INFORMATION ON THE PARTY

1. Information on the party

Name of party
Ecuador

Date on which its instrument of ratification, accession, approval or acceptance was deposited
29 Julio 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
Ministry of the Environment, Water and Ecological Transition

Title of National Focal Point
Mr.

Name of National Focal Point
Jose Antonio Davalos

Mailing address
Calle Madrid 1159 and Andalucía
Postal Code: 170525
Quito – Ecuador

Telephone number
593-2 398–7600

Fax number
{Empty}

E–mail
ecuador@localhost

Second E–mail
jose.davalos@ambiente.gob.ec

Web page
https://www.ambiente.gob.ec/
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 the Environment, Water and Ecological Transition

Title of contact officer
Director of Chemical Substances, Waste and Hazardous and Non–Hazardous Waste

Name of contact officer
Berenice Quiroz

Mailing address
Calle Madrid 1159 and Andalucía
Postal Code: 170525
Quito – Ecuador

Telephone number
593-2 398–7600

Fax number
{Empty}

E–mail
berenice.quiroz@ambiente.gob.ec

Second E–mail
berequiroz2009@hotmail.com

Web page
https://www.ambiente.gob.ec/

▼ 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

☐ No

Additional information on this question if needed
{Empty}
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
☐ No

3.3. Has the party endeavoured to identify individual stocks of mercury or mercury compounds exceeding 50 metric tons and sources of mercury supply generating stocks exceeding 10 metric tons per year that are located within its territory?

☐ Yes
☐ No

ba34_subsection
*If the party answered Yes to Question 3 above:

i. Please attach the results of your endeavor or indicate where it is available on the internet, unless unchanged from a previous reporting round.
   - ECU_3.3.pdf

ii. Supplemental: Please provide any related information, for example on the use or disposal of mercury from such stocks and sources.
   {Empty}

3.4. Does the party have excess mercury available from the decommissioning of chlor–alkali facilities?

☐ Yes
☐ No

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

Additional information if needed
 {Empty}

3.6. Has the party allowed the import of mercury from a non–party?

☐ No
Part E – Additional comments on the article in free text if the party chooses to do so

Ecuador, through the project "Development of Plans for the Management of Mercury Risks in Ecuador (2017 – 2018)", carried out an initial evaluation of the Minamata Convention on Mercury, which contemplates the "Types of mercury release sources" and “Potential hot spots” for mercury emissions and releases.

In this context, it is established that:

a) No individual stockpiles of mercury or mercury compounds greater than 50 metric tons have been identified by the Government, marketers or processing plants. Chlor-alkali production in operation.

b) No sources of mercury supply have been identified such as mercury catalyst recyclers and waste treatment facilities, mercury mines, producers of mercury compounds, and places where mercury by-products are generated, including mines that produce mercury as a by-product.

Additionally, through the current environmental regulations Ministerial Agreement No. 099 "Instructions for the Registration of Hazardous Chemical Substances and environmental obligations", published in the R.O. No. 601 of October 15, 2015, in which it is intended to establish the regulation and control measures for the import, export, manufacture, transfer, storage, transportation, industrial or artisanal use and use for academic research of dangerous chemical substances (potassium cyanide, sodium cyanide and mercury), the Ministry of the Environment, Water and Ecological Transition has not issued authorizations related to metallic mercury.

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.

Ecuador through the Ministry of Environment, Water and Ecological Transition (MAATE) has developed the document "Development of the baseline and macro proposal of the Action Plan for the management of products with Hg at the national level (2019)", identified imports mercury-added products according to Annex A of the Minamata Convention on Mercury.

From the diagnosis made in the project in question, the health and electricity sectors were prioritized for an exhaustive analysis of the stocks, in order to comply with article 4 of the Convention, on which an "Analysis of economic scenarios for the implementation of Article 4 on Mercury-added Products of the Minamata Convention in Ecuador", which will serve as the basis for establishing control mechanisms for the restriction/prohibition/exemption for the importation of this type of product in coordination with the Trade Committee Foreign (COMEX) this activity has been carried out from 2020 to the present.
It is expected that the measures established in the "Final report of the evaluation of the base line and proposal of the action plan of Hg in products (2019)", will come into force during the year 2022.

Additionally, in the year 2019 the management environmentally sound disposal of a batch of 14.8 tons of mercury-containing lighting waste from the electricity sector, whose final disposal was carried out locally through an authorized manager.

4.3. Has the party taken two or more measures 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.
Within the framework of the implementation of the "Mercury-free establishments" plan, it was established that as of 2015, the financial administrative area of the Ministry of Public Health of Ecuador (MSP) would begin the acquisition of resin to replace amalgams in the network of establishments of the Ministry of Public Health.

