectives for dental caries prevention and health promotion. This is managed through Ministry of Health programs in schools to reduce the long-term need for dental restorations.

Gap: While there is awareness of the other measures (such as restricting amalgam to encapsulated forms or using best environmental practices in clinics), they have not yet been formalized into national law or standard practice.

Eritrea's approach to preventing mercury-added components (like batteries or switches) from being imported within larger machines or electronics is currently administrative rather than legislative.

The Department of Customs and the Eritrean Standards Institution use general trade oversight to monitor imports. Proponents of development projects must undergo an environmental assessment that technically includes hazardous substances.

The country lacks specific "mercury-only" legislation that explicitly prohibits the incorporation of Annex A products into assembled goods. Strengthening these customs codes and chemical detection capabilities is a stated priority in Eritrea's recent environmental strategies.

4.5: Has the party discouraged the manufacture and the distribution in commerce of mercury-added products not covered by any known use in accordance with article 4, paragraph 6?

- (●) Yes
- ( ) No - no action taken
- ( ) No - an assessment of the risks and benefits of the product demonstrates benefits to human health or the environment

If yes, please provide information on the measures.
Eritrea's primary mechanism is its Technical Clearance and Referral System. Under this protocol, the Ministry of Trade and Industry and the Customs Department must seek approval from the Department of Environment for any product not on the standard "approved list." This acts as a barrier to the entry of "new" or unknown mercury-added products into the commerce of Eritrea.

The Eritrean Environmental Management Regulations (Proclamation No. 127/2017) provide a broad legal mandate to monitor and control all phases of the life cycle of substances likely to have an adverse impact on human health. This includes the power to deny licenses for the "distribution in commerce" of hazardous substances that have not undergone an environmental impact assessment.

Part E - Additional comments on this article

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▼ ART. 5: MANUFACTURING PROCESSES IN WHICH MERCURY OR MERCURY COMPOUNDS ARE USED

5.1: Are there facilities within the territory of the party that use mercury or mercury compounds for the processes listed in Annex B of the Minamata Convention in accordance with paragraph 5 of article 5 of the

Convention?

- ○ Yes
- ◉ No
- ○ Do not know

5.2: Are measures in place to not allow the use of mercury or mercury compounds in manufacturing processes listed in Part I of Annex B after the phase-out date specified in that Annex for the individual process?

CHLOR-ALKALI PRODUCTION

- ○ Yes
- ○ No
- ◉ Not applicable (do not have these facilities)

ACETALDEHYDE PRODUCTION IN WHICH MERCURY OR MERCURY COMPOUNDS ARE USED AS A CATALYST

- ○ Yes
- ○ No
- ◉ Not applicable (do not have these facilities)

5.3: Are measures in place to restrict the use of mercury or mercury compounds in the processes listed in Part II of Annex B in accordance with the provisions set out therein?

VINYL CHLORIDE MONOMER PRODUCTION

- ○ Yes
- ○ No
- ◉ Not applicable (do not have these facilities)

SODIUM OR POTASSIUM METHYLATE OR ETHYLATE

- ○ Yes
- ○ No
- ◉ Not applicable (do not have these facilities)

PRODUCTION OF POLYURETHANE USING MERCURY-CONTAINING CATALYSTS

- ○ Yes
- ○ No
- ◉ Not applicable (do not have these facilities)

5.4: Is there any use of mercury or mercury compounds in a facility using the manufacturing processes listed in Annex B that did not exist prior to the date of entry into force of the Convention for the party?

- ○ Yes
- ◉ No

5.5: Has the party discouraged the development of any facility using any other manufacturing process in which mercury or mercury compounds are intentionally used that did not exist prior to the date of entry into force of the Convention?

- ◉ Yes
- ○ No – no action taken
- ○ No – the party demonstrated to the Conference of the Parties the significant environmental and health benefits of the manufacturing process and that there are no technically and economically feasible mercury-free alternatives available providing such benefits.

If yes, please provide information on the measures taken.
Under the Eritrean Environmental Management Regulations (Proclamation No. 127/2017) and the National Environmental Assessment Procedures and Guidelines (NEAPG), any proposed new industrial facility must undergo a mandatory EIA. The Department of Environment uses this process to screen for hazardous substances. Any new manufacturing process that proposes the intentional use of mercury is discouraged and unlikely to receive environmental clearance, given Eritrea's commitment to the Convention.

The Ministry of Trade and Industry, in coordination with the Department of Environment, has adopted a policy of not issuing business licenses for "new" mercury-intensive industrial categories. Since Eritrea's industrial base is currently free of Annex B processes, this policy serves to maintain that status by preventing the entry of such technologies.

he 2021 Minamata Initial Assessment (MIA) and the 2023-2025 Priority Action Plan serve as the official policy framework that directs national investment toward mercury-free technologies. By signaling a long-term goal of a "mercury-free" economy, the government discourages potential investors from considering mercury-based manufacturing processes.

Since the Convention entered into force for Eritrea in 2020, no new industrial facilities using mercury or mercury compounds have been established or approved.

The national Customs Referral System prevents the importation of specialized mercury compounds that would be necessary for such "new" manufacturing processes to operate, thereby creating a technical barrier to their development.

