

First draft report on the development of guidance on methodologies for inventories of mercury releases to land and water

15 May 2019

Introduction

The Conference of the Parties in its decision MC-2/3 on releases to land and water established a group of technical experts to develop draft guidance on methodologies for preparing inventories for a list of potentially relevant point source categories, and requested the group to prepare a report including

- a list of any significant anthropogenic point source of release categories not addressed in provisions of the Convention other than article 9; and
- a suggested roadmap and structure for the development of draft guidance on methodologies for preparing its inventories.

Decision MC-2/3 also requested the secretariat to circulate a call to parties, signatories and other stakeholders to identify possible point source categories of releases to be included in the list referred to in paragraph 1 of the decision, and to compile the submissions into a report including the relevant point source categories identified in, inter alia, the United Nations Environment Programme toolkit for identification and quantification of mercury releases, the Minamata Initial Assessments and the Global Mercury Assessment, and to share the report with the group of experts.

Comments and relevant information were received from Argentina, Canada, Costa Rica, European Union, Mauritius, Montenegro, Norway, the Secretariat of the Barcelona Convention and the Mediterranean Action Plan, and Natural Resources Defense Council. These comments were compiled and circulated to the group of technical experts.

Definition of key terms

The group reviewed the submissions through two teleconferences. The group considered that, for the identification of significant anthropogenic point sources of release categories not addressed in provisions of the Convention other than article 9, there needs to be a common understanding about what is meant by key terms such as "point source", "significant" and "addressed".

Commented [A1]: Agree that some common understanding of the key terms will be helpful to Parties. However, it seems we still have work to do to get there.

Point source

Article 9 of the Convention provides no definition of point source. UNECE Protocol on Pollutant Releases and Transfer Register provides that each Party shall establish and maintain a publicly accessible national pollutant release and transfer register that is facility-specific with respect to reporting on point sources, and accommodates reporting on diffuse sources. It defines "facility" as one or more installations on the same site, or on adjoining sites, that are owned or operated by the same natural or legal person; and "diffuse sources" as the many smaller or scattered sources from which pollutants may be released to land, air or water, whose combined impact on those media may be significant and for which it is impractical to collect reports from each individual source. The Protocol on Heavy Metals under the UNECE Convention on Long-Range Transboundary Air Pollution and the Convention for the Protection of the Marine Environment of the North-East Atlantic include definitions of related terms such as "stationary sources" and "land-based sources".

Under the Clean Water Act of the United States of America, the term "point source" means any discernible, confined and discrete conveyance, including but not limited to any pipe, ditch, channel,

tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, or vessel or other floating craft, from which pollutants are or may be discharged. This term does not include agricultural stormwater discharges and return flows from irrigated agriculture. (<https://www.epa.gov/cwa-404/clean-water-act-section-502-general-definitions>). The European Environment Agency defines a point source as a stationary location or fixed facility from which pollutants are discharged; any single identifiable source of pollution; e.g. a pipe, ditch, ship, ore pit, factory smokestack (EEA Glossary, <https://www.eea.europa.eu/help/glossary/eea-glossary/point-source>). Definitions used in several other jurisdictions were provided by experts.

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Significant

Subparagraph 2(b) of article 9 provides that "relevant source" means any significant anthropogenic point source of releases as identified by a party that is not addressed in other provisions of the Convention, without elaboration on what might be considered significant. Therefore, parties may decide whether a source of releases to land or water within its territory is significant, and thus triggers measures for controlling and/or reducing the releases. In doing so, parties may Possible factors parties may take into account include the quantity of releases, location and exposure pathways.

Commented [A3]: This section needs to be harmonized with the work of the Article 11 waste group, which recently met in Japan.

Addressed in other provisions of the Convention

Several other articles of the Convention address the control and reduction of releases of mercury and mercury compounds to land and water. In particular, release to land is disposal, which makes the released material a waste and subject to Article 11. Untreated wastewater can also be considered disposal. Since article 9 provides for measures to control releases and development of inventory, one should consider whether other provisions address these aspects.

Commented [A4]: The Article 9 inventory requirement is limited to Article 9. Other articles of the Convention address aspects of release according to the agreement reached by the negotiating parties when the Convention was created. If inventory development was not included as part of other articles, it was because there was no agreement to include it. It is not appropriate for the Article 9 implementation group to consider "fixing" what they may believe are flaws in other Convention articles.