Additionally, in 2019, the MSP published Agreement No. 00036-2019 "Internal management manual for residues and waste generated in health establishments" in Official Registry No. 64, whose objective is to strengthen the internal management of the residues and waste generated in the health establishments of the National Health System, through the application of technical guidelines and tools in accordance with current legal regulations (includes dental amalgams).

During the year 2020, the consultation was carried out with the dental collegiate sector through which it was reported that mercury amalgams are no longer used, the same ones that have been replaced by resins, information that was verified with the import database maintained by the Customs of Ecuador.

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 under article 4?

☐ Yes
☐ No

If yes, please provide information on the measures.
The Ministry of the Environment, Water and Ecological Transition (MAATE) prepared and sent a technical report to the National Customs Service of Ecuador for the identification of specific tariff headings for mercury compounds and mercury-added products detailed in Annex A, with the purpose of establishing the restriction on trade at the national level of these products in compliance with the Minamata Convention on Mercury.

Additionally, since 2012, the Ministry of the Environment, Water and Ecological Transition, in order to ratify and implement the Minamata Convention on Mercury, developed the national project "Zero Mercury Plan", which has a component on "Management environmentally sound disposal of wastes consisting of elemental mercury and mercury-containing wastes".

In this context, inter-institutional work has been carried out with:

1. Ministry of Health. – Preparation of a plan for the substitution and elimination of medical devices containing mercury. On March 31, 2014, through Memorandum No. MSP–SNPSI–2014–0337–M and in compliance with public policies for the substitution and elimination of mercury, the process for the acquisition of devices,
equipment, medical supplies and others; that substitute and/or eliminate those that contain mercury in health establishments of the public sector.

The financial administrative area of the Ministry of Health carried out the acquisition of nursing equipment supplies including: thermometers, sphygmomanometers (sphygmomanometers) that did not contain mercury for distribution to district health facilities. In 2019, the Ministry of Health published Agreement No. 00036-2019 "Internal management manual for residues and waste generated in health establishments" in Official Registry No. 643, which includes the internal guidelines for the waste management of medical devices with mercury in health facilities.

2. Ministry of Energy and Non-Renewable Natural Resources. – Institutionalization of a strategy to reduce lighting fixtures with mercury vapor for sodium lighting and LED technology in electrical companies nationwide, as well as actions related to energy efficiency throughout the Ecuadorian territory.

3. The Ministry of the Environment, Water and Ecological Transition is preparing the "Instructions for the management of extended responsibility in the comprehensive management of disused discharge lamps", which has been socialized during the 2019–2021 period, between public and private sector actors. The Instructions in question are prepared within the framework of the extended responsibility of the producer and include the management of LED lamps in disuse, currently the document has been submitted for legal review and will be made official during the year 2022.

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

If no, has there been an assessment of the risks and benefits of the product that demonstrates environmental or health benefits? Has the party provided to the secretariat, as appropriate, information on any such product?

☐ Yes
☐ No

Part E – Additional comments on the article in free text if the party chooses to do so

{Empty}

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
☐ I 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?

<table>
<thead>
<tr>
<th>CHLOR–ALKALI PRODUCTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>○ Yes</td>
</tr>
<tr>
<td>○ No</td>
</tr>
<tr>
<td>○ Not applicable (do not have these facilities)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ACETALDEHYDE PRODUCTION IN WHICH MERCURY OR MERCURY COMPOUNDS ARE USED AS A CATALYST</th>
</tr>
</thead>
<tbody>
<tr>
<td>○ Yes</td>
</tr>
<tr>
<td>○ No</td>
</tr>
<tr>
<td>○ Not applicable (do not have these facilities)</td>
</tr>
</tbody>
</table>

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?

<table>
<thead>
<tr>
<th>VINYL CHLORIDE MONOMER PRODUCTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>○ Yes</td>
</tr>
<tr>
<td>○ No</td>
</tr>
<tr>
<td>○ Not applicable (do not have these facilities)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SODIUM OR POTASSIUM METHYLATE OR ETHYLATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>○ Yes</td>
</tr>
<tr>
<td>○ No</td>
</tr>
<tr>
<td>○ Not applicable (do not have these facilities)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PRODUCTION OF POLYURETHANE USING MERCURY–CONTAINING CATALYSTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>○ Yes</td>
</tr>
<tr>
<td>○ No</td>
</tr>
<tr>
<td>○ Not applicable (do not have these facilities)</td>
</tr>
</tbody>
</table>
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. Is there any facility that has been developed 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

If yes, please provide information on how the party tried to discourage this development or that the party has demonstrated the environmental and health benefits to the Conference of the Parties and that there are no technically and economically feasible mercury-free alternatives available providing such benefits.