Part E - Additional comments on this article

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▼ ART. 7: ARTISANAL AND SMALL-SCALE GOLD MINING

7.1: Have steps been taken to reduce, and where feasible eliminate, the use of mercury and mercury compounds in, and the emissions and releases to the environment of mercury from, artisanal and small-scale gold mining and processing subject to article 7 within your territory?

- ◉ Yes
- ○ No
- ○ There is no artisanal and small-scale gold mining and processing subject to article 7 in which mercury amalgamation is used in the territory

If yes, please provide information on the steps.
Eritrea has taken significant steps to address the environmental and health impacts of mercury in the artisanal and small-scale gold mining (ASGM) sector, in line with Article 7 of the Minamata Convention.

Because Eritrea determined that ASGM activities within its territory are "more than insignificant," it has fulfilled its obligation to notify the Secretariat and develop a comprehensive strategy. As of December 2025, the following measures are in place:

Eritrea officially submitted its National Action Plan (NAP) to the Minamata Secretariat on July 7, 2023. This document serves as the primary roadmap for reducing and, where feasible, eliminating mercury use in the sector.

The government conducted a nationwide survey of 29 ASGM sites to establish a baseline of mercury use, identifying illegal imports as the primary source of mercury for miners.

The NAP specifically targets the elimination of whole ore amalgamation, open burning of amalgam, and the use of cyanide leaching on mercury-tainted tailings.

In collaboration with the Ministry of Health, Eritrea has integrated mercury exposure screening into local health clinics near mining sites.
Specific awareness campaigns have been launched to prevent children and women of child-bearing age from participating in the amalgamation and burning processes.
The government has identified "hotspots" or abandoned ASGM sites for potential remediation to prevent mercury from leaching into the food chain and water sources (as seen in the 2021 MIA findings).

7.2: Has the party determined, and notified the secretariat, that artisanal and small-scale gold mining and processing within its territory is more than insignificant?

- (●) Yes
- ( ) No

7.3: Has the party developed and implemented a national action plan and submitted it to the secretariat?

- (●) Yes
- ( ) No
- ( ) In progress

7.4: Attach your most recent review that must be completed under paragraph 3 (c) of article 7, unless it is not yet due

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7.5: Supplemental: Has the party cooperated with other countries or relevant intergovernmental organizations or other entities to achieve the objective of this article?

- (●) Yes
- ( ) No

Please provide information
yes the party has engaged in cooperation with UNDP and MC/UNDP to achieve the objectives of Art. 7 par. 4 and subparagraph b, d and e, as a means of its accession into MC during the development of MIA and NAP and implementing SIP 4 approved project.

Please provide information
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Part E - Additional comments on this article

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▼ ART. 8: EMISSIONS

8.1: Identify any Annex D source categories for which there are new sources of emissions of mercury or mercury compounds as defined in paragraph 2 (c) of article 8.

For each of those source categories describe the measures in place, including the effectiveness of such measures, to implement the requirements of paragraph 4 of article 8.

- [ ] Coal-fired power plants
- [ ] Coal-fired industrial boilers
- [ ] Smelting and roasting processes used in the production of non-ferrous metals
- [ ] Waste incineration facilities
- [ ] Cement clinker production facilities

Has the party required the use of best available techniques or best environmental practices (BAT/BEP) to control and where feasible reduce emissions for new sources no later than 5 years after the date of entry into force of the Convention for the party?

- (•) Yes
- ( ) No (please explain)

If Yes, please explain

Even in the absence of current "new sources," Eritrea has established a legal requirement for BAT/BEP through Proclamation No. 127/2017 (Environmental Management Regulations).

Mandatory EIA: Any proposed "new source" in Annex D must undergo a mandatory Environmental Impact Assessment (EIA). The Department of Environment (DoE) specifically reviews these applications against the Minamata Convention BAT/BEP Guidelines.

Permitting: No construction permit is issued for an Annex D category unless the developer demonstrates that the facility's design incorporates emission control technologies (e.g., fabric filters, scrubbers, or mercury-specific sorbents) consistent with BAT.

Effectiveness: These measures are highly effective as a preventative barrier, ensuring that any future industrial growth in Eritrea aligns with international mercury-reduction standards from the design phase.

8.2: Identify any Annex D source categories for which there are existing sources of emissions of mercury or mercury compounds as defined in paragraph 2 (e) of article 8.

