

# FIRST FULL NATIONAL REPORTS OF THE MINAMATA CONVENTION ON MERCURY 2021



## REPORTING PERIOD:

16 August 2017 to 31 December 2020

### ▼ INFORMATION ON THE PARTY

## 1. Information on the party

### Name of party

Slovenia

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

23 June 2017

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

21 September 2017

## 2. Information on the national focal point

### Full name of the institution

Chemicals Office of the Republic of Slovenia

### Title of National Focal Point

Director

### Name of National Focal Point

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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

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Title of contact officer

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#### ▼ 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.**

The current inventories show that there are no stocks of mercury or mercury compounds and sources of mercury supply generating stocks.

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

- SVN\_3.4.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
- ☐ Yes
- ☐ The importing party has relied on paragraph 7 of article 3

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

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### **▼ 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.**

National legislation that regulates restrictions on the production, import and export is part of harmonized EU legislation and ensures compliance with Art 4 obligations.

- Regulation (EU) 2017/852 of the European Parliament and of the Council of 17 May 2017 on mercury
- Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals
- Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), Annex XVII contains the list of restrictions of certain hazardous substances, mixtures and articles for their marketing and use on the European market.
- Directive 2011/65/EU of the European Parliament and of the Council of 8 June 2011 on the restriction of the use of certain hazardous substances in electrical and electronic equipment
- Regulation (EC) No 1223/2009 of the European Parliament and of the Council of 30 November 2009 on cosmetic products
- Regulation (EU) No 528/2012 of the European Parliament and of the Council of 22 May 2012 concerning the making available on the market and use of biocidal products
- Regulation (EC) No 1107/2009 of the European Parliament and of the Council of 21 October 2009 concerning the placing of plant protection products on the market and repealing Council Directives 79/117/EEC and 91/414/EEC
- Regulation (EC) No 1107/2009 of the European Parliament and of the Council of 21 October 2009 concerning the placing of plant protection products on the market and repealing Council Directives 79/117/EEC and 91/414/EEC
- Directive 2006/66/EC of the European Parliament and of the Council of 6 September 2006 on batteries and accumulators and waste batteries and accumulators and repealing Directive 91/157/EEC
- Pravilnik o vsebnosti nevarnih snovi v materialih in sestavnih delih motornih vozil (Ur.l. RS, št. 43/06, 32/09 in 74/11), ki določa prepovedi in omejitve glede vsebnosti določenih nevarnih snovi v materialih in sestavnih delih motornih vozilih. (Rules on the content of dangerous substances in the materials and components of motor vehicles)

The survey conducted in 2002 showed that in Slovenia Hg is not used in the production of batteries, measuring devices, electrical equipment, optical equipment and lamps. According to recent analysis, those data are still relevant. Control of products on the market is carried out by the inspection services.

**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.**

National regulation on amalgam waste management (Uredba o ravnanju z amalgamskimi odpadki, ki nastanejo pri opravljanju zdravstvene dejavnosti in z njo povezanih raziskavah, UL RS, 89/08 – Decree on the management of amalgam waste generated by health services and related research activities), the use of filters and separators at dental practices mandatory since 1 January 2012.

National legislation is part of harmonized EU legislation:

Regulation (EU) 2017/852 of the European Parliament and of the Council of 17 May 2017 on mercury: from 1 January 2019 dental amalgam is used only in pre-dosed encapsulated form, from 1 July 2018 dental amalgam has not been used for dental treatment of deciduous teeth, of children under 15 years and of pregnant or breastfeeding women, except when deemed strictly necessary by the dental practitioner based on the specific medical needs of the patient.

As per Regulation (EU) 2017/852 national plan concerning the measures to implement the phase-down of the use of dental amalgam by 2030 – Nacionalni načrt o ukrepih za postopno opustitev uporabe amalgama v zobozdravstvu do leta 2030 – was adopted in June 2021.

