

# 2025 FULL REPORTS OF THE MINAMATA CONVENTION ON MERCURY

Report submitted on 31 December 2025



## REPORTING PERIOD:

1 January 2021 to 31 December 2024

*Attachments can be found on the website*

### ▼ INFORMATION ON THE PARTY

## 1. Information on the party

#### Name of party

Zambia

#### Date on which its instrument of ratification, accession, approval or acceptance was deposited

11 March 2016

#### Date of entry into force of the Convention for the party

16 August 2017

## 2. Information on the national focal point

#### Full name of the institution

Zambia Environmental Management Agency

#### Title of Contact Officer

Mr.

#### Name of Contact Officer

Christopher Kanema

#### Mailing address

P.O BOX 35131

Plot No. 6975 Corner Church and Suez Roads,  
Lusaka, Zambia

#### Telephone number

+260977747106

#### Fax number

{Empty}

#### E-mail

[ckanema@zema.org.zm](mailto:ckanema@zema.org.zm)

#### Second E-mail

[info@zema.org.zm](mailto:info@zema.org.zm)

#### Web page

<http://www.zema.org.zm>

## 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

### ▼ 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

**If the party answered no to the question, please explain.**

Zambia has not endeavored to identify individual stocks of mercury or mercury compounds exceeding 50 metric tons within its territory. However, there are reports of undocumented and unverified activities related to the mining of so-called “red mercury” in Northwestern Province (Kasempa), Muchinga Province (Shiwang’andu), and Lusaka Province (Luano and Rufunsa). These reports remain unsubstantiated and lack official verification.

**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

**If the party answered no to the question, please explain.**

Zambia has not endeavored to identify individual stocks of mercury or mercury compounds exceeding 10 metric tons within its territory. However, there are reports of undocumented and unverified activities related to the mining of so-called “red mercury” in Northwestern Province (Kasempa), Muchinga Province (Shiwang’andu), and Lusaka Province (Luano and Rufunsa). These reports remain unsubstantiated and lack official verification.

**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**

Mercury trade in Zambia is not officially carried out, however, there are indications that informal and unregulated trade may occur, particularly in relation to artisanal and small-scale mining activities. Further, Zambia applies a precautionary principle by prohibiting the import and use of mercury in order to prevent potential environmental and human health risks.

#### **▼ 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.**

Zambia has through the Medicines and Allied Substances Act No. 3 of 2013, developed and approved guidelines on the application for grant of marketing authorization of cosmetics in Zambia, which prohibit the inclusion of mercury in cosmetics to be placed on the Zambian market.

**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.**

1. Setting national objectives aiming at minimizing its use; The Government of the Republic of Zambia through the Ministry of Health initiated several programs to manage the risks associated

with the use of dental amalgam among the vulnerable populations (children and women of child bearing age). Promoting the use of Atraumatic Restoration Technique (ART) using alternative materials (Glass ionomer cement and Composite resins). 90% of public and private dental clinics no longer use dental amalgam. In addition, the university dental schools have revised their curriculum to exclude the use of dental amalgam and associated cavity preparation techniques.

2. Promoting the use of cost-effective and clinically effective mercury-free alternatives for dental restoration;

3. Promoting research and development of quality mercury-free materials for dental restoration; Currently, a study on the knowledge and Attitudes of dental practitioners toward use, safety and future of amalgam in Zambia is underway.

4. Dental schools have been encouraged to educate and train dental professionals and students on the use of mercury-free dental restoration alternatives and on promoting best management practices.

**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**

Excluded or not allowed, by taking measures as appropriate, the use of mercury in bulk form by dental practitioners

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.**

Amalgam is only used in the absence of mercury-free alternatives

**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)

**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.**

Zambia has through the Medicines and Allied Substances Act No. 3 of 2013, developed and approved guidelines on the application for grant of marketing authorization of cosmetics in Zambia, which prohibit the inclusion of mercury in cosmetics to be placed on the Zambian market. However, no assessment of the risks and benefits of the product has been undertaken.

## Part E – Additional comments on this article

Zambia needs to conduct onsite assessments to ascertain the risks and benefits of products subject to article 4.

### ▼ 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.

### Part E – Additional comments on this article

Currently there are no facilities producing of the above mentioned compounds in Zambia.