At the national level in 2016, the existence of a packaging factory was identified that uses metallic mercury as a transmitter of electrical charge in the sheaves of welding equipment, which has a useful life between 3 to 6 months, once its capacity of electrical transmission is exhausted, the mercury in these sheaves is changed. Among the welding products are: containers for paints, automotive oils and shoe glues.

The Ministry of the Environment, Water and Ecological Transition, through memorandum No. MAE-SCA–2017–0025–M, of January 13, 2017, requested the Guayas Provincial Environment Directorate to carry out an inspection, as well as to take the necessary actions that correspond within the framework of the current environmental regulations Ministerial Agreement No. 060 "Procedures and Requirements for Obtaining Authorizations for the Transfers and Consumption of Mercury", published in the Official Gazette No. 238 of May 5, 2014; in addition to notifying the subject of control so that it begins with the Registry of dangerous chemical substances, as established in this Ministerial Agreement No. 099 "Instructions for the registration of dangerous chemical substances and environmental obligations", published in the Registry officer no. 601 of October 5, 2015.

Additionally, through MAE-SCA–2018–0491–M, of July 11, 2018, the Undersecretary of Environmental Quality requested the Guayas Provincial Directorate of the Environment to report on the actions taken by the company Fábrica de Envases SA.

The Environmental Authority will continue to control and monitor said company as of February 2022, to analyze the process and verify the relevance of mercury-free and economically viable alternatives to discourage the establishment of said process or facility where mercury is used, as well how to establish guidelines for the environmentally sound management of mercury as waste and compliance with current environmental regulations.

**Part E – Additional comments on the article in free text if the party chooses to do so**

{Empty}
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.

Measure: Prohibition of the use of mercury in mining operations, issued through the Organic Mining Law published in RO No. 037, of July 16, 2013, which established a two-year term for the eradication of the use of mercury in mining activities through alternative methods that allow this substance to be progressively eliminated in the ore recovery processes. Despite this measure and the respective controls, the use of mercury in the ASGM sector is done clandestinely and through trafficking chains (unknown and uncontrolled sites) this substance enters the border illegally, which represents a problem and challenge to be addressed by the competent authorities.

Measure: Project "National Action Plan on the use of mercury in Artisanal and Small-Scale Mining (ASGM) of gold in Ecuador", in compliance with the provisions of Article 7 of the Minamata Convention, which began on 17 July 2018 and ended in July 2020.

In this context, the following is reported:
1) 2017: Ecuador was in negotiations to carry out the "National Action Plan on the use of mercury in Artisanal Mining and Small Scale (ASGM) of gold in Ecuador".
2) 2018: The project begins with the establishment of the working group and information gathering in the field.
3) 2019: Sectoral meetings were held, as well as the design of key strategies to address the problem of Hg in ASGM, and their subsequent implementation, for which reason the results during this period are described below:

- Identification of 25 sites of ASGM distributed in more than 13 provinces of Ecuador.

- Estimated 29.6 tons of mercury released into the environment annually in ASGM activities.

- The ratio of mercury use versus gold production varies between 0.45 and 11.79 kg of Hg per kg of gold produced.

- Approximately 10.1 tons worth of gold are produced annually by amalgamation.

- 11,500 people involved in ASGM activities, of which approximately 10% are women.

- The main conditions present in the ASGM community are: respiratory, gastrointestinal and muscle pain. In addition, problems with vision, hearing, tremors and even mental retardation occur near ASGM communities that could be related to the presence of mercury.

- The mining community, in general, is unaware of the effects that the handling, inhalation or contact with mercury can cause to health.

- There is little training to identify and attend to emergencies due to mercury poisoning.