Pursuant to Article 3, existing primary mercury mines are only allowed for a period of up to 15 years after entry into force of the Convention for a Party. Releases to land and water from mercury mines in this period are not addressed in article 3. Mercury waste from mercury mining is covered by article 11.

Similarly, other articles provide for control of release for most releases addressed by the Convention. Again, it is not appropriate for the Article 9 implementation group to second guess the decisions and agreements of the negotiators concerning the manner of controls of releases in other Articles.

Article 4 disallows the manufacturing of products listed in part I of annex A after the phase out date which is dependent on the exemption requests submitted by parties. However, releases to land and water from the production of products not listed in Annex A, including products that contain mercury below specified concentration limits, are not addressed in article 4. For dental amalgam in part II of annex A, a party has the option to choose, out of nine measures, to promote best environmental practice to reduce releases. Scrap amalgam not being recycled is waste and addressed by Article 11. As such, mercury releases from dental practices are addressed for parties that choose to promote best environmental practice, but not addressed for parties that do not choose so.

Commented [A5]: Discarded or end-of-life mercury devices are waste and addressed by Article 11 regardless of whether they are controlled under Article 4. Mercury product production wastes containing mercury would also be addressed by Article 11 if mercury concentrations exceed a threshold.

Subparagraph 5(a) of article 5 provides that each party with one or more facilities listed in annex B shall take measures to address emissions and releases of mercury and mercury compounds. Therefore, these facilities are addressed by article 5. Release inventory is not explicitly mentioned in article 5. Releases from manufacturing processes not listed in Annex B are not addressed by article 5. However, waste generated by Article 5/Annex B manufacturing processes, and other manufacturing processes using mercury or its compounds, are addressed by Article 11.

Commented [A6]: Scrap amalgam not being recycled is waste and so addressed by Article 11 regardless of whether it is being controlled as part of compliance with Article 4..

Subparagraph 5(a) of article 5 provides that each party with one or more facilities listed in annex B shall take measures to address emissions and releases of mercury and mercury compounds. Therefore, these facilities are addressed by article 5. Release inventory is not explicitly mentioned in article 5. Releases from manufacturing processes not listed in Annex B are not addressed by article 5.

Commented [A7]: Adding release inventory not appropriate nor needed, as sub paragraph 5(b) requires reporting under Article 21

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[Do we need a paragraph on Article 7, ASGM releases? The U.S. considers that provisions of Article 7, in conjunction with Articles 11 and 12, address releases from ASGM sites, and that controls would be implemented in the course of implementing Parties' National Action Plans.]

Article 8 provides that parties shall require the use of best available techniques (BAT) and best environmental practices (BEP) to control, and where feasible, reduce emissions from new sources of emission to air. It also provides that, for existing sources, parties shall take measures that may include a quantified goal, emission limit values, the use of BAT and BEP, etc. The guidance on BAT/BEP adopted by the Conference of the Parties takes into account the need to minimize cross-media effects. Therefore, mercury releases from sources listed in annex D may be addressed by measures to implement article 8 for some countries, and may not be addressed by others. Wastes generated by such facilities would be addressed by Article 11. Release inventory is not explicitly mentioned in article 8.

Article 10 provides that parties shall take measures to ensure that the interim storage of mercury and mercury compounds other than waste is undertaken in an environmentally sound manner. The guidelines on the environmentally sound interim storage include measures to prevent releases. Therefore, releases of mercury and mercury compounds from interim storage is addressed by this article.

Article 11 provides that parties shall take appropriate measures so that mercury waste is managed in an environmentally sound manner, taking into account the guidelines developed under the Basel Convention.¹ Therefore, this article addresses releases of mercury to land and water arising from the management of mercury waste generated by a broad range of facility types and activities. A discussion of its scope, and an initial list of mercury wastes addressed by Article 11 requirements, has recently been developed by the Article 11 Mercury Waste Expert Group (and will be incorporated by reference when final)², including for example releases from treatment of tailings and slurries from non-ferrous metal production. However, the current guidelines under the Base Convention only describes releases from waste incineration and waste landfill. Release inventory is not explicitly mentioned in article 11

Article 12 provides that parties shall endeavor to develop appropriate strategies for identifying and assessing sites contaminated by mercury and mercury compounds. It does not include an obligation of parties to address all sites that may be contaminated with mercury; rather, it requires the identification and assessment of contaminated sites, and leaves priority setting for controls and remediation to the discretion of parties. the releases of mercury releases. Therefore, releases from contaminated sites are not addressed by article 12.