## ▼ 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.**

Zambia has developed the National Action Plan (NAP) for Artisanal and Small-scale Gold mining (ASGM) 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 pursuant to Article 7. The following were the steps for developing the National Action Plan:

1. Establishing a coordinating mechanism and organization process;
2. Developing a national overview of the ASGM sector, including baseline estimates of mercury use and practices developed as part of the mercury inventory activity;
3. Setting goals, national objectives and mercury reduction targets, including elimination of mercury use in ASGM where feasible;
4. Formulating an implementation strategy;
5. Developing an evaluation process for the NAP; and
6. Endorsing and submitting the NAP

Following the NAP, a project called planetGOLD Zambia was developed to reduce and where feasible

eliminate mercury use in ASGM with an impact goal of reducing 1.16 metric tonnes of mercury in ASGM sites.

The government has enacted the Minerals Regulation Commission Act No. 14 of 2024 that is regulating chemical use in mining including ASGM and Geological Minerals Development Act No. 2 of 2025 that has set up an ASM department driving formalisation of the sector.

**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**

[ZMB\\_7.4.pdf](#)

**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**

Currently working with UNIDO on Global Elimination of mercury in nonferrous metals

**Please provide information**

- [ZMB\\_7.5.pdf](#)

## **Part E – Additional comments on this article**

Zambia conducted a baseline study on Artisanal and Small-Scale Gold Mining (ASGM) from which a National Action Plan (NAP) was developed. The gaps identified in the baseline study are being addressed through the implementation of the planetGOLD Zambia project working to support formalisation of ASGM, enhance access to finance and legal trade in ASGM, building capacity of miners in mercury free processing systems and raising awareness of responsible mining practices.

### **▼ 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 power plants**

1. The establishment of the power plant requires the company to undertake the Environmental Impact Assessment (EIA) process in line with the Environmental Management Act No. 12 of 2011, where an approval with conditions is granted.

2. The Environmental Management Plan outlining measures to minimize pollution is submitted to

ZEMA for consideration.

3. All coal fired power plants are licensed for emission to air by ZEMA.

4. Monitoring of emissions to ensure compliance to stipulated license conditions is carried out by ZEMA.

Effectiveness

Submissions of bi-annual Returns of Emissions for the facilities as a legal requirement enables the Agency to monitor the emissions. However, Mercury in particular is not amongst the parameters that are being monitored because the current Environmental Management(Licensing) Regulations No. 112 of 2013, does not prescribe monitoring of mercury.

Coal-fired industrial boilers

#### **Coal-fired industrial boilers**

1. The establishment of the coal fired industrial boilers requires the company to undertake the Environmental Impact Assessment (EIA) process in line with the Environmental Management Act No. 12 of 2011, where an approval with conditions is granted.

2. The Environmental Management Plan outlining measures to minimize pollution is submitted to ZEMA for consideration.

3. All coal fired industrial boilers are licensed for emission to air by ZEMA.

4. Monitoring of emissions to ensure compliance to stipulated license conditions is carried out by ZEMA.

Effectiveness

Submissions of bi-annual Returns of Emissions for the facilities as a legal requirement enables the Agency to monitor the emissions. However, Mercury in particular is not amongst the parameters that are being monitored because the Environmental Management(Licensing) Regulations No. 112 of 2013 does not prescribe monitoring of mercury.

Smelting and roasting processes used in the production of non-ferrous metals

#### **Smelting and roasting processes used in the production of non-ferrous metals**

1. The establishment of the Smelting and roasting processes used in the production of non-ferrous metals requires the company to undertake the Environmental Impact Assessment (EIA) process in line with the Environmental Management Act No. 12 of 2011, where an approval with conditions is granted.

2. The Environmental Management Plan outlining measures to minimize pollution is submitted to ZEMA for consideration.

3. All Smelting and roasting processes used in production of nonferrous metals are licensed for emission to air by ZEMA.

4. Monitoring of emissions to ensure compliance to stipulated license conditions is carried out by ZEMA.

Effectiveness

Submissions of bi-annual Returns of Emissions for the facilities as a legal requirement enables the Agency to monitor the emissions. However, Mercury in particular is not amongst the parameters that are being monitored because the Environmental Management(Licensing) Regulations No. 112 of 2013 does not prescribe monitoring of mercury.

Waste incineration facilities

#### **Waste incineration facilities**

1. The establishment of waste incineration facilities requires the company to undertake the Environmental Impact Assessment (EIA) process in line with the Environmental Management Act No. 12 of 2011, where an approval with conditions is granted.