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
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

- {Empty}

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

a) For the development of the National Action Plan for Mercury in Artisanal and Small-Scale Mining and as provided in the Convention, during 2018 the Project Steering Committee was formed, with the participation of the Ministry of Public Health, Ministry of Energy and Non–Renewable Natural Resources, and the Geological Mining Research Institute, who represent the main actors that have provided information for the formulation of the NAP, and at the same time will also be responsible for the execution of the actions and strategies to be presented within the Plan. Attached is the document that describes the functions of the National Steering Committee, its composition and structure.

b) On the other hand, entities such as the Ministry of Defense, the Customs Service of Ecuador, the Mining Regulation and Control Agency, the National Mining Company, the National Police, Decentralized Autonomous Governments (municipalities), Provincial Governments, Associations of Artisanal Miners and Small–Scale Mining, Universities and Research Centers, among others, during the period of presentation of this report have been part of the process of formulating the National Action Plan for Mercury in Artisanal and Small–Scale Mining, which has sought to have the contribution from a point of view and multidisciplinary analysis, and at different levels: local, regional and national.

c) Ecuador together with countries of the Andean Community worked on the development of Decision No. 844 published on May 29, 2019 (Attached) that creates the Andean Observatory in charge of the management of official information on mercury that it has its objective is to provide the competent authorities of the Member Countries with an updated information alternative that is easy to access and understand, so that the Member Countries can formulate or update public policies applied to the production, import, export, marketing, transportation and other, related to the use and control of mercury.

In addition, during the reporting period of this report, Ecuador worked on the development of regulations to regulate and establish the procedures and operating mechanisms for the implementation and operation of the Andean Observatory.

d) Within the framework of the Ecuador–Colombia Binational Technical Commission to Fight Illegal Mining, on October 2, 2020, a virtual workshop was held to "Strengthen Binational Cooperation on Environmental Matters", in order to strengthen the knowledge of both countries in the control and regulation of mining activities, with special emphasis on the control and eradication of mercury, as well
as promoting compliance with the commitments of this technical mechanism with Colombia.

e) Within the framework of the Mixed Commission to Fight Illegal Mining Ecuador–Peru, on December 21, 2020, a virtual workshop was held to "Exchange information on national best practices in mercury control through a workshop binational technician.

**Please provide information**
- ECU_7.5.pdf

**Part E – Additional comments on the article in free text if the party chooses to do so**

During the period evaluated in this report, Ecuador was developing the project "National Action Plan on the use of mercury in Artisanal and Small-Scale Mining (ASGM) of gold in Ecuador", which began on July 17 of 2018 and was presented to the Secretariat of the Minamata Convention on Mercury in July 2020.

In the following link you will find the document prepared in mention:
https://www.mercuryconvention.org/es/parties/national-action-plans

**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
Based on the execution of the project "Development of Plans for Mercury Risk Management (2017–2018)", no new sources of mercury emissions related to Annex D of the Minamata Convention on Mercury were identified at the national level.

**Attach relevant documentation**
{Empty}
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**

{Empty}

**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**

Through the "Development of Plans for Mercury Risk Management (2017–2018)" project, Ecuador developed an "Expansion and optimization program for the management and final disposal of products and equipment containing mercury", the main risks identified for this activity are: the release of mercury into the soil from metal recycling (including vehicles) and metal smelting, the release of mercury into the air from informal waste incineration, and the release of mercury into the soil from waste management in informal dumps.

**Progress**

An evaluation of the objectives and goals established in the "Expansion and optimization program for the management and final disposal of products and equipment containing mercury" has not been carried out during the evaluation period of this report.

**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

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 yes, when was the inventory last updated?
Tue, 03/27/2018 – 00:00

Please indicate where this inventory is available
Ecuador, through the project "Development of Plans for Mercury Risk Management (2017–2018)" updated the inventory of emissions and releases of mercury with base information for the year 2015.

In Chapter II "Inventory of emissions and releases of mercury " of the document “Development of Plans for Mercury Risk Management in Ecuador” (Attached), details the results of the inventory of mercury emissions and releases.

Attach
- ECU_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

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?
Ecuador, within the framework of the "Development of Plans for Mercury Risk Management in Ecuador" project, developed a National Mercury Risk Plan based on information obtained from the update of the national inventory of mercury emissions and releases, the result of that evaluation allowed to identify the following priorities:

1. Elimination of the use of mercury in artisanal mining and small mining in Ecuador.
2. Minimization of the use of products and equipment that contain mercury.
3. Expand and optimize the system for the management and final disposal of products containing mercury.
4. Implement water treatment systems that prevent the discharge of mercury into bodies of water.

Part E – Additional comments on the article in free text if the party chooses to do so

{Empty}

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
○ I do not know

Please indicate the measures taken to address releases from relevant sources and the effectiveness of those measures.