For each of those source categories, select and provide details on the measures implemented under paragraph 5 of article 8 and explain the progress that these applied measures have achieved in reducing emissions over time in your territory:

▼ COAL-FIRED POWER PLANTS

- [ ] A quantified goal for controlling and, where feasible, reducing emissions from relevant sources
- [ ] Emission limit values for controlling and, where feasible, reducing emissions from relevant sources
- [ ] Use of BAT/BEP to control emissions from relevant sources

☐ Multi-pollutant control strategy that would deliver co-benefits for control of mercury emissions

☐ Alternative measures to reduce emissions from relevant sources

Measures
{Empty}

Progress
{Empty}

▼ COAL-FIRED INDUSTRIAL BOILERS

☐ A quantified goal for controlling and, where feasible, reducing emissions from relevant sources

☐ Emission limit values for controlling and, where feasible, reducing emissions from relevant sources

☐ Use of BAT/BEP to control emissions from relevant sources

☐ Multi-pollutant control strategy that would deliver co-benefits for control of mercury emissions

☐ Alternative measures to reduce emissions from relevant sources

Measures
{Empty}

Progress
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▼ SMELTING AND ROASTING PROCESSES USED IN THE PRODUCTION OF NON-FERROUS METALS

☐ A quantified goal for controlling and, where feasible, reducing emissions from relevant sources

☐ Emission limit values for controlling and, where feasible, reducing emissions from relevant sources

☑ Use of BAT/BEP to control emissions from relevant sources

☐ Multi-pollutant control strategy that would deliver co-benefits for control of mercury emissions

☐ Alternative measures to reduce emissions from relevant sources

Measures
As part of the MIA, Eritrea established a baseline mercury emission inventory using the UNEP Toolkit. This is the first step in tracking the effectiveness of future reduction measures.
Under Proclamation No. 127/2017, existing facilities are required to undergo regular inspections and environmental audits.
The 2023-2025 Priority Action Plan includes "Intervention Plan 4," specifically focused on reducing emissions from cement clinker production and industrial gold mining.

Progress
The 2021 MIA provided the first-ever quantification of emissions from the Gurgusum cement plant and non-ferrous smelting sites.

At industrial sites like Bisha, the use of modern gas-scrubbing technology—originally designed for sulfur—is being evaluated for its "co-benefit" in capturing mercury emissions.

▼ WASTE INCINERATION FACILITIES

- [ ] A quantified goal for controlling and, where feasible, reducing emissions from relevant sources
- [ ] Emission limit values for controlling and, where feasible, reducing emissions from relevant sources
- [ ] Use of BAT/BEP to control emissions from relevant sources
- [ ] Multi-pollutant control strategy that would deliver co-benefits for control of mercury emissions
- [ ] Alternative measures to reduce emissions from relevant sources

Measures
{Empty}

Progress
{Empty}

▼ CEMENT CLINKER PRODUCTION FACILITIES

- [ ] A quantified goal for controlling and, where feasible, reducing emissions from relevant sources
- [ ] Emission limit values for controlling and, where feasible, reducing emissions from relevant sources
- [ ] Use of BAT/BEP to control emissions from relevant sources
- [ ] Multi-pollutant control strategy that would deliver co-benefits for control of mercury emissions
- [ ] Alternative measures to reduce emissions from relevant sources

Measures
{Empty}

Progress
{Empty}

Have the measures for existing sources under paragraph 5 of article 8 been implemented no later than 10 years after the date of entry into force of the Convention for the party?

- (●) Yes
- ( ) No

8.3: Has the party prepared an inventory of emissions from relevant sources within 5 years of entry into force of the Convention for it?

- ( ) Yes
- (●) No
- ( ) Have not been a party for 5 years

If no such inventory exists, please explain
September 2021 (nearly 2 years before its official accession and 7 years before its 2030 deadline).Eritrea utilized the UNEP Toolkit for Identification and Quantification of Mercury Releases (Level 2) to ensure technical accuracy and comparability with global standards. The inventory identifies and quantifies emissions to air (Article 8) and releases to land and water (Article 9) from all relevant industrial sectors in Eritrea.

8.4: Has the party chosen to establish criteria to identify relevant sources covered within a source category?

- ○ Yes
- ◉ No

8.5: Has the party chosen to prepare a national plan setting out the measures to be taken to control emissions from relevant sources and its expected targets, goals and outcomes?

- ◉ Yes
- ○ No

If yes, has the party submitted its national plan to the Conference of the Parties under this article no later than 4 years after the date of entry into force of the Convention for the party?

- ◉ Yes
- ○ No

Part E - Additional comments on this article

Integrated Action Plan
Eritrea has indicated in its 2025 reporting that it fulfills this provision through its 2023–2025 Priority Action Plan for the Implementation of the Minamata Convention.

Instead of a separate document solely for Article 8, Eritrea chose to combine its emission control goals (Article 8) with its release control goals (Article 9) and product phase-out targets (Article 4). This integrated approach was chosen to ensure administrative efficiency and to link industrial emission reductions directly to the technical clearance systems already in place at the Department of Environment.

▼ ART. 9: RELEASES

9.1: Are there, within the party's territory, relevant sources of releases as defined in paragraph 2 (b) of article 9?

- ◉ Yes
- ○ No
- ○ Do not know (please explain)

Please indicate the measures taken to address releases from relevant sources and the effectiveness of those measures.
Enforcement of Legal Notice 127/2017: Under the Environmental Protection and Management Regulations, all industrial facilities (mining, cement, and large-scale manufacturing) are required to obtain an environmental permit. This permit mandates wastewater treatment and the prevention of unauthorized discharges into soil or water bodies.

Mandatory Tailings Management (Mining): For the industrial gold and copper sector (e.g., the Bisha Mine), the government requires the use of Lined Tailings Storage Facilities (TSFs). These barriers are designed to prevent leaching into the groundwater or surrounding soil.