**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

**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 yes, please provide information on the measures.**

Regulation (EU) 2017/852 of the European Parliament and of the Council of 17 May 2017 on mercury

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

4.4. Slovenia does not have manufacturing that may be using mercury-added products listed in Annex A.

Relevant EU and national legislation:

- Regulation (EU) 2017/852 of the European Parliament and of the Council of 17 May 2017 on mercury

- Directive (EU) 2011/65 of the European Parliament and of the Council of 8 June 2011 on the restriction of the use of certain hazardous substances in electrical and electronic equipment
- Directive (EC) 2006/66 of the European Parliament and of the Council of 6 September 2006 on batteries and accumulators and waste batteries and accumulators and repealing Directive 91/157/EEC
- Pravilnik o vsebnosti nevarnih snovi v materialih in sestavnih delih motornih vozil (Ur.l. RS, št. 43/06, 32/09 in 74/11), ki določa prepovedi in omejitve glede vsebnosti določenih nevarnih snovi v materialih in sestavnih delih motornih vozil. (Rules on the content of dangerous substances in the materials and components of motor vehicles)

▼ 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?**

**CHLOR-ALKALI PRODUCTION**

- ☒ Yes
- ☐ No
- ☐ Not applicable (do not have these facilities)

**If yes, please provide information on these measures.**

The use of Hg was ceased in 1996, since then a non-Hg membrane technology has been used.

**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. 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

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

5.2. The use of Hg was ceased in 1996. A new facility which was built in 1996 was among the first in Europe that used a non-Hg membrane technology. Remaining Hg was sold, hence there has been no stocks of Hg since then.

#### **▼ 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

**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

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

{Empty}

#### ▼ 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**

There are no new sources of emissions of mercury or mercury compounds from Coal-fired power plants defined in paragraph 2 (c) of article 8 in Slovenia.

☒ Coal-fired industrial boilers

**Coal-fired industrial boilers**

There are no new sources of emissions of mercury or mercury compounds from Coal-fired industrial boilers defined in paragraph 2 (c) of article 8 in Slovenia.

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

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

There are no new sources of emissions of mercury or mercury compounds from Smelting and roasting processes used in the production of non-ferrous metals defined in paragraph 2 (c) of article 8 in Slovenia.

☒ Waste incineration facilities



### Waste incineration facilities

There are no new sources of emissions of mercury or mercury compounds from Waste incineration facilities defined in paragraph 2 (c) of article 8 in Slovenia.

### ☒ Cement clinker production facilities

#### Cement clinker production facilities

There are no new sources of emissions of mercury or mercury compounds from Cement clinker production facilities defined in paragraph 2 (c) of article 8 in Slovenia.

**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

There are no new sources.

### 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

Relevant legislative:

- Uredba o mejnih vrednostih emisije snovi v zrak iz velikih kurilnih naprav (Uradni list RS, št. 103/15) (Decree on limit values for emissions from large combustion plants into the atmosphere); determines emissions limit values, requirements for plant operation, requirements for the operational monitoring of emissions.
- Pravilnik o prvih meritvah in obratovalnem monitoringu emisije snovi v zrak iz nepremičnih virov onesnaževanja ter o pogojih za njegovo izvajanje (Uradni list RS, št. 105/08) (Rules on initial measurements and operational monitoring of the

emission of substances into the atmosphere from stationary pollution sources and on the conditions for their implementation)

### Progress

National emission of Hg have declined by 52% between 1990 (0,33t) and 2019 (0,16t). Since 1990 the largest reduction in mercury emissions has been achieved by the energy production and distribution sector in public power and heat generation. Its share in overall emissions has dropped from 48% in 1990 to 27% in 2015 and to 21% in 2019.

### ▼ 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

Same applies as for coal-fired power plants.

### 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

No such source of Hg emissions has been identified.

### Progress

{Empty}

### ▼ 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

Frequency of emissions measurements is set out in:

- Uredba o sežigalnicah odpadkov in napravah za sosežig odpadkov (Uradni list RS, št. 8/16 in 116/21) (Decree on waste incineration and co-incineration plants); determines the conditions for obtaining the environmental permit, limit values for air emissions and measures for its control, limit values for emissions in wastewater and measures to control emissions in wastewater from waste gas cleaning plants, waste management rules, operating conditions, requirements for the operational monitoring of air emissions and wastewater disposal emissions.
- Uredba o spremembi in dopolnitvi Uredbe o sežigalnicah odpadkov in napravah za sosežig odpadkov (Uradni list RS, št. 116/21) (Decree amending the Decree on waste incineration and co-incineration plants)