Ecuador, within the framework of the "Development of Plans for Mercury Risk Management in Ecuador" project, developed a National Mercury Risk Plan based on information obtained from the update of the national inventory of mercury emissions and releases, the result of that evaluation made it possible to identify the following priorities:

a) The "Program for the implementation of wastewater treatment systems" which includes the following objectives:

1. Reduce the release of mercury into water due to the absence of wastewater treatment.
2. Implement wastewater treatment systems nationwide.
3. Eliminate the release of mercury into the water due to the lack of wastewater treatment.

b) The “Program for the management of risks in products and materials that contain mercury”, which has the following objectives:

1. Control mercury in landfills and in final disposal plants for hazardous waste.
2. Minimize the amount of mercury-containing waste disposed of in dumps and landfills.
3. Implement control processes in environmental managers to ensure that mercury releases into the environment comply with national regulations.
4. Eradicate the final disposal of mercury-containing waste disposed of in dumps and sanitary landfills.
An evaluation of the objectives and goals established in the aforementioned programs has not been carried out during the evaluation period of this report.

Additionally, under the "Development of Plans for Mercury Risk Management (2017–2018)" project, samples were taken from leachate cells from environmental managers' landfills to determine the concentration of mercury in said water.

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

When was the inventory last updated?
2018-03-27

Please indicate where this inventory is available
Ecuador, through the project "Development of Plans for Mercury Risk Management (2017–2018)" updated the inventory of emissions and releases of mercury with base information for the year 2015.

In Chapter II "Inventory of emissions and releases of mercury" of the document "Development of Plans for Mercury Risk Management in Ecuador" (Attached in Article 8), the results of the inventory of mercury emissions and releases are detailed.

Part E – Additional comments on the article in free text if the party chooses to do so

{Empty}

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
- I do not know

Please indicate the measures taken to ensure that such interim storage is undertaken in an environmentally sound manner and the effectiveness of those measures.

Ecuador has current legal regulations that establish the technical requirements for the storage of hazardous chemical substances, including mercury, such as:

1. Environmental Organic Code published in RO No. 983 of April 12, 2017 and its Regulations published in the RO No. 507 of June 12, 2019, where it is established that each activity that uses hazardous...
chemical substances must have an Environmental Management Plan that includes the storage of chemical substances.

2. INEN 2266:2013 standard on the requirements for the transport, storage and handling of hazardous materials.


**Part E – Additional comments on the article in free text if the party chooses to do so**

{Empty}

**ART. 11: MERCURY WASTES**

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

- Yes
- No

Please describe the measures implemented pursuant to paragraph 3, and please also describe the effectiveness of those measures.

In 2017, the Organic Environmental Code entered into force and in 2019 its Regulations, which establish the obligation of environmentally sound management of hazardous waste, including waste with added mercury, waste consisting of mercury or mercury compounds, for which the national capacity to manage this type of waste, determining that the processes of encapsulation and final disposal in security cells are of greater application by qualified environmental managers through the Ministry of Environment, Water and Ecological Transition (MAATE).

On the other hand, through the Program for the environmentally sound management of chemical substances in their life cycle, in 2019 a batch of 14.8 tons of mercury–containing lights from the electricity sector was managed in a national and environmentally appropriate manner.

Until the date of presentation of this report, the MAATE has not issued environmental administrative authorizations for the recovery, recycling, regeneration or reuse of waste with added mercury, waste consisting of mercury or mercury compounds, nor has it issued environmental administrative authorizations for the export of mercury-added waste, waste consisting of mercury or mercury compounds, including transboundary movement.

11.2. Are there facilities for final disposal of waste consisting of mercury or mercury compounds in the party’s territory?

- Yes
- No
- I do not know

If yes, if the information is available, how much waste consisting of mercury or mercury compounds has been subjected to final disposal under the reporting period? Please specify the method of the final disposal operation/operations.

Based on table 1 of the annex to decision MC–3/5, in which waste consisting of mercury or mercury compounds is considered, it is established that Ecuador, if it has carried out the management of waste...
consisting of mercury through a encapsulation process and final disposal in security cells:

a) November 2015
- Managed Quantity: 998.50 Kg
- Managed Waste: Metallic Mercury

b) December 2015
- Managed Quantity: 74.7 Kg
- Managed Waste: Metallic Mercury

Part E – Additional comments on the article in free text if the party chooses to do so

{Empty}

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 Ministry of the Environment, Water and Ecological Transition, through the project "Plan Zero Mercury in the years 2014 and 2016", contemplated as a component the "Development and management of remediation", for which an inventory of sites potentially contaminated, where water, sediment and soil samples were evaluated in the provinces of El Oro, Azuay, Morona Santiago and Zamora Chinchipe where there is gold mining. All the samples taken presented a mercury concentration above the reference value of the standard.