Consolidated list of potentially relevant point source categories

The table below is a compilation of submissions on potentially relevant point sources, based on the UNEP toolkit for identification and quantification of mercury releases. The group of technical experts has not been able to review this table in detail, and the inclusion of a source category in this list does not

Commented [A9]: Again, Article 9 may not second-guess or re-negotiate the scope of other articles of the Convention. Article 12 addresses contaminated sites, and includes a requirement for site assessment, and that risk reduction activities be undertaken in an environmentally sound manner. As the every contaminated site is different, risks posed by sites can vary considerably. Only parties can determine their priorities.

¹ Article 11 relies on relevant definitions of the Basel Convention for defining waste. Under Minamata and Basel, wastes are materials that are disposed or intended to be disposed, or required to be disposed; "disposal" is defined as any Basel Annex IV operation, and includes deposit into or onto land (D1), release into a waterbody (D6/D7), several recycling/recovery operations, and other operations, although some parties may manage waste and wastewaters under different laws. Waste disposal operations under Annex IV may or may not represent environmentally sound management (ESM). Distinctions between ESM and non-ESM operations are often identified in technical guidances developed by the Basel Convention.

imply that it was agreed by the group. It should be noted that some sources under these source categories may be regarded as diffuse sources.

Preliminary list of potentially relevant point source categories

Source category in the Toolkit		Release points*	Remarks
Source category: Extraction and use of fuels/energy sources			
5.1.1	Coal combustion in power plants	Water: Releases from coal wash. Wet and semi-wet flue gas scrubbers may release waste water. Land: Solid flue gas residues used in cement production, under roads, deposited on-site or disposed to landfill. Solids from any water cleaning likely deposited?	Parties may address these releases as part of cross-media measures under article 8, and Article 11 .
5.1.2.1	Coal combustion in coal fired industrial boilers	Similar with 5.1.1 for some big facilities. Minor facilities may release solid residues from dust filter.	Parties may address these releases as part of cross-media measures under article 8 and article 11 .
5.1.2.2	Other coal use	Perhaps releases as dust from filters in some cases.	.
NEW	Coal mining	Mercury levels low unless concentrated by for example coal wash, which is known to release mercury to water and land/waste deposits. Some countries apply coal wash in the mining areas. Already in 5.1.1	
5.1.3	Mineral oils - extraction, refining and use	Mercury may be released to water from offshore oil extraction as well as from oil refining. The same is likely the case for on-shore extraction. Major oil-based industrial boilers and power generation with dust filters release mercury-containing filter residues to land or waste (depending on local regulation).	Any material that is a waste is addressed by Article 11. See Basel Convention Annex IV operations D1 and D6/D7 in particular to understand what material is waste.
5.1.4	Natural gas - extraction, refining and use	Offshore natural gas extraction releases mercury to water. The same is likely the case for on-shore extraction. Gas extraction in high-level mercury regions may have mercury filters from which residues are disposed of as waste or regenerated onsite. (Gas condensates have concentrated mercury and may sometimes be	

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		deposited or released to land. In some cases mercury is extracted from the condensate for marketing or final disposal).	
5.1.5	Other fossil fuels - extraction and use	Lack of data on this subject	
5.1.6	Biomass fired power and heat production	Major biomass industrial boilers and power generation with dust filters may release mercury-containing filter residues to land or waste (depending on local regulation).	
5.1.7	Geothermal power production	Depending on technology vents may release mercury if underground is mercury-rich; sometimes mercury is absorbed in filters and absorbents are regenerated offsite (extracted mercury is marketed or disposed as waste), or perhaps in some cases disposed as waste.	
NEW	Reprocessing of spent nuclear fuels.	Lack of information on this subject	
Source category: Primary (virgin) metal production			
5.2.1	Mercury (primary) extraction and initial processing	May have massive releases to water and land.	
5.2.2	Gold (and silver) extraction with mercury amalgamation processes	Massive mercury releases to land and water	Addressed in Article 7 and Articles 11 and possibly 12.
5.2.3	Zinc extraction and initial processing	Mining and concentration phases likely have significant mercury releases to water and land, but data are lacking. Extraction phase (smelting) has releases to water from wet gas cleaning and may also have releases to land. Direct leach technology may have releases to water and land (no quantitative data available).	Parties may address these releases as part of cross-media measures under article 8- and Article 11.
5.2.4	Copper extraction and initial processing	Mining and concentration phases likely have significant mercury releases to water and land, but data are lacking. Extraction phase (smelting) has releases to water from wet gas cleaning and may also have releases to land. Direct leach technology may have releases to water and land (no quantitative data available).	Parties may address these releases as part of cross-media measures under article 8- and Article 11.