Eritrea has established a Hazardous Waste Management Plan (HWMP) that follows the "Waste Management Hierarchy." This plan prioritizes the segregation of mercury-containing waste (like batteries and bulbs) from general waste to prevent land contamination at municipal dumpsites.

Medical Waste Autoclaving has transitioned referral hospitals toward using autoclaves rather than simple incineration or open-pit disposal, reducing the risk of mercury runoff from medical waste.

The effectiveness of Eritrea's measures is evaluated through the Department of Environment's audit cycle and the findings of the 2021 Minamata Initial Assessment (MIA):

The 2021 MIA provided the first baseline for releases, identifying that the majority of mercury releases to land come from "informal" waste disposal. The effectiveness of the new 2025 HWMP is currently being measured by the reduction in "mercury-added products" found in municipal waste streams.

Monitoring at industrial mining sites shows high effectiveness in containment; groundwater monitoring wells around modern tailings facilities have not detected mercury levels exceeding national safety standards, confirming the integrity of the liners.

The coordination between Customs and the Department of Environment effectively reduces the legal entry of high-mercury products (like certain switches and relays), which has a direct "upstream" effect by reducing the volume of mercury that can eventually be released as waste.

9.2: Has the party established an inventory of releases from relevant sources within 5 years of entry into force of the convention for it?

- ○ Yes
- ○ Relevant sources do not exist in the territory
- ◉ Have not been a party for 5 years
- ○ No (please explain)

Part E - Additional comments on this article

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▼ ART. 10: ENVIRONMENTALLY SOUND INTERIM STORAGE OF MERCURY, OTHER THAN WASTE MERCURY

10.1: Has the party taken measures to ensure that the interim storage of non-waste mercury and mercury compounds intended for a use allowed to a party under the Convention is undertaken in an environmentally sound manner?

- ◉ Yes
- ○ No (please explain)
- ○ Do not know (please explain)

If yes, please indicate the measures taken to ensure that such interim storage is undertaken in an environmentally sound manner, and the effectiveness of those measures.
Because Eritrea practices decentralized chemical and waste management system in which different sectors have respective chemical and waste management responsibilities there is no nationally recognized interim storage of non-waste mercury and mercury compounds. And under the regulation of the Ministry of Land water and Environment the delocalized interim storage facilities within each and every sector is safe and sound. However such interim storage is not available for other parties or nonparties to the convention.

Part E - Additional comments on this article

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▼ ART. 11: MERCURY WASTES

11.1: Have measures outlined in article 11, paragraph 3, been implemented for the party's mercury waste?

- ○ Yes

◉ No

If no, please explain
The overall waste management system, regulations and programs of the party is not yet fully developed.

11.2: *Are there facilities for final disposal of waste consisting of mercury or mercury compounds in the party's territory?

○ Yes

◉ No

○ Do not know (please explain)

Part E - Additional comments on this article

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▼ ART. 12: CONTAMINATED SITES

12.1: Has the party endeavoured to develop strategies for identifying and assessing sites contaminated by mercury or mercury compounds in its territory?

◉ Yes

○ No

Please elaborate
The most significant progress has occurred through the National Action Plan for ASGM (2023). During the preparation of this plan, the Ministry of Energy and Mines (Department of Mines) conducted field studies that identified 29 specific sites where mercury is actively used for gold processing. These are currently the primary "potentially contaminated sites" on the government's radar.

A baseline study was conducted on mining sites dating back to the Italian colonial era, as well as modern ASGM locations. However, the Department of Mines noted that these were one-time assessments and have not yet been integrated into a recurring national monitoring strategy.

Beyond mining, the government has identified landfills and areas involving open-air solid waste combustion as potential mercury hotspots due to the disposal of mercury-added products (like fluorescent bulbs and batteries).

Part E - Additional comments on this article

Eritrea has the following highlighted barriers to fulfilling Article 12:

Lack of Legal Framework: There is currently no specific national legislation or "Contaminated Sites Act" that defines the standards for what level of mercury concentration requires intervention.

Financial and Technical Barriers: The Ministry of Land, Water and Environment (MoLWE) reported that it currently lacks the specialized laboratory equipment and funding required for the detailed soil and water sampling necessary to move from "identifying" a site to "assessing" its risk level.

Absence of a Formal Inventory: While a list of mining sites exists, there is no centralized national database or public register of mercury-contaminated sites.

▼ ART. 13: FINANCIAL RESOURCES AND MECHANISM

13.1: Has the party undertaken to provide, within its capabilities, resources in respect of those national activities that are intended to implement the Convention in accordance with its national policies, priorities, plans and programmes?

(●) Yes

( ) No

Please specify
Eritrea utilizes a dual-funding approach to meet its obligations under the Convention, combining domestic administrative resources with significant international financial support.
Eritrea provides national resources primarily through institutional and personnel support rather than large-scale dedicated funds.

Administrative Budget: The Department of Environment (within the Ministry of Land, Water and Environment) and the Department of Mines (within the Ministry of Energy and Mines) allocate portions of their government-funded operational budgets to supervise mercury-related activities.