### Progress

{Empty}

## ▼ CEMENT CLINKER PRODUCTION FACILITIES

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

### Measures

- Zakon o varstvu okolja (Uradni list RS, št. 39/06 – uradno prečiščeno besedilo, 49/06 – ZMetD, 66/06 – odl. US, 33/07 – ZPNačrt, 57/08 – ZFO-1A, 70/08, 108/09, 108/09 – ZPNačrt-A, 48/12, 57/12, 92/13, 56/15, 102/15, 30/16, 61/17 – GZ, 21/18 – ZNOrg, 84/18 – ZIURKOE in 158/20) (Environmental Protection Act)
- Uredba o vrsti dejavnosti in naprav, ki lahko povzročajo onesnaževanje okolja večjega obsega (Uradni list RS, št. 57/15) (Decree on activities and installations causing large-scale environmental pollution)
- Uredba o odpadkih (Uradni list RS, št. 37/15, 69/15 in 129/20) (Decree on waste)
- Uredba o sežigalnicah odpadkov in napravah za sosežig odpadkov (Uradni list RS, št. 8/16 in 116/21) (Decree on waste incineration and co-incineration plants); applies to cement clinker production facilities that use waste as fuel
- Uredba o predelavi nenevarnih odpadkov v trdno gorivo in njegovi uporabi (Uradni list RS, št. 96/14) (Decree on the recycling of non-hazardous waste into solid fuel and on its use)
- Directive 2010/75/EU of the European Parliament and of the Council of 24 November 2010 on

industrial emissions (integrated pollution prevention and control)  
2013/163/EU: Commission Implementing Decision of 26 March 2013 establishing the best available techniques (BAT) conclusions under Directive 2010/75/EU of the European Parliament and of the Council on industrial emissions for the production of cement, lime and magnesium oxide (notified under document C(2013) 1728)

**Progress**

{Empty}

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

☒ Yes

☐ No

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

☒ Yes

☐ No

☐ Have not been a party for 5 years

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

Mon, 05/31/2021 – 00:00

**Please indicate where this inventory is available**

[http://okolje.arso.gov.si/onesnazevanje\\_zraka/uploads/datoteke/IIR%202021\\_Slovenia\\_May%202021.pdf](http://okolje.arso.gov.si/onesnazevanje_zraka/uploads/datoteke/IIR%202021_Slovenia_May%202021.pdf)

The report contains information on Slovenian inventories for all years from the base years (1980, 1987 or 1990) of the protocols to the year 2019.

**Attach**

- SVN\_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 the article in free text if the party chooses to do so**

8.2. The Environmental Agency of Republic of Slovenia carries out monitoring of Hg emissions from all major industrial sources. The Agency also keeps an inventory of technologies that are used in order to reduce the emissions. Several studies on Hg mass flows has been carried out and measurements for reducing of emissions have been implemented in thermal power plant Šoštanj and cement clinker facility Salonit.

The national plan setting out the measures to be taken to control emissions from existing sources and to choose the appropriate technologies to reduce emissions has not been prepared yet.

## ▼ 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.**

The control is carried out by the Environmental Agency of the Republic of Slovenia. Criteria for the reporting are set out in:

- Uredba o emisiji snovi in toplote pri odvajanju odpadnih voda v vode in javno kanalizacijo (Uradni list RS, št. 64/12, 64/14 in 98/15) (Decree on the emission of substances and heat when discharging waste water into waters and the public sewage system); it contains: release limit values, listed in Annex 2, evaluation of emissions of substances and heat, measures to prevent emissions from waste water disposal, measures to reduce emissions from waste water disposal, obligations of investors and plant managers related to obtaining an environmental permit
- Pravilnik o prvih meritvah in obratovalnem monitoringu odpadnih voda (Uradni list RS, št. 94/14 in 98/15 (Rules on initial measurements and operational monitoring of wastewater); determines the types of parameters in the first measurements and operational monitorings, sampling methodology and measuring parameters and quantities of wastewater, specifies the technical conditions for the implementation of operational monitoring.

The frequency of measurements depends on the amount of wastewater in the calendar year. Releases from municipal and industrial wastewater treatment plants are reported at the beginning of each year (data for previous year) as part of annual reporting.