2. The Environmental Management Plan outlining measures to minimize pollution is submitted to ZEMA for consideration.

3. The waste incineration facilities are licensed for emission to air by ZEMA.

4. Monitoring of emissions to ensure compliance to stipulated license conditions is carried out by ZEMA.

Effectiveness

Submissions of bi-annual Returns of Emissions for the facilities as a legal requirement enables the

Agency to monitor the emissions. However, Mercury in particular is not amongst the parameters that are being monitored because the Environmental Management(Licensing) No. 112 of 2013 does not prescribe monitoring of mercury.

Cement clinker production facilities

### **Cement clinker production facilities**

Cement clinker production facilities

1. The establishment of Cement clinker production facilities requires the company to undertake the Environmental Impact Assessment (EIA) process in line with the Environmental Management Act No. 12 of 2011, where an approval with conditions is granted.
2. The Environmental Management Plan outlining measures to minimize pollution is submitted to ZEMA for consideration.
3. The Cement Clinker production facilities are licensed for emission to air by ZEMA.
4. Monitoring of emissions to ensure compliance to stipulated license conditions is carried out by ZEMA.

### Effectiveness

Submissions of bi-annual Returns of Emissions for the facilities as a legal requirement enables the Agency to monitor the emissions. However, Mercury in particular is not amongst the parameters that are being monitored because the Environmental Management(Licensing)No. 112 of 2013 does not prescribe monitoring of mercury.

**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**

Zambia has implemented a number of Best Available Techniques and Best Environmental Practices (BAT/BEP) for controlling pollutants such as carbon monoxide (CO) and Sulphur dioxide (SO<sub>2</sub>). However, there are currently no specific BAT/BEP measures addressing mercury emissions. Consequently, there is a need to develop and implement mercury-specific BAT/BEP to ensure effective control and management of mercury emissions in Zambia. Among other measures to be implemented, is the development of regulations to address mercury emissions.

## **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**

There are no measures implemented under paragraph 5 of article 8. This is because the current regulations do not provide for regulation of mercury emissions from the coal fired

power plants. In addition, the existing BAT/BEP measures have not been assessed in line with the control of mercury emissions from Coal-fired power plants.

#### **Progress**

BAT/BEP measures are in place. However, there is need to assess whether these are adequate enough to reduce mercury emissions from Coal-fired power plants. Further, there is need to set limits for Coal-fired power plants.

#### **▼ 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**

The current regulations do not provide for monitoring of mercury emissions from the Coal-fired industrial boilers. In addition, the existing BAT/BEP measures have not been assessed in with the control of mercury emissions from Coal-fired industrial boilers.

#### **Progress**

BAT/BEP measures are in place. However, there is need to assess whether these are adequate enough to reduce mercury emissions from Coal-fired industrial boilers. Further, there is need to develop statutory instruments to include the regulation of mercury emission from Coal-fired industrial boilers

#### **▼ 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**

The current regulations only provide for mercury emission limits for copper production. Similarly, the existing BAT/BEP measures have not been assessed in line with the control of mercury emissions from non-ferrous metals.

#### **Progress**

BAT/BEP measures are in place. However, there is need to assess whether these are adequate enough to reduce mercury emissions from non-ferrous metals. Furthermore, there is need to develop statutory instruments to include the regulation of mercury emission from non-ferrous metals.

#### ▼ 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

The current regulations only provide for mercury emission limits for waste incineration. Similarly, the existing BAT/BEP measures have not been assessed in line with the control of mercury emissions from waste incineration.

##### Progress

BAT/BEP measures are in place. However, there is need to assess whether these are adequate enough to reduce mercury emissions from waste incineration.

Furthermore, there is need to develop statutory instruments to include the regulation of mercury emission from waste incineration.

#### ▼ 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

The current regulations only provide for mercury emission limits for cement clinker production facilities. Similarly, the existing BAT/BEP measures have not been assessed in line with the control of mercury emissions from waste incineration.

##### Progress

BAT/BEP measures are in place. However, there is need to assess whether these are adequate enough to reduce mercury emissions from cement clinker production facilities.

Furthermore, there is need to develop statutory instruments to include the regulation of mercury emission from cement clinker production facilities.

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

##### Please explain

There are no 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. However, there

plans to include the regulation of mercury emissions in the statutory instrument which is currently under review.

**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 yes, when was the inventory last updated?**

30 June 2017

**Please indicate where this inventory is available**

The Minamata Initial Assessment Report for Zambia was carried in June, 2017 but has not yet been updated. Plans are under way to review and update the Minamata initial assessment

**Attach**

- [ZMB\\_8.3.pdf](#)

**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

**Part E – Additional comments on this article**

All source categories listed under the Annex D do not have measures for reducing emissions. Further, some source categories under Annex D do not have national limits for emission that can be used for monitoring mercury emissions and these includes emissions from:

Coal-fired power plants;  
Coal-fired industrial boilers; and  
Cement clinker production facilities.