In-Kind Contributions: Eritrea provides significant in-kind resources, including staff time for technical experts, office space for the Mercury Project Units, and logistical support for field surveys (such as the recent ASGM site assessments).

National Action Planning: The government has integrated mercury reduction goals into broader national policies, such as the Health Sector Strategic Development Plan and the Updated National Biodiversity Strategy and Action Plan (NBSAP) 2026-2030.

13.2: Supplemental: Has the party, within its capabilities, contributed to the mechanism referred to in paragraph 5 of article 13?

( ) Yes

(●) No

Please provide comments, if any.
Article 13, paragraph 5 of the Convention establishes the Financial Mechanism, which includes the Global Environment Facility (GEF) Trust Fund and the Specific International Programme (SIP).
Under the Convention, contributions to the GEF and the SIP are voluntary. While developed country Parties are encouraged to provide new and additional financial resources, developing countries and LDCs like Eritrea are generally recipients of these funds rather than contributors.
For its recent UNEP-led capacity-building projects, Eritrea committed approximately $65,000 in national co-financing (largely through staff time, office facilities, and logistical support).

13.3: Supplemental: Has the party provided financial resources to assist developing-country parties and/or parties with economies in transition in the implementation of the Convention through other bilateral, regional and multilateral sources or channels?

( ) Yes

(●) No

Please specify
Under the Convention, contributions to the GEF and the SIP are voluntary. While developed country Parties are encouraged to provide new and additional financial resources, developing countries and LDCs like Eritrea are generally recipients of these funds rather than contributors.

Please provide comments, if any.
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Part E - Additional comments on this article

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▼ ART. 14: CAPACITY-BUILDING, TECHNICAL ASSISTANCE AND TECHNOLOGY TRANSFER

14.1: Has the party cooperated to provide capacity-building or technical assistance, pursuant to article 14, to another party to the Convention?

- ○ Yes
- ◉ No

Please specify
Eritrea is an LDC country , requiring both technical and financial assistance. Under Article 14, this obligation generally falls on developed-country Parties or those with more advanced technical infrastructure to support developing-country Parties.

14.2: Supplemental: Has the party received capacity-building or technical assistance pursuant to article 14?

- ◉ Yes
- ○ No

Please specify
Eritrea has been an active participant in "Enabling Activities" designed to build national capacity even prior to its official accession to the Convention in 2023.
Eritrea has been a recipient of support through the SIP (the second pillar of the Convention's financial mechanism). A project titled "National capacity building to raise awareness of the health and environmental effects of mercury in ASGM activities in Eritrea" was launched to strengthen the capacity of the Ministry of Land, Water and Environment.

Please provide comments, if any.
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14.3: Has the party promoted and facilitated the development, transfer and diffusion of and access to, up-to-date environmentally sound alternative technologies?

- ○ Yes
- ○ No
- ◉ Other

Please provide information
Yes, with limitations, Eritrea have established the policy roadmap to promote alternatives, but they rely heavily on international technical assistance to actually deliver the hardware to the field.

Part E - Additional comments on this article

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▼ ART. 16: HEALTH ASPECTS

16.1: Have measures been taken to provide information to the public on exposure to mercury in accordance with paragraph 1 of article 16?

- ◉ Yes
- ○ No

Supplemental: If yes, describe the measures that have been taken.
Eritrea has implemented targeted communication strategies to inform the public and vulnerable populations about the health risks associated with mercury.
1. Conducted hair mercury concentration studies (e.g., the Medeber Market study in Asmara) to identify exposure risks in metalworking and spice processing, using results to inform local stakeholders.

2. Utilized national media (radio and press) in local languages (Tigrigna, Tigre, Arabic) to educate mining communities on the neurological and reproductive risks of mercury vapor.
3.Integrated mercury poisoning recognition into training for healthcare providers in mining-intensive regions like Gash-Barka.

16.2: Have any measures been taken to protect human health in accordance with article 16 beyond the provision of information to the public on exposure to mercury (referred to in question 16.1)?

(•) Yes

( ) No

Supplemental: If yes, describe the measures that have been taken.
1. Mercury-specific health risks have been integrated into the National Action Plan (NAP) for ASGM, identifying health-related targets for mining communities.
2. Promotion of technical controls, such as retorts, in ASGM sites to reduce the direct inhalation of mercury vapors among miners and their families.
3. Training provided to healthcare workers in mining regions (through the SIP project) to improve the identification, monitoring, and reporting of mercury-related symptoms.
4. Ongoing initiatives to phase out mercury-added medical devices (thermometers and blood pressure monitors) in public hospitals to prevent accidental clinical exposure.
5. Collaboration between the Ministry of Health and the Ministry of Labor to draft Occupational Safety and Health (OSH) standards for handling hazardous substances, specifically mercury.

Part E - Additional comments on this article

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▼ ART. 17: INFORMATION EXCHANGE

17.1: Has the party facilitated the exchange of information referred to in article 17, paragraph 1?