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Commented [A16]: Is there any data on mercury in biomass used for fuel? Seems like an unlikely source of mercury. If there is no supporting data, this category should be deleted. Identification as waste means it is addressed by Article 11.

Commented [A17]: Air releases are not addressed by Article 9

Commented [A18]: Waste is addressed by Article 11.

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5.2.5	Lead extraction and initial processing	Mining and concentration phases likely have significant mercury releases to water and land, but data are lacking. Extraction phase (smelting) has releases to water from wet gas cleaning and may also have releases to land. Direct leach technology may have releases to water and land (no quantitative data available).	Parties may address these releases as part of cross-media measures under article 8. <u>and Article 11.</u>
5.2.6	Gold extraction and initial processing by methods other than mercury amalgamation	Significant releases to land (on-site) and releases to water are reported.	Parties may address these releases as part of cross-media measures under article 8. <u>and Article 11.</u>
5.2.7	Aluminium extraction and initial processing	In the step of producing the intermediate alumina from bauxite, mercury releases to water take place; releases to land may take place. <u>No data are available on releases from the final step from alumina to aluminium.</u>	<u>Addressed by Article 11</u>
5.2.8	Other non-ferrous metals - extraction and processing	Mercury releases to land from silver mining has been reported. For other non-ferrous metals extraction, releases to land and water may likely take place for some metal extraction but no data are available.	<u>Addressed by Article 11</u>
5.2.9	Primary ferrous metal production	Mercury releases to land/waste are reported and water releases from wet scrubbers applied <u>may take place.</u>	
NEW	Processing of ferrous metals	Downstream processing of ferrous metals is expected to have only minor Mercury emissions/releases related to fuels use. Ferrous metals recycling is covered in 5.7.2.	This was proposed by experts. Need to look at whether this is covered by 5.2.9 and 5.7.2.
NEW	<u>Diamond mining</u>	<u>Anecdotal information on cleaning of diamonds with Mercury exist, but no other data are available.</u>	
Source category: Production of other minerals and materials with mercury impurities			
5.3.1	Cement production	Mercury is concentrated in the filter dust recycling step and dust may therefore be bled regularly to the final cement product or to deposited waste/land (no data available on detailed fate).	Parties may address these releases as part of cross-media measures under article 8.
5.3.2	Pulp and paper production	Releases to land and water are reported.	
5.3.3	Production of lime and light weight aggregates	Releases to land and water from lime production are reported.	

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Commented [A28]: Any data on releases from cement or concrete?

Commented [A29]: Waste is addressed by Article 11

5.3.4	Other minerals and materials	Mercury releases from fertilizer production in some countries is known but published data are not available.	
Source category: Intentional use of mercury in industrial processes			
5.4.1	Chlor-alkali production with mercury-technology	Releases to water, land and absorption in building materials reported; some facilities have significant unaccounted mercury amounts, meaning major parts of releases/emissions are not accounted for quantitatively.	Addressed by article 5, and Article 11 and Article 12.
5.4.2	VCM production with mercury catalyst	Releases to water are reported. Releases to land may happen.	Addressed by article 5 and Article 11; potentially Article 12.
5.4.3	Acetaldehyde production with mercury catalyst	Releases to water are reported	Addressed by article 5 and Article 11.
5.4.4	Other production of chemicals and polymers with mercury	Releases to water and land from production of mercury-containing chemicals or with the use of mercury in the processes may take place. Releases may take place from alcoholates production.	Sodium or potassium methylate and ethylate production is addressed by article 5. and Article 11.
Source category: Consumer products with intentional use of mercury			
5.5.1	Thermometers with mercury	Releases to land and or water are reported for production of some mercury-added products (from breakage/spillages). The same is expected for other mercury-added products.	Releases from the manufacturing of these products are not covered by article 4 but are addressed by Article 11.
5.5.2	Electrical switches and relays with mercury	Releases that may reach land and or water are reported.	Releases from the manufacturing of these products are not covered by article 4. but are addressed by Article 11.
5.5.3	Light sources with mercury	Releases that may reach land and or water are reported.	Releases from the manufacturing but are addressed by Article 11. of these products are not covered by article 4.
5.5.4	Batteries with mercury	Releases to land and water are reported	Releases from the manufacturing of these products are not covered by article 4. but are addressed by Article 11.
5.5.5	Polyurethane with mercury catalysts	Releases to land and or water are reported for production of some mercury-added products. Releases may perhaps take place from cleaning of polyurethane sports floors with mercury catalysts.	Manufacturing is addressed by article 5 and by Article 11. Releases from the use are not addressed.

