FIRST FULL NATIONAL REPORTS OF THE MINAMATA CONVENTION ON MERCURY 2021

* Question 11.2 amended by Croatia on 9 August 2022

REPORTING PERIOD:
16 August 2017 to 31 December 2020

▼ INFORMATION ON THE PARTY

1. Information on the party

Name of party
Croatia

Date on which its instrument of ratification, accession, approval or acceptance was deposited
25 September 2017

Date of entry into force of the Convention for the party
24 December 2017

2. Information on the national focal point

Full name of the institution
Ministry of Health

Title of National Focal Point
Ms.

Name of National Focal Point
Romana Grizelj

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

Focal Point is submitting the national report

- (●) Information is submitted by the national focal point
- ( ) Information is submitted through the national focal point by the contact officer

▼ ART. 3: MERCURY SUPPLY SOURCES AND TRADE

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

- ( ) Yes
- (●) 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.
In relevant Croatian data base from responsible institution there is no stocks of mercury or mercury compounds, since Croatia has mechanisams in place to colects data/reports 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.
{Empty}

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
- [x] 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.
Regulation (EU) 2017/852 of the European Parliament and of the Council of 17 May 2017 on mercury, and repealing Regulation (EC) No 1102/2008 is the main legislation regarding implementation of the Minamata convention at EU level.

MERCURY REGULATION-Regulation (EU) 2017/852 covers the full life cycle of mercury. It complements a large body of existing EU environmental law on mercury, by inter alia:

Prohibiting the export of mercury and mercury compounds;
Prohibiting the manufacture, export and import of a large range of mercury-added products;
Putting an end to all uses of mercury catalysts and large electrodes in industrial processes;
Reducing the use of and pollution from dental amalgam, which is the last large use of mercury in the EU, and setting out a process to assess the feasibility of a complete phase out of the use of mercury in dentistry;
Closing the door to future new uses of mercury in industry and in products;
Ensuring that all mercury waste is safely taken out of the economic sphere, stabilised in a less toxic form and stored permanently in environmentally sound conditions.

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.
Regulation (EU) 2017/852

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.
Regulation (EU) 2017/852

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

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

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

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

- ( ) Yes
- (●) No
- ( ) 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)

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

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

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

○ Yes

○ No

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

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

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▼ ART. 8: EMISSIONS

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

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

☐ Coal-fired power plants

☐ Coal-fired industrial boilers

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

☐ Waste incineration facilities

☐ Cement clinker production facilities

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

○ Yes

◉ No

Please explain
Croatia has only existing 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
Control of input materials through emission measuring and environmental management system (EMS) through environmental permits.

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
{Empty}

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
{Empty}

Progress
{Empty}

▼ CEMENT CLINKER PRODUCTION FACILITIES

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

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

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

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

☐ Alternative measures to reduce emissions from relevant sources

Measures
Control of input materials through emission measuring and environmental management system (EMS) through environmental permits.

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?
Fri, 12/31/2021 - 00:00

Please indicate where this inventory is available
The Republic of Croatia has established Croatian E-PRTR database and it's operating since 2008, called Emission Pollution Register (EPR), and in it all data about releases, emission and waste has been collected, including pollutants: Mercury and Mercury compounds for emission to air, releases for waters and waste and also solid Mercury for waste, reported by operators by themselves.
The data from this database has been reported to EIONET on yearly basis regrading E-PRTR Regulation https://eur-lex.europa.eu/legal-content/EN/AUTO/?uri=celex:32006R0166
This obligation brings together the previous separated obligations http://rod.eionet.europa.eu/obligations/538 and https://rod.eionet.europa.eu/obligations/756

The information is EPR database and data in EPR database is available on:
http://roo.azo.hr/
http://www.haop.hr/hr/tematska-podrucja/otpad-registri-oneciscavanja-i-ostali-sektorski-pritisci/postrojenja-i-registri-2
https://cdr.eionet.europa.eu/hr/eu/eprtr_lcp/?_ts=1640858472.16
https://prtr.unece.org/

Attach
{Empty}

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

{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.
In the period from 2017 to 2020, according to data reported in Croatian E-PRTR database (EPR) by operators themselves, 0.274 tons of Mercury and compounds (as Hg) was discharged into water. Those of them, which are obliged of issuing Environmental Permits (EI), have special monitoring and all relevant techniques according to ELVs and BAT. They are regularly monitoring by Coordinated Environmental Inspections, and their permits are regularly supervised and amended if necessary.

