Minamata Convention On Mercury
Ratification and Implementation Manual

David Lennett
Senior Attorney, Natural Resources Defense Council

and

Richard Gutierrez, *JD, LI.M.*
Founder and Executive Director, BAN Toxics!

zero Hg
mercury working group

Minamata Convention On Mercury
Ratification and Implementation Manual

By

David Lennett
Senior Attorney, Natural Resources Defense Council

and

Richard Gutierrez, *JD, LI.M.*
Founder and Executive Director, BAN Toxics!

2014 (updated January 2015, June 2016)

Spanish and French translations:
Ms. Leticia Baselga,
mercurio@ecologistasenaccion.org

Layout and design 2014:
Rebecca Lagunsad, BAN Toxics!

Layout and design 2016:
suerossi.com

Contents

Foreword

by Mr. Fernando Lugris, Chair of the Minamata Convention on Mercury Intergovernmental Negotiating Committee

It has been my honor and privilege to chair the process leading to the development of the Minamata Convention on Mercury. With the adoption of the final text in October 2013, the equally daunting and important tasks of early ratification and implementation of the Convention are now before us.

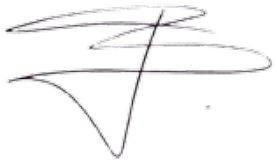
In the interim period before the Convention comes into force, there is much to do, both for the Intergovernmental Negotiating Committee (INC) and for governments and other stakeholders. The Final Act accompanying the formal adoption of the Convention contains an ambitious but necessary set of activities to be completed by the INC before the Convention comes into force. These activities include the preparation of crucial guidance documents related to the Convention control measures and financial arrangements.

At the same time, governments are evaluating their domestic situations and preparing for ratification and implementation of the Convention. They are gathering data, assessing legal authorities and institutional capacities, and identifying activities they need to undertake to comply with the Convention and otherwise address mercury uses and releases within their borders. For developing countries, this process may also involve accessing financial and technical assistance now available from a variety of sources.

Progress on both these very important parallel tracks will require the same level of commitment and spirit of cooperation I witnessed during development of the Convention. The continuing involvement of all stakeholders is an important element in achieving progress as well, particularly by representatives of civil society, including both environmental and health-related nongovernmental organizations and industry.

In this regard, I wish to express my appreciation and gratitude to the coauthors of this Manual, David Lennett and Richard Gutierrez, and to the Zero Mercury Working Group, for preparing this excellent publication. Readers should look to this useful companion resource while reading the Minamata Convention text. The Manual will contribute to a better understanding of the Convention obligations and the issues/challenges still before us, and thus facilitate completion of our work.

I look forward to the progress we will soon make in implementing this Convention, and to the resulting improvements in human health and environmental protection we are ultimately working to achieve.



Ambassador Fernando Lugris
Permanent Representative of Uruguay to UNEP,
Chair of the Minamata Convention on Mercury
Intergovernmental Negotiating Committee

ABOUT THE ZERO MERCURY WORKING GROUP

The Zero Mercury Working Group (ZMWG) is an international coalition of over 95 public interest environmental and health non-governmental organizations from more than 52 countries around the world formed in 2005 by the European Environmental Bureau and the Mercury Policy Project. ZMWG strives for zero supply, demand, and emissions of mercury from all anthropogenic sources, with the goal of reducing mercury in the global environment to a minimum. Its mission is to advocate and support the adoption and implementation of a legally binding instrument which contains mandatory obligations to eliminate where feasible, and otherwise minimize, the global supply and trade of mercury, the global demand for mercury, anthropogenic releases of mercury to the environment, and human and wildlife exposure to mercury.

ABOUT THE MANUAL

This Minamata Convention on Mercury Ratification and Implementation Manual (Manual) was co-authored by David Lennett, Senior Attorney of the Natural Resources Defense Council (NRDC) and Richard Gutierrez, *JD, Ll.M.*, founder and Executive Director of BAN Toxics. To ensure its accuracy and maximize its utility, a panel of experts identified in the Acknowledgements Section below reviewed the Manual.

INTENDED USERS

This Manual is intended for use by government officials involved in mercury-related activities or treaty ratification and implementation processes in their countries. Members of academia, civil society organizations, and people's movements are also encouraged to use this Manual.

REASON FOR THE MANUAL

The purpose of the Manual is to provide a simple, easy to understand introduction to the Minamata Convention on Mercury (Convention) for those officials who may need information about the Convention and its obligations, and about national activities which may be undertaken in preparation for Convention ratification and implementation. This Manual is not meant to be a replacement for the original text of the Convention. Instead, it should be used as a guide in understanding the contents of the treaty; and as a quick reference when discussing the substance of the treaty text, and the related practical and procedural issues surrounding the ratification process.