Additionally, through the approval of the project "Strengthening the national capacity for the implementation of the Minamata Convention in Ecuador" of the Specific International Programme of the Minamata Convention on Mercury, an activity is contemplated that allows the formulation of strategies to prioritize, manage and, as appropriate, remediate identified contaminated sites.

Part E – Additional comments on the article in free text if the party chooses to do so

{Empty}

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
Ecuador has implemented the following projects/programs for the implementation of the Minamata Convention on Mercury:

1) National action plan on mercury in artisanal and small-scale gold mining (2017–2020):
   - Resources provided: Technicians
   - Amount of project allocated by the GEF: $500,000

   - Resources provided: Technicians
   - Amount of the project allocated by the GEF: $110,750
   - Co-financing year 2017: $78,134

3) Program for the environmentally sound management of chemical substances in their life cycle (2018–2023):
   - Resources provided: Technicians
   - Amount of the project allocated by the GEF: $849,000
   - Co-financing year 2018: $247,863.60
   - Co-financing year 2019: $269,380.77
   - Co-financing year 2020: $179,114.82

4) Awareness-raising among children from educational institutions located in the mining area of the cantons of Zaruma and Portovelo in the province of El Oro on the effects of exposure to mercury and the Minamata Convention (2020):
   - Resources provided: Technicians
   - Project amount allocated by JICA: $1,000

Please provide comments, if any.
{Empty}

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

- Yes
- No

Please specify
Ecuador has contributed with the technical team of the Directorate of Chemical Substances, Residues and Hazardous and Non-Hazardous Waste, for this reason the co-financing in kind is detailed below:

1) Year 2018: $900,117.00
2) Year 2019: $1,612,893.37
3) Year 2020: $87,195.37

The amounts indicated are part of part of the contributions established in question 13.1, for the "Program for the environmentally sound management of chemical substances in their life cycle (2018–2023)."

Please provide comments, if any.
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
Ecuador has supported other Parties (Colombia and Peru), through the exchange of knowledge on mercury management and actions implemented within the framework of the Minamata Convention on Mercury.

Please provide comments, if any.

Part E – Additional comments on the article in free text if the party chooses to do so

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
a) On September 27, 2018, Ecuador organized the virtual workshop "Control mechanisms for the reduction of negative effects of mercury based on the Minamata Convention" and whose objective was to strengthen the execution of national actions of the participating countries through the review of the guide structured by Ecuador for the analysis of the requirements of the Convention, which compiled conceptual notes of documents published for the ratification and implementation of the Minamata Convention on Mercury.

The participating countries were: Mexico, Brazil, United States, Guatemala, Argentina, El Salvador, Peru, Costa Rica and Uruguay.

b) In 2019, through the Programme for the Environmentally Sound Management of Chemical Substances in their Life Cycle, a diagnosis of needs and plans for capacity development and financing were carried out to improve national reports on statistics/indicators for Hg.

c) Within the framework of the Ecuador–Colombia Binational Technical Commission to Fight Illegal Mining, on October 2, 2020, a virtual workshop was held to "Strengthen Binational Cooperation on Environmental Matters", in order to strengthen the knowledge of both countries in the control and regulation of mining activities, with special emphasis on the control and eradication of mercury, as well as promoting compliance with the commitments of this technical mechanism with Colombia.
d) Within the framework of the Mixed Commission to Fight Illegal Mining Ecuador–Peru, on December 21, 2020, a virtual workshop was held to "Exchange information on national best practices in mercury control through a workshop binational technician.

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

- Yes
- No
- Please specify

Please specify

a) Under the "Development of Plans for Mercury Risk Management" project, Ecuador strengthened its national technical capacity through the following activities:

- Training in mercury risk communication (2017), carried out in Ecuador by the National Center for Environmental Health / Agency for Toxic Substances and Disease Registry Centers for Disease Control and Prevention.
- Training on sites contaminated with mercury (2017), held in Madrid – Spain at the Center for Energy, Environmental and Technological Research (CIEMAT).
- Mercury analytical program (2017), carried out in Ljubljana–Slovenia at the Jozef Stefan reference laboratory.
- Entry into analysis of mercury species in different abiotic matrices (2018), carried out in Ljubljana–Slovenia at the Jozef Stefan reference laboratory. – The Istituto Nazionale di Ottica donated a sampler for total mercury in air (passive sampler CNR–IIA) (2018), which was implemented in the UNACEM cement company. – Ecuador participated in the global evaluation of laboratories carried out by RECETOX (2018), five national laboratories were part of the evaluation, the matrices that were evaluated were: standard solution, fish samples, and human hair.