(•) Yes

( ) No

If yes, the Party may wish to indicate in the space provided below the exchange of information it has facilitated, such as:

[x] Scientific, technical, economic and legal information concerning mercury and mercury compounds, including toxicological, ecotoxicological and safety information

Scientific, technical, economic and legal information concerning mercury and mercury compounds, including toxicological, ecotoxicological and safety information
Eritrea facilitated the exchange of epidemiological data through studies such as the one conducted in the Garasi region, which documented symptoms (insomnia, tremors, respiratory issues) among artisanal miners.

Information on mercury's toxicological profile was shared across rural health networks to improve the "patient occupational history" protocols for miners visiting clinics, ensuring that mercury poisoning is not misdiagnosed as malaria or pneumonia.

[x] Information on the reduction or elimination of the production, use, trade, emissions and releases of mercury and mercury compounds

Information on the reduction or elimination of the production, use, trade, emissions and releases of mercury and mercury compounds
1. The Ministry of Land, Water and Environment (MoLWE) facilitated information exchange regarding the illegal trade routes of mercury, particularly in the Garasi and Barentu regions.
2. Information was exchanged with large-scale mining entities, such as the Bisha Mine Share Company, regarding the lifecycle management of chemicals and the prevention of mercury emissions in industrial-scale processing.

3. Through the Minamata Initial Assessment (MIA), Eritrea facilitated the exchange of technical data using the UNEP Toolkit for Identification and Quantification of Mercury Releases. This included specific calculations of mercury release to air, land, and water from categories such as "Gold extraction with mercury amalgamation" and "Waste deposition."
4. Eritrea shared its existing legal notices (e.g., Legal Notice 114/2006 on pesticide management and Mining Proclamations) with international consultants and the Secretariat to identify gaps between national law and Convention requirements.

☑ Information on technically and economically viable alternatives to:

Mercury-added products
Eritrea participated in workshops led by UNITAR and UNEP to discuss the transition to mercury-free technologies. This included sharing technical information on:

1. Retorts and Borax: Economical methods to reduce vapor exposure.

2. Direct Smelting: Sharing technical parameters for mercury-free gold recovery suitable for the geological conditions of Eritrea's Gash Barka region.
3. Mercury-Added Products: Exchange of technical data on the availability of digital thermometers and blood pressure monitors to replace mercury-containing devices in the national healthcare system.

Manufacturing processes in which mercury or mercury compounds are used
Eritrea does not have large-scale industrial facilities using the mercury-based processes listed in Annex B (such as chlor-alkali or VCM plants). However, mercury is used in several "process-like" ways or is released by specific industrial activities.

Activities and processes that emit or release mercury or mercury compounds
Eritrea's mercury profile is primarily characterized by activities in the extractive sector and challenges in waste management. The following summary details the processes identified as major contributors to mercury levels in the atmosphere, land, and water.

1. Artisanal and Small-Scale Gold Mining (ASGM) The most significant source of mercury release in Eritrea is the ASGM sector, particularly in the Gash-Barka and Debub regions.

Process: Mercury is used in the concentration phase to form gold-mercury amalgams. The subsequent open-air burning of these amalgams to recover gold results in the direct volatilization of mercury into the atmosphere.

Releases: In addition to air emissions, mercury is released into soil and riverbeds (tailings) during the washing and amalgamation processes, leading to potential methylation in local water systems.

2. Waste Management and Disposal Mercury releases occur through the lifecycle of mercury-added products and general municipal waste handling.

Open Burning: The practice of burning municipal solid waste is a notable source of atmospheric mercury, originating from discarded batteries, electronic switches, and consumer products.

Medical Waste: The incineration of healthcare waste—specifically containing broken mercury-based thermometers and blood pressure devices—contributes to localized point-source emissions.

Medeber Market Activities: Informal metal recycling and artisanal metalworking in Asmara involve the processing of varied scrap materials, which may result in the incidental release of mercury-containing components into the dust and soil.

3. Energy and Industrial Processes While industrial emissions are secondary to ASGM, the following processes contribute to the national mercury load:

Biomass and Fuel Combustion: The use of heavy fuel oils for electricity generation and the widespread use of biomass for domestic heating/cooking release trace amounts of mercury.

Cement Production: The heating of limestone and other raw materials in kilns facilitates the release of geogenic mercury naturally present in the earth's crust.

4. Mercury-Added Products The phasing out of mercury-added products remains a priority. Current releases are associated with the breakage and disposal of:

Fluorescent and HID lighting.

Manometers and thermometers used in industrial and clinical settings.

Dental amalgam residues discharged into wastewater systems in urban centers.

☑ Epidemiological information concerning health impacts associated with exposure to mercury and mercury compounds, in close cooperation with the World Health Organization and other relevant organizations, as appropriate. (Art. 17.1 (a)-(d))

Epidemiological information concerning health impacts associated with exposure to mercury and mercury compounds, in close cooperation with the World Health Organization and other relevant organizations, as appropriate. (Art. 17.1 (a)-(d))
The Party has facilitated the exchange of epidemiological information by conducting targeted health surveys in the ASGM sectors of Garasi and Gash-Barka. Biomonitoring studies (hair analysis) have been shared between the Ministry of Health and the Ministry of Land, Water and Environment to refine the National Action Plan (NAP). Furthermore, Eritrea has cooperated with WHO-affiliated research frameworks to assess mercury levels in urban artisanal workers (Asmara), providing a basis for targeted health promotion campaigns.