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?
2021-12-31

Please indicate where this inventory is available
The Republic of Croatia has established Croatian E-PRTR database and it's operating since 2008, called Emission Pollution Register (EPR), and in it all data about releases, emission and waste has been collected, including pollutants: Mercury and Mercury compounds for emission to air, releases for waters and waste and also solid Mercury for waste, reported by operators by themselves.
The data from this database has been reported to EIONET on yearly basis regrading E-PRTR Regulation https://eur-lex.europa.eu/legal-content/EN/AUTO/?uri=celex:32006R0166
This obligation brings together the previous separated obligations http://rod.eionet.europa.eu/obligations/538 and https://rod.eionet.europa.eu/obligations/756

The information is EPR database and data in EPR database is available on:
http://roo.azo.hr/
http://www.haop.hr/hr/tematska-podrucja/otpad-registri-oneciscavanja-i-ostali-sektorski-pritisci/postrojenja-i-registri-2
https://cdr.eionet.europa.eu/hr/eu/eprtr_lcp/?_ts=1640858472.16
https://prtr.unece.org/.

In the scope of core business of the Institute, in the part of maintaining Information System of Environment and Nature, part of which is Croatian E-PRTR database (Environmental Pollution Register - EPR), Institute is conducting continuous technical assistance and workshops for competent authorities for the quality control and verification of the EPR data, reported by operators, for the purpose of better QA/QC and better quality of data. This is according to Art. 21 of the national Ordinance on EPR (OG 87/15).

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

Please indicate the measures taken to ensure that such interim storage is undertaken in an environmentally sound manner and the effectiveness of those measures.
Regulation (EU) 2017/852 and other national and EU regulations.

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.

Basel Convention is ratified and transposed by the Low on Basel Convention ratification. As a party Croatia is conducting all articles of the Convention, Low on ratification of the Basel Convention (OG IT , NO. 3/94, 7/2019, 8/2019), conduction is according to regulation (EZ) br. 1013/2006 which is used for all MS EU.

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.
D9 Recovery of sorted Materials, 14,8668 tons 2017-2020

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
Croatia has in plan to develop study regarding 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

If Croatia define in the future that is necessary to proceed with some activities regarding fulfilment of the obligation than will ensure implementation and additional resources.

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
Its on vountary basis we will see in the future.

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
Its on vountary basis we will see in the future.

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
There was no interest from other parties.

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

- ○ Yes
- ◉ No

Please specify
Until now there was no need for that.

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 EU and national level there are regularly activities

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.
Public health information regarding mercury exposure reduction for population at risk are published.

Institute for Medical Research and Occupational Health carried out measurements of total gaseous mercury in ambient air at one location in Zagreb (measuring station Zagreb-1 of the Croatian state network for continuous air quality monitoring). All data from state air quality monitoring network are available to public at the web-page of the Ministry of Economy and Sustainable Development http://iszz.azo.hr/iskzl/. Data on mercury mass concentrations in the form of 24-hour averages, as well as annual reports on air quality can be downloaded from the same webpage for the period 1 January 2017 until 31 December 2020.

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.
Croatia developed national plan for dental amalgam reduction in accordance to Mercurry regulation

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 information associated with exposure to mercury of vulnerable population in Croatia are presented to the World Health Organization. More info you can find on web page: https://www.hzjz.hr/medunarodna-istrazivanja/primjena-biomonitoringa-za-procjenu-izlozenosti-zivi-tijekom-prenatalnog-perioda-u-dvije-hrvatske-regije-uporabom-standardizirane-metodologije-svjetske-zdravstvene-organizacije/

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

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▼ ART. 18: PUBLIC INFORMATION, AWARENESS AND EDUCATION

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

◉ Yes

○ No

If yes, please indicate the measures that have been taken and the effectiveness of those measures
Provision to the public of available information of Croatian research on health and environmental effects of mercury and mercury compounds through published professional and scientific publications as well as public health meetings and public awareness presentations.

More info: 1. Article EXPOSURE OF NURSES TO MERCURY FROM BROKEN MEDICAL EQUIPMENT Available on: https://hrcak.srce.hr/clanak/111365
2. Article The Use of Mercury-Based Medical Devices Across Croatian Healthcare Facilities Avhttps://hrcak.srce.hr/clanak/116880ailable on:
3. How to set up a public health campaign: Croatian example of environmental mercury exposure Available on: https://hrcak.srce.hr/clanak/56819

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

It is conducted monitoring of levels of mercury in vulnerable populations (mothers and their newborns) through research in two Croatian regions, as well as research for the purpose of preparing the PhD, conducted in capital city of Croatia where levels of mercury were monitored in women.
More info you can find on web page: https://www.hzjz.hr/medunarodna-istrazivanja/primjena-biomonitoringa-za-procjenu-izlozenosti-zivi-tijekom-prenatalnog-perioda-u-dvije-hrvatske-regije-uporabom-standardizirane-metodologije-svjetske-zdravstvene-organizacije/

Croatia (through Croatian Institute of Public Health) is one of the country which have part in the HBM4EU project which is a joint effort of 30 countries, the European Environment Agency and the European Commission, co-funded under Horizon 2020. The initiative is coordinating and advancing human biomonitoring in Europe. HBM4EU is generating evidence of the actual exposure of citizens to chemicals and the possible health effects in order to support policy making. More info about the projectis available on: https://www.hbm4eu.eu/about-us/about-hbm4eu/
Also, Croatian Institute of Public Health actively participates in the preparation of project documentation for the Partnership for the Risk Assessment of Chemicals (PARC).