**▼ 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.**

There are no measures in place specifically targeting mercury emissions from relevant sources, as defined under Article 9, paragraph 2(b).

**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)

**When was the inventory last updated?**

30 June 2017

**Please indicate where this inventory is available.**

ZMB\_9.2.pdf

**Please explain**

The Minamata Initial Assessment Report for Zambia was conducted in June 2017 and has not yet been updated. However, plans are currently underway to review and update the assessment

## **Part E – Additional comments on this article**

There are no measures that have been established and implemented from relevant sources defined in paragraph 2 (b) of article 9 within 5 years of entry into force of the convention for it. However, Plans are under way to review and update the Minamata initial assessment.

### **▼ 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.**

Measures

Mercury is regulated as a chemical under the Environmental Management Act No. 12 of 2011 and the Environmental Management (Licensing) Regulations of 2013. An interim storage facility is licensed in accordance with these regulations to ensure the environmentally sound management of mercury waste.

Effectiveness

The measures are effective, as the license and associated license conditions are used as tools to monitor compliance at the interim storage facility. In addition, statutory returns are used to monitor and track quantities of mercury stored at the facility

## **Part E – Additional comments on this article**

Currently, there is only one pilot interim storage facility for mercury-added products used in the health sector.

There is a need to establish fully fledged facilities in all provincial regions of the Country for the safe and environmentally sound management of mercury waste.

### **▼ ART. 11: MERCURY WASTES**

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

- Yes
- No

Yes – the party has taken measures so that mercury waste is managed in an environmentally sound manner

**Please describe measure and effectiveness of measures**

Measures

Zambia implements the Basel Convention for hazardous waste including mercury waste during transboundary movement.

Mercury waste is regulated under the Environmental Management Act No. 12 of 2011 and the Environmental Management (Licensing) Regulations of 2013.

Interim storage facilities for mercury waste are required to be licensed in accordance with national legislation.

Effectiveness

These measures ensure environmentally sound management of mercury waste through a regulatory framework that requires licensing, compliance with license conditions, and routine oversight.

Licensing provides enforceable standards for safe handling, storage, and management of mercury waste.

Yes – the party has taken measures so that mercury waste is recovered, recycled, reclaimed or directly re-used for a use allowed to a party under the Convention or for environmentally sound disposal pursuant to paragraph 3 (a)

Yes – the party has taken measures so that mercury waste is not transported across international boundaries except for the purpose of environmentally sound disposal

**Please describe measure and effectiveness of measures**

Measures

Any import or export of hazardous waste, including mercury waste, must comply with the provisions of the Basel Convention.

Transboundary movement is subject to prior informed consent and authorization by the competent authority.

Effectiveness

Compliance with the Basel Convention ensures that mercury waste is not transported across international boundaries except for environmentally sound disposal

**If the party answered yes to any measures above, please describe the measures implemented pursuant to paragraph 3, and please also describe the effectiveness of those measures.**

Measures

Mercury is regulated as a mercury waste under the Environmental Management Act No. 12 of 2011 and the Environmental Management (Licensing) Regulation of 2013.

An interim storage facility is licensed above the stated regulations to ensure environment sound management of the mercury.

Effectiveness

The measures are effective as the licence and licence conditions are used as a tools for monitoring compliance for the interim storage facility. Further, the statutory returns are used to monitor the quantities of mercury waste in the Interim storage facility

**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**

Zambia currently has an interim storage facility located at the Ministry of Health Headquarters and, licensed by Zambia Environmental Management Agency(ZEMA) for mercury containing devices that were phased out from health facilities. This mercury containing compound such as Mercury containing thermometers and Sphygmomanometers.

▼ 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**

Zambia developed a National Action Plan (NAP) which provided a baseline on mercury (Hg) use and sites involved in its usage. Following the NAP, a project was developed to reduce where feasible eliminate Hg usage in ASGM and through this intervention a contextual study of the ASGM sector updated the baseline done during the NAP detailing amounts of Mercury in Gold production, environmental practices affected by this usage and the sites involved in Mercury usage.

**Part E – Additional comments on this article**

There is a need to follow-up to assess the level of contamination in the sites that are using Mercury in Gold extraction.