Commented [A30]: All discarded or end-of-life mercury devices are classified as waste and controlled by Article 11.

5.5.6	Biocides and pesticides with mercury	Releases to land and or water are reported for production of some mercury-added products .	Manufacturing will stop pursuant to article 4.
5.5.7	Paints with mercury	Releases to land and or water are reported for production of some mercury-added products During application of paints, mercury may be released to water from cleaning of spillages and tools.	Manufacturing of biocidal paints will stop pursuant to article 4. Need to look at whether non-biocidal mercury-added paints are produced. <u>Wastes addressed by Article 11</u>
5.5.8	Pharmaceuticals for human and veterinary uses	Releases to land and or water are reported for production of some mercury-added products Mercury may be releases to water and land through <u>excretion</u> .	
5.5.9	Cosmetics and related products with mercury	Releases to land and or water are reported for production of some mercury-added products. Mercury in applied cosmetics will be washed out to water from households; <u>potentially in overall significant amounts.</u>	Releases from the manufacturing of these products are not covered by article 4. <u>but are addressed by Article 11..</u>
Source category: Other intentional product/process use			
5.6.1	Dental mercury-amalgam fillings	Releases to water are reported throughout the lifecycle of dental amalgam; from placement of new fillings, from drilling of old fillings and <u>urine excretion while fillings are in the mouth (in households).</u>	Parties may address these releases under article 4. <u>but are addressed by Article 11..</u>
5.6.2	Manometers and gauges with mercury	Releases to land and or water are reported for production of some mercury-added products (from breakage/spillages).	Releases from the manufacturing of these products are not covered by article 4. <u>but are addressed by Article 11..</u>
5.6.3	Laboratory chemicals and equipment with mercury	Releases to land and or water are reported for production of some mercury-added products (from breakage/spillages).	<u>Waste is addressed by Article 11</u>
5.6.4	Mercury metal use in religious rituals and folklore medicine	Releases to land and water are expected from both manufacture, trade and use (no quantitative data available); ayurvedic medicine in India is a major example of mercury use.	
5.6.5	Miscellaneous product uses, mercury metal uses, and other sources	Releases to land and or water are reported for production of some mercury-added products.	<u>Production wastes are addressed by Article 11.</u>
NEW	<u>Lighthouses</u>	<u>Releases to land and water may take place via washing of condensed evaporated mercury and spillages</u>	
Source category: Production of recycled metals ("secondary" metal production)			

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Commented [A32]: Is this a source we believe we can control under Article 9?

Commented [A33]: Do we know the mercury content of these products and the amounts produced?

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5.7.1	Production of recycled mercury ("secondary production")	Releases to water and land/waste are reported	
5.7.2	Production of recycled ferrous metals (iron and steel)	Releases to water and land/waste are reported (no quantitative data)	
5.7.3	Production of other recycled metals		
Source category: Waste incineration			
5.8.1	Incineration of municipal/general waste	Releases to water from wet flue gas cleaning reported. Releases to land/waste of ash and flue gas cleaning residues.	Addressed by article 11.
5.8.2	Incineration of hazardous waste	Expected to be like incineration of municipal waste above.	Addressed by article 11.
5.8.3	Incineration of medical waste	In many developing countries medical waste is burned at sub-optimal conditions and releases to land with solid residues are to be expected. For developed countries conditions are expected to be like described for municipal waste above.	Addressed by article 11.
5.8.4	Sewage sludge incineration	Expected to be like incineration of municipal waste above.	Addressed by article 11.
5.8.5	Informal waste burning	Significant amounts of mercury-added products are may be burned in the open in developing countries. Some of it may evade evaporation due to low temperatures and give rise to releases to land and water (leaching of remnants).	Diffuse sources; <u>this is really waste mismanagement. While nominally addressed by Article 11, open dumping of waste and subsequent waste pile burning are issues that go far beyond the scope of the Minamata Convention.</u>
Source category: Waste deposition/landfilling and waste water treatment			
5.9.1	Controlled landfills/deposits	Releases to water (through leaching) are reported.	Addressed by article 11.
5.9.2	Diffuse disposal under some control	This source category refers to use of residues under roads and similar, which may be considered as releases to land, with potential for slow releases to water.	Diffuse sources
5.9.3	Informal local disposal of industrial production waste	In such instances releases to land and water may be expected.	Diffuse sources
5.9.4	Informal dumping of general waste	Informal dumping is in itself a release to land. It may also cause releases to water.	Diffuse sources

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Commented [A38]: As above—what basis is there for believing mercury may be present in raw materials?