### 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?**

2021-01-15

**Please indicate where this inventory is available**

Data for the years up to 2019 is available at:

industrial wastewater: [http://vode.arso.gov.si/dist\\_javna/izpusti/iskalnik\\_in.jsp](http://vode.arso.gov.si/dist_javna/izpusti/iskalnik_in.jsp)

municipal wastewater treatment plants: [http://vode.arso.gov.si/dist\\_javna/kcn/iskalnik\\_cn.jsp](http://vode.arso.gov.si/dist_javna/kcn/iskalnik_cn.jsp)

Due to the transition to a new information system, data for 2020 is not yet publicly available.

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

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

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

- ☐ Yes
- ☒ No
- ☐ I do not know

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

In Slovenia there is no interim storage of mercury.

### **▼ 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.**

The measures are implemented with the Decree on waste landfill (Uredba o odlagališčih odpadkov (Uradni list RS, št. 10/14, 54/15, 36/16, 37/18 in 13/21)).

Article 46 of the decree provides for operational monitoring of the landfill. The operator of the landfill must ensure that operational monitoring is implemented:

- measurements of meteorological parameters,
- measurements of landfill gas emissions,
- measurements of the emission of leachate, discharge of contaminated rainwater from landfill surfaces and waste water from vehicle washing facilities and other equipment in the landfill area,
- measurements of chemical status parameters, general physico-chemical parameters and specific pollutants in surface waters, if they are present in the landfill area or if leachate, contaminated

rainwater and waste water from vehicle washing facilities and other equipment in the landfill area are discharged directly into surface waters;

– measurements of the operating monitoring parameters of groundwater status.

The operational monitoring shall be carried out to the extent and in the manner set out in Annex 8 of The Decree on waste landfill. The operator of the landfill shall submit to the Ministry a report on the implementation of the operational monitoring for the previous year by 31 March of the current year at the latest.

The annual reports are reviewed by the Ministry and the competent inspectorate is informed with the results.

### **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

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

11.2. There is no facility for final disposal, wastes are exported to a country (Germany) where such facilities exist.

## **▼ 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**

Contaminated sites with significantly higher concentration of Hg compared to the nature hinterland are well documented. The most important is the historic area of the Idrija mercury mine with the freshwater system that leads to the bay of Trieste. Since the mine closed down in 1995 several measures have been put in place. The monitoring project of the consequences of 500-years of mining in the area was prepared in 2006, with its implementation starting in 2010. According to the project, the activities are carried out on the basis of an annual work programme. The Idrija Mercury Heritage Management Centre (CUDHg) is in charge of the maintenance of the unwatered parts of the mine as well as for regular monitoring in the area of the influence of the mine.

#### **Relevant national legislation:**

- Zakon o rudarstvu (Uradni list RS, št. 14/14 – uradno prečiščeno besedilo in 61/17 – GZ) (Mining Act)
- Zakon o preprečevanju posledic rudarjenja v rudniku živega srebra Idrija (Uradni list RS, št. 26/05) (Prevention of Effects of Mining in the Idrija Mercury Mine Act)
- Odločba Ministrstva za infrastrukturo št. 361–30/2011–DE–36 z dne 28. 11. 2014 o prenehanju rudarskih pravic RŽS Idrija ter prenos vzdrževanja nezalitega dela jame in monitoringa vplivnega območja rudnika s pripadajočimi objekti na površini na CUDHg Idrija (skladno s 150 c. členom Zakona o rudarstvu, ZRud–1–UPB3, UL RS, št. 14/14, z dne 21. 2. 2014) (Decision of the Ministry of Infrastructure on termination of mining rights of Idrija Mercury Mine and the transfer of maintenance of unwatered

part of the mine and monitoring of the impact area of the mine with the associated surface facilities to CUDHg Idrija)

– Rudarski projekt »Opazovanje (monitoring) vplivnega območja Rudnika živega srebra Idrija po končanih delih« (št. projekta: 01/06, september 2006); dovoljenje za izvajanje del je izdalo Ministrstvo za gospodarstvo, št. 361–39/2008–11, januar 2009 (Authorisation for taking up a monitoring project, issued by the Ministry of Economic Development and Technology) .

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

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### **▼ 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**

A network of institutions with clearly defined competencies has been established in Slovenia covering knowledge as well as all necessary research and support infrastructure to implement commitments under the Convention.