▼ 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**

Funds are allocated for the licensing and monitoring of facilities that intend to import, export, transport, store, and distribute mercury and mercury waste. These measures are implemented in line with the principles of environmentally sound management of mercury and mercury waste.

**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.**

Zambia is a developing country and as such may not be capable of contributing to the mechanism referred to in paragraph 5 of article 13.

**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**

Zambia is a developing country and is not capable of providing 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.

**Please provide comments, if any.**

Zambia makes in kind contributions towards the implementation of national activities under the Minamata Convention.

## Part E – Additional comments on this article

Zambia requires multilateral, regional and bilateral sources of financial and technical assistance, as well as capacity-building and technology transfer in order to enhance and increase their activities on mercury in the implementation of the Convention.

### ▼ 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

ASGM Communities across the landscape have been engaged, through the planetGOLD Zambia project which has been conducting capacity building on responsible mining practices and training miners on alternative solutions to mercury use in gold extraction.

Furthermore two sites have been selected to serve as pilot sites for mercury free processing plants that will also be knowledge transfer sites for miners to learn how to process gold without mercury. The University of Zambia is setting up a gravity circuit pilot plant to support ASGM gold extraction without mercury and serve as a research unit for ASGM gold processing.

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

Yes

No

##### Please specify

Zambia has received part of capacity-building through technical and financial assistance for instance, the use of mercury reporting tool kits; Mercury Initial Assessment; and National Action Plan for Artisanal and Small Scale Gold Mining.

##### Please provide comments, if any.

{Empty}

#### 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 specify

Zambia through the planetGOLD Zambia project is setting up two sites to pilot mercury free environmentally friendly gold processing systems. ASGM will work in these sites and produce gold without the use of mercury, and it is envisioned that there will be technology transfer from these sites that results in a multiplier effect with more miners adopting these practices.

Zambia through the planetGOLD Zambia project is setting up a revolving ASGM fund which ASGM can access through micro loans meant for purchasing mercury free processing equipment that is environmentally sound alternative to the current practices.

## Part E – Additional comments on this article

Technical and financial assistance received was beneficial in local capacity building towards reduction or

complete removal of mercury.

The party did receive capacity building in the use of alternative technology such as phase out of mercury containing medical devices (thermometers and sphygmomanometer).

#### ▼ 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.**

Zambia has instituted awareness programmes and information systems on the dangers of exposure to mercury and mercury products to human health.

### 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.**

Zambia has developed the National Action Plan for the ASGM Sector which includes the public health strategy that provides for:

1. Preventive programmes on occupational exposure to mercury and mercury compounds;
2. Diagnosis, treatment and care for populations affected by the exposure to mercury or mercury compounds; and
3. Monitoring of health risks related to the exposure to mercury and mercury compounds.

Zambia has also instituted the assessment of mercury in cosmetics to reduce or eliminate where possible the use of mercury.

Zambia has instituted the phase out of dental amalgam in children under 15, breast feeding and child bearing women to reduce on the effects of mercury in both children and adults. In addition, Zambia is on course to phase out by 2034.

Zambia has also instituted phasing out of mercury containing medical devices (thermometers and sphygmomanometer) in health facilities.

## Part E – Additional comments on this article

Zambia requires a legal framework which will compel a complete phase out of dental amalgam and mercury containing medical devices (thermometers and sphygmomanometer) in health facilities, and mercury containing cosmetics products by 2034. Strides have been made to meet this goal through engagement by the line (Ministry of Health and Ministry of Green Economy and Environment).

#### ▼ 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:**

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

- 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**

Information related to the reduction or elimination of the production, use, trade, emissions, and releases of mercury has been exchanged primarily through participation in Convention-related meetings, implementation activities, and reporting processes

- Information on technically and economically viable alternatives to:
- 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))

## **Part E – Additional comments on this article**

Information exchange on mercury-related issues continues to be strengthened through existing national coordination mechanisms and Zambia's participation in regional and global platforms under the Minamata Convention.

### **▼ 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**

Research has been conducted on mercury levels in soils, sediments, and aquatic organisms in mining-impacted areas in the Kitwe mining area in Zambia. These studies provide empirical data on mercury contamination in affected environments. There is need for follow up studies on the impact of mercury and mercury compounds on human health and the environment.

- Alternatives to mercury and mercury compounds

#### **Alternatives to mercury and mercury compounds**

1. Research is under at the University of Zambia and the Copperbelt University on the alternatives to Mercury for gold processing.
2. The planetGOLD Zambia conducted a baseline study and contextual profiling on the Artisanal and Small-Scale Gold Mining (ASGM) in Zambia. The ASGM sites were identified where alternatives to mercury can be introduced.
3. There are plans to construct a pilot plant to further validate the results from the research on alternatives to mercury and mercury compounds.