Commented [A39]: Cannot claim significant amounts burned without supporting data

Commented [A41]: Diffuse sources not in the scope of Article 9- only point sources

Commented [A40]: Use of materials as road-base would likely be considered a Basel Annex IV.B reuse—such as R5.

Commented [A42]: This is waste mismanagement; while nominally addressed by Article 11 (if mercury is present) this issue goes far beyond the scope of the Minamata Convention

Commented [A43]: This is waste mismanagement; while nominally addressed by Article 11 (if mercury is present) this issue goes far beyond the scope of the Minamata Convention

5.9.5	Waste water system/treatment	Releases to water and land (sludge application as fertilizer) are reported.	
Source category: Crematoria and cemeteries			
5.10.1	Crematoria/cremation	Releases to land/waste may take place where crematoria are equipped with Mercury filters.	<u>Air pollution control residues are wastes addressed by Article 11.</u>
5.10.2	<u>Cemeteries</u>	<u>Cemeteries are direct releases to land.</u>	

* Based on information aggregated for the UN Environment toolkit for identification and quantification of mercury releases. For additional details see <https://www.unenvironment.org/explore-topics/chemicals-waste/what-we-do/mercury/mercury-inventory-toolkit>

Structure and roadmap for the development of guidance on inventory

The following structure is proposed for the guidance on inventory, based on the existing guidance on the methodology for preparing inventories of emissions pursuant to Article 8.

- Background
- Steps to establish a releases inventory
- Initial steps: identify relevant point source categories and individual facilities releasing or potentially releasing mercury or mercury compounds
- Collection of release information from individual facilities, including source (type and location of facility), and amounts of release when feasible
- Development of a national release inventory database
- Making the data publicly accessible and searchable
- UNEP Inventory Toolkit

The development of guidance following this structure will not take much time. The methodologies for release estimation are basically determined already, and therefore the remaining work is to establish required releases calculation factors for relevant release scenarios for release source categories that do not already have such factors established in existing inventory tools.

Regarding the roadmap, there was a suggestion that since there will be a two-year period between COP3 and COP4, a roadmap may include the development of draft guidance on BAT/BEP for releases, as required under Article 9, paragraph 7(a). In this manner, draft guidance on both BAT/BEP and inventories could be considered at COP-4. The group briefly discussed this proposal, and other suggestions were made such as requesting the expert group to review the technologies for controlling releases from wastewater treatment facilities or to discuss which source categories may require guidance on BAT/BEP.

The following roadmap is proposed, in order to develop a draft guidance on standardized and known methodologies for preparing inventories for the sources included in the list.

Proposed roadmap for the development of release inventory guidance

Secretariat to circulate a call to parties and other stakeholders to submit existing information on factors to calculate release from the identified source categories. This will include contacts with relevant industrial associations and invitation for them to participate in the work of the group of technical experts.	January 2020
Secretariat to draft a general guidance for release inventories.	March 2020

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Commented [A46]: Not sure what this implies. Need to discuss what is meant here. We have had no discussion of release calculation factors, so apparently this needs to go on the agenda for our upcoming meeting.

Commented [A47]: However, without inventory data, we do not know the types of sources for which we need BAT/BEP guidance. The U.S. understands not wanting to wait 2 years to begin BAT/BEP development, but we need to know the types of releases on which we should focus.

Commented [A48]: The proposed roadmap needs discussion.

The group of technical experts to review the submissions and draft general guidance. The group will advise the secretariat on further information collection.	April 2020
Draft general guidance to be posted on the Convention website for comments.	May 2020
Further information collection	May-August 2020
Secretariat to compile information including release calculation factors.	September 2020
The group of technical experts to finalize the draft general guidance and review the information including release calculation factors.	September 2020
The draft general guidance, release calculation factors and other relevant information posted on the Convention website.	November 2020
Pilot use of the guidance by several parties to estimate mercury releases.	December 2020 - March 2021
The group of technical experts to review the outcome from the pilot.	April 2020
Draft report of the intersessional work, including a proposed roadmap for the development of guidance on BAT/BEP, to be posted on the Convention website for comment	May 2020
Report to COP 4 finalized.	July 2021 ⁹

Commented [A49]: This seems to be a typo. If not, need to discuss.