According to the contracts with the Ministry of Economy and Sustainable Development, Institute for Medical Research and Occupational Health (IMROH) carried out measurements of total gaseous mercury in ambient air at one location in Zagreb (measuring station Zagreb-1 of the Croatian state network for continuous air quality monitoring). 24-hour samples were continuously collected and analysed from 1 January 2017 until 31 December 2020. During the whole measuring period mercury mass concentrations were much lower than the limit value (1 μg/m3 for an annual average) set by the Regulation on Levels of Pollutants in Ambient Air (OG No. 77/2020) [Uredba o razinama onečišćujćih tvari u zraku NN 77/2020].

In IMROH, research activities related to monitoring of levels of mercury in vulnerable populations and assessments of the impact of mercury on human health were carried out within the research project HRZZ-IP-2016-1998 “Assessment of daily exposure to metals and maternal individual susceptibility as factors of developmental origins of health and disease – METALORIGINS” (http://metalorigins.imi.hr/), funded by Croatian Science Foundation. As fish-rich diet, a dominant dietary source of methylmercury (MeHg) exposure for the general population, is part of the cultural tradition in Croatian coastal areas, we investigated the levels of total mercury in the muscle tissue of 12 commercially important fish species from 48 locations in the eastern Adriatic Sea, as a function of fish species, size and habitat and evaluated risks and benefits of fish consumption regarding mercury and selenium in vulnerable population groups (children and women of reproductive age) based on the obtained results (Sulimanec Grgec et al., 2020). Results of mercury exposure assessment in mother-infant pairs from continental and coastal Croatia showed that maternal seafood/fish consumption is associated with increased levels of mercury in maternal hair and blood, umbilical cord blood, and in placenta. Mercury levels in maternal hair and blood were associated with seafood consumption (MeHg exposure), while mercury levels in serum were associated with the number of dental amalgams and reflected inorganic mercury exposure (Sekovanić et. al. 2020, Sekovanić et. al. 2019). Additionally, study of population living in the vicinity of an oil refinery showed no increase in mercury blood, hair and urine levels (Cvitković et al.,2017).

Research activities related to monitoring of levels of mercury (together with other toxic metals) in environmental media, were focused mainly on apex predatory mammals (Lazarus et a., 2020, 2018, 2017). The influence of anthropogenic pollution on the aquatic environment of Plitvice Lakes National Park (PLNP) was investigated during 2011-2012 and it was shown that concentrations of total mercury in the aquatic environment of the park (water, fish, sediment) were low, which is in accordance with protected status of the park (Kljaković-Gašpić et al., 2018).

REFERENCES

Scientific papers:
Sekovanić A, Piasek M, Orct T, Sulimanec Grgec A, Matek Sarić M, Stasenko,S, Jurasović J. Mercury exposure assessment in mother–infant pairs from continental and coastal Croatia. Biomolecules. 2020; 10:821 (https://doi.org/10.3390/biom10060821)
Sulimanec Grgec A, Kljaković–Gašpić Z, Orct T, Tičina V, Sekovanić A, Jurasović J, Piasek M. Mercury and selenium in fish from the eastern part of the Adriatic Sea: A risk–benefit assessment in vulnerable population groups. Chemosphere 2020; 261:127742 https://doi.org/https://doi.org/10.1016/j.chemosphere.2020.127742
Lazarus M, Orct T, Sergiel A, Vranković L, Filipović Marijić V, Rašić D, Reljić S, Aladrović J, Zwijacz–Kozica T, Zieba F, Jurasović J, Erk M, Maslak R, Nuria S, Huber Đ. Metal(loid) exposure assessment and biomarker responses in captive and free–ranging European brown bear (Ursus arctos). Environ Res 2020;183:109166. (https://doi.org/10.1016/j.envres.2020.109166)
Lazarus M, Orct T, Reljić S, Sedak M, Bilandžić N, Jurasović J, Huber Đ. Trace and macro elements in the femoral bone as indicators of long–term environmental exposure to toxic metals in European brown bear (Ursus arctos) from Croatia. Environ Sci Pollut Res 2018;25(22):21656–21670.
Lazarus M, Sekovanić A, Orct T, Reljić S, Jurasović J, Huber Đ. Sexual maturity and life stage influences toxic metal accumulation in Croatian brown bears. Arch Environ Contam Toxicol 2018;74:339–48.
Kljaković–Gašpić, Z., Herceg Romanić, S., Bituh, T., Kašuba, V., Brčić Karačonji, I., Brajenović, N., Franulović, I., Jurasović, J., Klinčić, D., Kopjar, N., Marović, G., Milić, M., Orct, T., Sekovanić, A., Želježić, D., 2018. Assessment of multiple anthropogenic contaminants and their potential genotoxicity in the aquatic environment of Plitvice Lakes National Park, Croatia. Environ. Monit. Assess. 190, 694. (https://doi.org/10.1007/s10661–018–7028–1)
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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

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