- The topics identified in paragraph 1 of article 17

#### **The topics identified in paragraph 1 of article 17**

1. There is need for information dissemination on scientific, technical, economic and legal concerning mercury and mercury compounds, including toxicological, ecotoxicological and safety information.
2. There is need for information on the reduction or elimination of the production, use, trade, emissions and releases of mercury and mercury compounds

- The results of its research, development and monitoring activities under article 19

### **The results of its research, development and monitoring activities under article 19**

1. Zambia conducted a baseline study on Artisanal and Small-Scale Gold Mining from which a NAP was developed. The gaps identified in the baseline study are being addressed through the implementation of the planetGOLD Zambia project working to support formalisation of ASGM, enhance access to finance and legal trade in ASGM, building capacity of miners in mercury free processing systems and raising awareness of responsible mining practices.
2. According to research findings by Chisanga et al., 2025, "Mercury concentrations in soils and sediments near mining areas were significantly higher than in reference sites".
3. Conversely, the Soils near the smelters and mine sites showed elevated mercury concentrations, especially in topsoil (Podolsky et al., 2015). Vertical soil profile suggested atmospheric deposition of mercury from smelting activities.
4. Further research is needed on the biomonitoring of mercury in human populations, fish, air, and water over time in identified mining sites.

Activities to meet its obligations under the Convention

#### **Activities to meet its obligations under the Convention**

1. Development of a National Action Plan (NAP) for Artisanal and Small-Scale Gold Mining from which the planetGOLD Zambia project was born from.
2. The enactment of the Minerals Regulation Commission Act No. 14 of 2024
3. The enactment of the Geological Minerals Development Act No. 2 of 2025

**(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**

1. Zambia has a Communication Plan on chemicals under the citizen engagement strategy on awareness.
2. Zambia has also featured on various electronic and print media platforms to raise awareness materials on health and environmental effects of mercury and mercury compounds including their alternatives.

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

### **Part E – Additional comments on this article**

There is need for an evaluation of the effectiveness of the Public information, awareness and education on mercury and mercury products.

#### **▼ 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**

Zambia has conducted inventories use, consumption, and anthropogenic releases to water and land of mercury and mercury compounds. However, the modelling and impacts assessment have not been done due to the lack of harmonized methodologies for the activities undertaken under subparagraphs (a), (b) and (c) of Article 19.

- ✓ 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**

Research has been conducted on mercury levels in soils, sediments, and possibly aquatic organisms in mining-impacted areas in Zambia (e.g., studies in the Kitwe mining area examined heavy metals including mercury). These studies provide empirical data on mercury contamination in affected environments. There is need for follow up studies.

- ✓ 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**

No research has been conducted on the assessments of the impact of mercury and mercury compounds on human health and the environment due to inadequate funding and resources.

- ✓ 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**

No research has not been conducted due to the lack of harmonized methodologies for the activities undertaken under subparagraphs (a), (b) and (c) of Article 19.

- ✓ 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**

No information

- ✓ 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**

Unverified information on smuggling of mercury in the country as Zambia is a transit country.

- ✓ 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**

The planetGOLD project conducted a baseline review of the Zambian ASGM sector, investigating the amount of gold produced, methods used, mercury to gold ratio in the extraction process and the processing methods employed. The project is developing gold processing routes that employ technology that can be adapted by ASGM to extract mercury free gold, ensuring technology is adaptable and scalable across the ASGM landscape.

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

## Part E – Additional comments on this article

The modelling and impacts assessment have not been done due to the lack of harmonized methodologies for the activities undertaken under subparagraphs (a), (b) and (c) of Article 19.

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

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

Zambia is successfully implementing activities under the Minamata convention, however it is faced with a number of challenges;

1. Financial resources associated with costs for upgrading industrial facilities to meet BAT/BEP requirements and conducting national inventories and monitoring programmes.
2. Inadequate storage facilities for mercury waste
3. Lack of regulation for tackling existing emission sources of mercury and mercury waste.
4. Unverified sources of mercury supply in the country.
5. Inadequate awareness raising on the health and environmental effects of mercury.

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

#### Comments regarding the reporting format and possible improvements, if any

The reporting format is clear and well structured and allows the Party to provide relevant information on the implementation of the Convention.