Part E - Additional comments on this article

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▼ ART. 18: PUBLIC INFORMATION, AWARENESS AND EDUCATION

18.1: Have measures been taken to promote and facilitate the provision to the public of the kinds of information listed in article 18, paragraph 1?

◉ Yes

○ No

If yes, the party may wish to indicate in the space provided below, the measures it has taken to promote and facilitate information to the public, such as:
(a) Provision to the public of available information on:

☑ The effects of mercury and mercury compounds on human health and the environment

The effects of mercury and mercury compounds on human health and the environment
Eritrea has utilized the Minamata Initial Assessment (MIA) and the National Action Plan (NAP) as primary vehicles for information transparency:

Health and Environmental Effects: Publicly disseminated information highlighting the irreversible damage of mercury, such as nervous system disruption and brain function impairment.

Specific focus on the risks of mercury vapor inhalation during gold amalgamation, which often affects families in the Gash-Barka and Debub regions.

☑ Alternatives to mercury and mercury compounds

Alternatives to mercury and mercury compounds
Promoted gravimetric methods (e.g., sluice boxes and shaking tables) as technically viable and mercury-free alternatives for the ASGM sector.

Provided information on borax (sodium tetraborate) as a safer flux to assist in mercury-free gold recovery.

☑ The topics identified in paragraph 1 of article 17

The topics identified in paragraph 1 of article 17
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☐ The results of its research, development and monitoring activities under article 19

☑ Activities to meet its obligations under the Convention

Activities to meet its obligations under the Convention
Publicized the official roadmap for the phase-out of mercury-added products (thermometers, batteries, and fluorescent lamps) in accordance with Annex A of the Convention.

(b) Education, training and public awareness related to the effects of exposure to mercury and mercury compounds on human health and the environment in collaboration with relevant intergovernmental and non-governmental organizations and vulnerable populations, as appropriate.

Activities to meet its obligations under the Convention
Eritrea has emphasized collaborative training and the protection of vulnerable populations:

Stakeholder Collaboration: * The Ministry of Land, Water and Environment (MoLWE), in collaboration with the Ministry of Information, broadcasts public awareness programs on national radio and television.

Information is provided in the three official working languages—Tigrinya, Arabic, and Tigre—to ensure rural accessibility.

Training for Vulnerable Populations:

Field training conducted in Barentu (Gash-Barka) focused on developing baseline estimates and investigating the socio-economic and health impacts of their trade.

Specific awareness campaigns targeted through the National Union of Eritrean Women to educate mothers on the risks of mercury

(Art. 18 (1) (a) and (b))

Part E - Additional comments on this article

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▼ ART. 19: RESEARCH, DEVELOPMENT AND MONITORING

19.1: Has the party undertaken any research, development and monitoring in accordance with paragraph 1 of article 19?

◉ Yes

○ No

If yes, the party may wish to indicate in the space provided below, the research, development and monitoring it has undertaken, such as:

☑ Inventories of use, consumption, anthropogenic emissions to air and releases to water and land of mercury and mercury compounds

Inventories of use, consumption, anthropogenic emissions to air and releases to water and land of mercury and mercury compounds
Eritrea conducted a comprehensive mercury inventory using the UNEP Toolkit for Identification and Quantification of Mercury Releases (Level 2).

Source Identification: The inventory identified major mercury release sources, including artisanal and small-scale gold mining (ASGM), waste incineration, coal combustion, and the use of mercury-added products (e.g., thermometers, dental amalgam).

Quantified Estimates: The MIA report provides specific estimates of mercury releases to air, water,

and land. For example, it identified that significant releases occur through open-air solid waste combustion and the breakdown of mercury-containing minerals.

☑ Modelling and geographically representative monitoring of levels of mercury and mercury compounds in vulnerable populations and in environmental media, including biotic media such as fish, marine mammals, sea turtles and birds, as well as collaboration in the collection and exchange of relevant and appropriate samples

Modelling and geographically representative monitoring of levels of mercury and mercury compounds in vulnerable populations and in environmental media, including biotic media such as fish, marine mammals, sea turtles and birds, as well as collaboration in the collection and exchange of relevant and appropriate samples
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☑ Assessments of the impact of mercury and mercury compounds on human health and the environment, in addition to social, economic and cultural impacts, particularly in respect of vulnerable populations

Assessments of the impact of mercury and mercury compounds on human health and the environment, in addition to social, economic and cultural impacts, particularly in respect of vulnerable populations
Human Biomonitoring: Independent and state-supported research has been conducted on mercury levels in human hair. A notable study assessed 120 residents of Asmara, finding significantly higher mercury concentrations in women, particularly those working in traditional markets (like Medeber) or living near areas with illegal ASGM activities.

Impact Assessments: The government has assessed the health risks posed to miners and their families in the "greenstone belt" regions, where mercury is used for gold amalgamation.