**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**

Slovenia was among the donors to GEF–7 replenishment with 4,76 millions EUR.

**Please provide comments, if any.**

{Empty}

**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**

We have no data on this

**Please provide comments, if any.**

{Empty}

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

{Empty}

▼ **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**

Slovenia has not provided capacity-building or technical assistance to another party to the Convention.

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

☐ Yes

☒ No

**Please specify**

Slovenia has not received capacity-building or technical assistance

**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**

A new technology for a removal of SO<sub>2</sub> from the emission sources, at which a removal of Hg takes place simultaneously, has been developed by the Slovenian scientists. A technology is currently used by a coal-fired power plant in Slovenia and elsewhere in the world.

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

▼ 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.**

The results of the analysis of Hg in soil, air and water in Idrija area are publicly available. Residents are encouraged to bring soil samples from their gardens and drinking water to analyze mercury content at the Idrija Mercury Heritage Management Centre (CUDHg). CUDHg Idrija periodically raises awareness of residents about mercury in their living environment through the workshops, lectures, news and social media. People, pregnant women and children in particular, are advised not to consume vegetables grown in the area around the former mining smelting plants, as well as to not eat fish from the river due to their contamination with Hg. CUDHg Idrija provides workshops and lectures on the effects of mercury on the living environment for schools and professional groups. CUDHg Idrija set up in 2017 in the former Idrija Hg Smelting Plant, educational permanent exhibition on the harmfulness and toxicity of mercury. The exhibition is opened to the public.

Information how to behave if accidentally break a lamp or thermometer which contains Hg are easily accessible on the national web pages.

**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.**

The Human Biomonitoring Program (HBM) has been established in Slovenia, which also includes assessment of exposure to mercury in the living environment and diet within the general population of children and adults. It provides monitoring of temporal and spatial changes in exposure to mercury. A National Hub for HBM has been set up to bring together experts of different professions, institutions and sectors. The first phase took place between 2008 and 2014, the second phase started in 2018 and will run until 2022

In addition to the national priorities the Hub takes care of harmonization of HBM protocols and actively links with the European HBM program (HBM4EU), which has been running since 2017. This initiative contributes directly to the improvement of health and well-being for all citizens, by investigating how exposure to chemicals affects the health of different vulnerable groups, such as children and pregnant women, as well as of highly exposed groups like workers. Furthermore, a Human biomonitoring Guidance Values, which will supplement the comprehensive health risk assessment of population exposure to Hg, are being prepared within the HBM4EU .

In the future, the recommendations for the consumption of fish and other seafood, based on the data of mercury concentrations in fish and diet habits of the Slovenian population, will be prepared.

## 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**

Scientific and technical information concerning mercury and mercury compounds, including toxicological, ecotoxicological and safety information are shared within the published scientific papers yearly.

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

{Empty}

### ▼ 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**

The Jožef Stefan Institute (JSI) is particularly active in the field of education, training and awareness raising. They collaborate with competent intergovernmental and non-governmental organisations and vulnerable populations. In the past they organised several international meetings on mercury focusing on strengthening scientific cooperation, staff training, different sectors integration and the transfer of knowledge. JSI regularly organizes 'Open Day Event' with the lab tours and provides all aspects of mercury issue to the general public.

The National Institute of Public Health webpage provides extensive information on the health and environmental effects of mercury and mercury compounds.

Several popular-science programmes have been shown on the national TV.

In 2017 the CUDHg set up an educational permanent exhibition on the harmfulness and toxicity of mercury in the former Idrija Hg Smelting Plant. They also organize annual workshops for schools and general public.

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

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### ▼ ART. 19: RESEARCH, DEVELOPMENT AND MONITORING

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

☒ Yes

☐ No

##### If yes, please describe these actions

###### Research:

A new technology for a removal of SO<sub>2</sub> from the emission sources at which a removal of Hg takes place simultaneously has been developed by the Slovenian scientists. A technology is currently used in Slovenia and in coal-fired power plants elsewhere in the world.

Scientists' group at the Faculty for Civil and Geodetic Engineering has developed a 3D mathematical model which is used in monitoring the pollution with Hg in the Gulf of Triest.