b) The Japanese government, through the Japan International Cooperation Agency in Ecuador (JICA Ecuador), annually trains national personnel from different national institutions on the ratification and implementation of the Minamata Convention on Mercury.

c) Within the framework of the Ecuador–Colombia Binational Technical Commission to Fight Illegal Mining, on October 2, 2020, a virtual workshop was held to "Strengthen Binational Cooperation on Environmental Matters", in order to strengthen the knowledge of both countries in the control and regulation of mining activities, with special emphasis on the control and eradication of mercury, as well as promoting compliance with the commitments of this technical mechanism with Colombia.

d) Within the framework of the Mixed Commission to Fight Illegal Mining Ecuador–Peru, on December 21, 2020, a virtual workshop was held to "Exchange information on national best practices in mercury control through a binational technician workshop.

f) Through communication No. MC/SIP2/2019/5/ECU of November 21, 2019, the Secretariat of the Minamata Convention on Mercury approved the project "Strengthening capacities for the implementation of the Minamata Convention in Ecuador", for the amount of $250,000 which aims to: Strengthen the country's capacity to control national emissions and releases of mercury and contribute to the identification of priority actions to address emissions and releases within the framework of the Minamata Convention.

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
At the national level, Ecuador has developed the following activities related to the transfer and dissemination of up-to-date environmentally sound alternative technologies and access to them:


2) Through the Program for the Environmentally Sound Management of Chemical Substances in their Life Cycle (PNGQ), work is being done to promote mercury-free alternatives in ASGM (Green Gold) and in products with mercury content in the electrical and health sector. The PNGQ in 2019, modified the activity of installing a mineral processing plant with a capacity of 10 Tons/day by strengthening installed processing plants (5) and mineral analysis laboratories (2), in order to promote commercialization of unprocessed ore and avoid the use of mercury. To comply with this activity, PNGQ has incorporated the following activities since 2020:

- Evaluation of processing plants and mineral analysis laboratories.
- Strengthening (equipment and/or training) processing plants and laboratories.
- Training of technicians from entities related to ASGM.

All these activities will make it possible to implement the mineral sales strategy on a pilot scale with which it is intended to achieve a reduction of 2 tons of mercury use in ASGM.

3) The National Action Plan on the use of mercury in ASGM in Ecuador has the component "Reduction of releases and risks of exposure to mercury and elimination of worst practices" that contains strategies to promote the adoption of efficient technologies for the extraction and processing of gold free of the use of mercury.

Part E – Additional comments on the article in free text if the party chooses to do so
{Empty}

▼ 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.
With the aim of contributing to the fulfillment of the objectives assumed by the country with the Minamata Convention, actions have been generated that allow the public to be made aware of the impact that hazardous substances have on health, such as mercury, in that sense, carried out the following actions:

- Under the National Action Plan for Mercury in Artisanal and Small-Scale Mining (NAP) project, on August 13 and 14, 2019, workshops were held in the cities of Portovelo and Camilo Ponce Enríquez with the participation of more than 79 people, with whom the need to articulate actions with the Ministry of Health was identified and the damage that mercury can cause to health in the short, medium and long term was shared.

- In 2019 to 2020, 4 pieces (Publications for social networks) were prepared for dissemination on social
networks in the accounts of the Ministry of the Environment, Water and Ecological Transition and the United Nations Development Program, through which seeks to promote the proper management of waste products with mercury. Through this material, we seek to reduce the risks that this substance has on health and the environment through practical and simple advice.

– Within the framework of the formulation of the national action plan in accordance with article 7 of the Convention, Ecuador developed an evaluation of the capacities of the health sector to attend to conditions derived from contact with mercury in human health, and a rapid evaluation of health within the community of miners within both evaluations have been the basis for the formulation of the health strategy that will form part of the National Action Plan.

16.2. Have any other measures been taken to protect human health in accordance with article 16?

☐ Yes
☐ No

Supplemental: If yes, describe the measures that have been taken.

Within the framework of the implementation of the Minamata Convention with the objective of protecting human health and the environment, in July 2013 Ecuador established the prohibition of mercury in mining activities through the unnumbered article added by the Organic Law Reform to the Law of Mining, to the Reformatory Law for Tax Equity in Ecuador and the Organic Law of the Internal Tax Regime, called Law No. 0, published in the Official Registry Supplement 37: “without prejudice to the application of the environmental mining regulations, the use of mercury in the country in mining activities, in accordance with the mechanisms that the national environmental authority establishes for this purpose, in conjunction with the institutions with legal authority over the matter”.

Additionally, through the Zero Mercury Plan, artisanal miners were trained on the risks of mercury use (2013–2014).