We hope that this Manual will be used by governments and civil society to quickly ratify the Convention and initiate mercury reduction activities.

HOW TO USE THE MANUAL

The Manual is divided into 3 main parts: Introduction and Overview of the Convention, the Convention Control Measures, and the Convention Support Mechanisms.

Within the Introduction and Overview, the process leading to the Convention and a general discussion of the Convention contents and ratification is provided.[1] Within the Convention Control Measures part, readers will find a discussion of the primary obligations of the Convention, and some of the key issues that were left unresolved during the negotiations and may be addressed by the Convention after its entry into force.

The Convention Support Mechanisms part touches on the various support mechanisms that the Convention provides to Parties in implementing their obligations, including financial, technical, and information modalities.

For accuracy, the authors have used language that is close to the original English version of the treaty text. Unless otherwise indicated, the primary source of this Manual's contents is the treaty text itself.

Through the course of the Manual, readers will see certain symbols, which stand for the following:

Indicates an illustrative example or fact related to the discussion that may be useful to the reader.

Indicates an important piece of information that may not be immediately apparent in the discussion.

Indicates a discussion of frequently raised concerns or issues that may need special attention.

Indicates a discussion of issues a country needs to consider prior to ratification.

Indicates the tasks that are assigned to the Conference of the Parties (COP) under a specific article or as issues that need to be considered by the COP.

ACKNOWLEDGMENTS

The Zero Mercury Working Group acknowledges the financial support of the United Nations Environment Programme (UNEP), the Sigrid Rausing Trust, the European Commission, and the Swedish Public Development Cooperation Aid (SIDA) through the Swedish Society for Nature Conservation (SSNC) for the development and/or distribution of this Manual. NRDC acknowledges the support of the Garfield Foundation for its mercury-related work. BAN Toxics acknowledges the support of Dialogos, the Global Environment Facility, the United Nations International Development Organization, and SSNC for its mercury and chemicals management work.

The coauthors wish to acknowledge and express our sincere appreciation to the following individuals who provided essential feedback and comments to improve the accuracy and quality of the Manual: Mr. Dominique Kpokro Bally, Jeunes Volontaires pour l'Environnement de la Côte d'Ivoire; Mr. Michael Bender, Mercury Policy Project; Mr. Ludovic Bernaudat, United Nations Industrial Development Organization (UNIDO); Mr. David Buchholz, United States Department of State; Dr. Gaston Casaux, Uruguay Ministry of Public Health; Mr. Jacob Duer, Minamata Convention Interim Secretariat; Mr. Henrik Eriksen, Norwegian Ministry of Environment; Mr. Rico Euripidou, GroundWorks; Mr. Frank Jensen, Danish Ministry of the Environment; Ms. Susan Keane, Natural Resources Defense Council; Ms. Gohar Khojayan, Armenian Women for Health and Healthy Environment; Mr. Ludwig Kramer, ClientEarth; Ms. Stephanie Laruelle, Minamata Convention Interim Secretariat; Ms. Sheila Logan, Minamata Convention Interim Secretariat; Mr. Jordi Pon, United Nations Environment Programme Regional Office for Latin America and the Caribbean; Ms. Elena Lymberidi-Settimo, European Environmental Bureau; Ms. Lone Schou, Danish Ministry of the Environment; Mr. Anil Sookdeo, Global Environment Facility; and Ms. Margherita Tolotto, European Environmental Bureau. Their affiliations are included for identification purposes only.

Richard also would like to express his gratitude to the following individuals at BAN Toxics for assisting him in the course of developing the Manual: Golda Benjamin, *LL.B., LL.M.*; Myline Macabuhay; Kathleen Lungub; and Rebecca Lagunsad. Lastly, David wishes to acknowledge NRDC law clerks Scott Breen, Esther Silberstein, and Grant Blumberg for their assistance in Manual preparation.

DISCLAIMER

The sole responsibility for the content of this Manual lies with the co-authors. The organizations that provided financial support are not responsible for any use that may be made of information contained herein.

Moreover, the views reflected in this Manual are solely those of the co-authors and are not necessarily those of the members of the expert review panel or their institutions.