A research project which will focus on transport of Hg from Idrija (the area of ancient mercury mine) via rivers Idrijca and Soča to the bay of Triest started in October 2021. The aim of the research is to obtain more information on the Hg circulation in that area. Additionally, the research will analyse the levels of Hg in the sea and distinguish between the Hg which originates from the mine and the Hg coming from other sources. The recommendations for the long-term management of the polluted environment will be prepared based on the research findings.

Within the »Project of monitoring the consequences of shutdown of the Idrija Mercury Mine after its closure«, the Idrija Mercury Heritage Management Centre provides periodically measurements of mercury in the air in the town of Idrija, in river Idrijca and in soil in Idrija. The Center occasionally and in cooperation with the Jožef Stefan Institute in Ljubljana also performs analyzes of mercury in vegetables in Idrija.

At Jožef Stefan Institute, Department of Environmental Sciences ([www.environment.si](http://www.environment.si)), led by prof. dr. Milena Horvat, Group for Inorganic chemistry deals with many Hg relevant national and international (EU funded) research projects since 2019:

###### National:

1 EFFECT OF ENDOCRINE DISRUPTORS (BISPHENOLS, PARABENS, TRICLOSAN) AND POTENTIALLY TOXIC AND ESSENTIAL CHEMICAL ELEMENTS ON THE BIRTH, INFERTILITY AND OVARIAN CANCER IN SLOVENIA

1.9.2020—31.8.2023, head: Virant Klun Irma

2 Identifying the genetic determinants of chemical toxicity in the green alga *Chlamydomonas reinhardtii*

1.9.2020—31.8.2023, head: Županič Anže

3 BE MERMAiD – Bioavailable mercury methylation in the Adriatic sea

1.1.2019—31.12.2022, head: Horvat Milena

4 STRAP – Sources, TRansport and fate of persistent Air Pollutants in the environment of Slovenia

1.7.2019—30.6.2022, head: Ogrinc Nives

5 Neuropsychological dysfunctions caused by low level exposure to selected environmental pollutants in susceptible population – NEURODYS

1.7.2018—30.6.2021, head: Horvat Milena

6 Stable isotopes in the study of the impact of increasing CO<sub>2</sub> levels on C and Hg cycling in coastal waters

1.5.2017—30.4.2020, head: Ogrinc Nives

7 An attempt to interpret the results of biomonitoring in conjunction with data on environmental pollution, with an emphasis on air pollution and an assessment of the potential effects of these pollutants on the health of the population

1.4.2018—30.11.2019, head: Horvat Milena

8 Exposure of children and adolescents to selected chemicals through their habitat environment

1.10.2016—30.9.2019, head: Horvat Milena

9 Cycling of substances in the environment, mass balances, modelling of environmental processes and risk assessment

1.1.1999—31.12.2025, head: Horvat Milena

International:

- European Human Biomonitoring Initiative, 1.1.2017–31.12.2021, Milena Horvat
- Integrated Global Observing Systems for Persistent Pollutants, 1.2.2016–31.1.2021, Milena Horvat
- Health and Environment Research Agenda, 1.1.2019–31.12.2022, Milena Horvat
- Global Mercury Observation and Training network in support to the Minamata Convention, 1.1.2020 – 31.12.2023, MILENA HORVAT
- Cross-Mediterranean Environment and Health Network, 1.7.2013–31.12.2016, Milena Horvat
- Metrology for oxidised mercury, 2017–2020, Milena Horvat
- Metrology for traceable protocols for elemental and oxidised mercury concentrations, 1. 10. 2020 – 30. 9. 2023, Milena Horvat

Mercury monitoring in Slovenia is carried out within the framework of national monitoring of the state of the environment which includes soil, water and air. Monitoring takes place in the following environmental media:

- Hg in air
- Hg in surface water (Hg is measured in water and in bioota–fish)
- Hg in groundwater
- Hg in soil

• Point sources of emissions:

Coal-fired power plant: measurements of Hg levels have been performed since 1998, with the introduction of new technologies the emissions dropped from 80% to 12% (of total Hg brought into the process) in 2009, additionally, in order to further reduce the emissions, cleaner fuels are used

Cement clinker productions: a comprehensive study of Hg circulation in the production process and emissions of various forms of Hg into the environment has been conducted in the past

**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)**

{Empty}

▼ SUPPLEMENTAL – ADDITIONAL COMMENTS

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

{Empty}