Despite these measures and the respective controls, the use of mercury in the ASM sector is done clandestinely and through trafficking networks (unknown and uncontrolled sites) this substance enters the border illegally, which represents a problem and challenge to be addressed by the competent authorities.

Part E – Additional comments on the article in free text if the party chooses to do so
{Empty}

▼ ART. 17: INFORMATION EXCHANGE

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

☐ Yes
☐ No

Please provide more information, if any

1) Source of information regarding actions of the National Action Plan on Mercury in ASM: https://www.planificacion.gob.ec/ecuador-lanzo-oficialmente-el-proceso-de-elaboracion-del-plan-
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, please indicate the measures that have been taken and the effectiveness of those measures.

In addition to the activities detailed in articles 16 and 17 of this report, through the “Program for the environmentally sound management of chemical substances in their life cycle” in 2019 and 2020, it trained representatives of electricity companies and about the following topics:

- Mercury: Characteristics and Risks
- Minamata Convention on Mercury
- Comprehensive management of products with Mercury

In 2020, the "Program for the environmentally sound management of chemical substances in their life cycle", developed an "Implementation Plan of a capacity development plan on the Stockholm and Minamata conventions", in virtual format, where 193 participants in the 60-hour course and 174 people in the 10-hour course were registered. The personnel who participated in the courses were from public and private institutions directly and indirectly related to mercury management. Additionally, in 2020, steps were taken to implement this course on the virtual platform for Environmental Education and Water of the Ministry of Environment, Water and Ecological Transition (MAATE), which will be freely accessible to the actors involved in the management of the mercury throughout its life cycle.

In addition, it will implement actions to raise awareness of the proper management of products and waste with added Hg in the health sector, for which it will work with the Ecuadorian Institute of Social Security (IESS), which is part of the public health network of Ecuador.

Part E – Additional comments on the article in free text if the party chooses to do so

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

- Yes
- No

If yes, please describe these actions

Among the activities carried out by the Ministry of Environment, Water and Ecological Transition, Ecuador, the following are detailed:

- Updating inventories of mercury emissions and releases developed under the project "Development of Plans for Mercury Risk Management (2017 – 2018)" and the "Action Plan for the management of products with Hg at the national level (2019)".

- Evaluation of mercury concentration levels in water, sediment and soil samples, in areas of the mining areas of the provinces of El Oro, Azuay, Morona Santiago and Zamora Chinchipe developed under the "Zero Mercury Plan (2014 and 2017)".

- Evaluation of mercury concentration levels in components of ichthyofauna and aquatic macroinvertebrates in the mining area of the province of El Oro, developed under "Development of Plans for Mercury Risk Management (2017 – 2018)".

- Strengthening the capacity of analytical laboratories for the analysis of mercury concentration in hair samples through the Lasa Laboratory (12 trained in 2018), an activity carried out under the project "Development of Plans for Mercury Risk Management (2017 – 2018)".

- Control of the traceability of mercury from its importation to its use in accordance with specific environmental regulations and in coordination with the National Customs Secretariat of Ecuador, an activity carried out since 2014.

- Reduction of mercury risks through the implementation of the Best Available Techniques (BAT) and the Best Environmental Practices (BEP) with emphasis on waste management with liquid mercury in the Health sector, this activity will be developed in 2022 –

- Installation of a total mercury sampler in air (CNR–IIA passive sampler) in 2019, installed in the Galapagos National Park, the same one that was donated by the Canadian Institute of Environment and Climate Change.

Part E – Additional comments on the article in free text if the party chooses to do so

{Empty}

▼ COMMENTS

Part C: Comments regarding possible challenges in meeting the objectives of the Convention (Art. 21, para. 1)

The main difficulties in achieving the objectives of the Convention are related to:

- The economic resources available and the assigned national budget.
- Illegal or informal trade in mercury.

- Lack of specification in tariff headings for the identification of products with added mercury that are subject to restriction, importation or manufacture in accordance with Annex A of the Convention.

- Lack of staff by governing institutions to implement effective control and monitoring of the main sources of emissions and releases identified.

- Cultural change regarding the management and final disposal of mercury and mercury-added products.

- Impact of the execution of planned activities within the framework of the Minamata Convention due to the COVID-19 Pandemic.

▼ SUPPLEMENTAL – ADDITIONAL COMMENTS

Supplemental: Part D: Comments regarding the reporting format and possible improvements, if any

There are national activities that can be presented jointly as compliance with several articles of the Minamata Convention, it is suggested to analyze the relevance that allows not to repeat activities in each article separately.