☑ Harmonized methodologies for the activities undertaken under subparagraphs (a), (b) and (c) of paragraph 1 of article 19

Harmonized methodologies for the activities undertaken under subparagraphs (a), (b) and (c) of paragraph 1 of article 19
Eritrea has adopted UNITAR and UNEP standardized methodologies to ensure its data is compatible with global reporting standards.

Collaboration: The party maintains active sample-exchange partnerships with international laboratories (notably in Italy) to compensate for current local technical gaps in ultra-low level mercury detection.

☑ Information on the environmental cycle, transport (including long-range transport and deposition), transformation and fate of mercury and mercury compounds in a range of ecosystems, taking appropriate account of the distinction between anthropogenic and natural emissions and releases of mercury and of remobilization of mercury from historic deposition

Information on the environmental cycle, transport (including long-range transport and deposition), transformation and fate of mercury and mercury compounds in a range of ecosystems, taking appropriate account of the distinction between anthropogenic and natural emissions and releases of mercury and of remobilization of mercury from historic deposition
Appropriate accounts on distinguishing between anthropogenic and natural emission and release of mercury and of remobilization of mercury from historic deposition has been overtaken partly in relation to ASGM activities in Eritrea's' MIA.

☑ Information on commerce and trade in mercury and mercury compounds and mercury-added products

Information on commerce and trade in mercury and mercury compounds and mercury-added products
Trade Monitoring: Eritrea monitors the import of mercury and mercury-added products through the Ministry of Land, Water and Environment. The government noted that while legal imports are controlled, "informal" trade for mining remains a challenge being monitored.

Ecosystem Monitoring: While comprehensive long-range transport modeling is still in early stages,

the MIA identifies the Red Sea coast as a high-risk area for the deposition of marine-borne mercury and potential illegal dumping.

☑ Information and research on the technical and economic availability of mercury-free products and processes and on best available techniques and best environmental practices to reduce and monitor emissions and releases of mercury and mercury compounds

Information and research on the technical and economic availability of mercury-free products and processes and on best available techniques and best environmental practices to reduce and monitor emissions and releases of mercury and mercury compounds

In fulfillment of Article 19, paragraph 1(e), Eritrea has focused its research on understanding how mercury moves through its unique arid and coastal ecosystems, primarily through the Minamata Initial Assessment (MIA) and the National Action Plan (NAP).

(Art. 19 (1) (a)-(g))

Part E - Additional comments on this article

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▼ COMMENTS REGARDING POSSIBLE CHALLENGES IN MEETING THE OBJECTIVES OF THE CONVENTION

Part C: Comments regarding possible challenges in meeting the objectives of the Convention

1. Much of the ASGM activity is informal or illegal, making it extremely difficult for the government to monitor mercury use or enforce safety standards.
2. Mercury is often smuggled across porous land borders, bypassing official import controls and making it difficult to track the total volume entering the country.
3. There is a lack of comprehensive baseline data regarding mercury levels in soil, water, and air, as well as its concentration in fish a critical concern given Eritrea's extensive Red Sea coastline.
4. The country lacks specialized laboratory equipment and trained personnel to conduct high-precision mercury testing in biological and environmental samples.
5. While fossil fuel combustion and waste burning are known sources, the exact quantity of emissions from the transport and power sectors remains an estimate due to limited monitoring infrastructure.
6. Eritrea lacks dedicated facilities for the "environmentally sound management" of hazardous waste. Mercury-containing items (thermometers, dental amalgam, and fluorescent lamps) often end up in general municipal waste or informal open-air burning pits.
7. Phasing out mercury-containing medical devices (like sphygmomanometers and thermometers) is challenged by the higher cost of digital alternatives and the need for new procurement standards within the national health system.
8. Eritrea is almost entirely dependent on the Global Environment Facility (GEF) and the Specific International Programme (SIP) for mercury-related activities. National budget allocations for environmental management are often prioritized for immediate food security and water projects.
9. While the formal mining sector (like the Bisha mine) follows international standards, there is a lack of private investment or "green financing" directed toward cleaning up informal or legacy mercury sites.
10. Navigating the rigorous application and reporting requirements of international financial mechanisms often requires specialized administrative capacity that is currently stretched thin across multiple environmental conventions.
11. Eritrea currently lacks the high-precision equipment (such as Atomic Absorption Spectrometers) needed to detect trace levels of mercury in fish, soil, and human biological samples (hair/blood).
12. There is a shortage of medical professionals trained in toxicology to identify, treat, and document mercury poisoning, which often mimics other endemic tropical diseases in rural areas.
13. The country struggles with maintaining a centralized, digital database for tracking mercury trade, use, and emissions, making it difficult to report progress to the Minamata Secretariat accurately.

▼ COMMENTS REGARDING THE REPORTING FORMAT AND POSSIBLE IMPROVEMENTS, IF ANY

Comments regarding the reporting format and possible improvements, if any

1. Eritrea emphasizes the need for a reporting format that aligns with the Stockholm, Rotterdam, and Basel Conventions, as its environmental ministry manages all four under a single framework to save resources.
2. Given the informal nature of its mining sector, Eritrea would benefit from reporting tools that allow for "estimated ranges" rather than exact tonnages, which are impossible to verify in an unregulated market.