LIST OF ACRONYMS / TERMS

ASGM	Artisanal and Small-Scale Gold Mining
Basel Convention	Basel Convention on the Transboundary Movement of Hazardous Wastes and Their Disposal
BAT/BEP	Best Available Techniques/Best Environmental Practices
CCFL	Cold Cathode Fluorescent Lamps
CFL	Compact Fluorescent Lamp
COP	Conference of the Parties
EEFL	External Electrode Fluorescent Lamp
ESM	Environmentally Sound Management
EU	European Union
FDA	U.S. Food and Drug Administration
GMP	UNEP Global Mercury Partnership
ICC	Implementation and Compliance Committee
ILO	International Labour Organization
INC	Intergovernmental Negotiating Committee
LCD	Liquid Crystal Display
LDC	Least Developed Countries
LED	Light Emitting Diode
MAP	Mercury-Added Product
MCCAP	Mercury-Cell Chlor-Alkali Plant
NAP	National Action Plan
NGO	Non-governmental Organization
NIP	National Implementation Plan
PIC	Prior Informed Consent
POPs	Persistent Organic Pollutants
PVC	Polyvinyl Chloride
REIO	Regional Economic Integration Organization
RoHS Directive	EU Restriction of Hazardous Substances Directive
Rotterdam Convention	Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade
SIDS	Small-Island Developing States
SIP	Specific International Programme
Stockholm Convention	Stockholm Convention on Persistent Organic Pollutants
UNEP	United Nations Environment Programme
VCM	Vinyl Chloride Monomer
WHO	World Health Organization
ZMWG	Zero Mercury Working Group

Chapter 1

Introduction to The Minamata Convention on Mercury

A. THE ROAD TO THE CONVENTION

The objective of the Minamata Convention on Mercury is "to protect the human health and the environment from the anthropogenic emissions and releases of mercury and mercury compounds."[2]

This objective reflects the critical findings of UNEP's first Global Mercury Assessment in 2002 and the updated 2013 Global Mercury Assessment.[3,4] Both documents highlight the adverse impacts of mercury on human health and the environment, mercury's global reach, and the serious challenges facing its continued use and risk.

In 2009, the UNEP Governing Council agreed to establish an Intergovernmental Negotiating Committee (INC) to prepare a legally binding international agreement, beginning the process resulting in the Minamata Convention on Mercury.[5] Negotiations commenced in 2010 and took place over five INC meetings:

- INC 1, 7 to 11 June 2010, Stockholm, Sweden
- INC 2, 24 to 28 January 2011, Chiba, Japan
- INC 3, 31 October to 4 November 2011, Nairobi, Kenya
- INC 4, 27 June to 2 July 2012, Punta del Este, Uruguay
- INC 5, 13 to 18 January 2013, Geneva, Switzerland

A final agreement was reached at 7 a.m. on Saturday, January 19, 2013 during INC 5. Following the conclusion of the negotiations, the text was formally adopted and opened for signature at a Diplomatic Conference (Conference of Plenipotentiaries), held in Kumamoto, Japan, from 10 to 11 October 2013. The Diplomatic Conference was preceded by a ceremonial opening held in Minamata, Japan on October 9, 2013, and a preparatory meeting held on October 7 and 8.

A website has been developed for the Convention. On this website, readers can track the number of governments which have signed and/or ratified the Convention.[6] The Convention will enter into force ninety days after the date of deposit of the 50th government's instrument of ratification (*or acceptance, approval or accession as explained below*). In November 2014 and March 2016, two negotiation sessions were held (INC 6 and 7) to develop implementation materials in anticipation of Convention entry into force.

B. OVERVIEW OF THE MINAMATA CONVENTION

The Minamata Convention on Mercury (Convention) is a major international development in controlling the harmful effects of mercury pollution. The Convention is the latest in the series of chemicals and waste conventions. It follows the Stockholm Convention on Persistent Organic Pollutants (POPs), 12 years after that convention was adopted in 2001.

As noted above, the objective of the Minamata Convention is to "protect the human health and the environment from anthropogenic emissions and releases of mercury and mercury compounds." While other chemical and waste treaties focus on a broad range of subjects, e.g. hazardous wastes, POPs, this Convention has just one focus—mercury.

The limited focus of the Convention, however, belies the range of control it has over the life cycle of mercury. The Convention covers the following major areas:

1. Mercury supply sources and trade (Article 3);
2. Mercury-added products (Article 4);
3. Manufacturing processes in which mercury or mercury compounds are used (Article 5);
4. Artisanal and small-scale gold mining (ASGM) (Article 7);
5. Emissions (to air) (Article 8);
6. Releases (to land and water) (Article 9);
7. Environmentally sound interim storage of mercury, other than mercury waste (Article 10);
8. Mercury wastes (Article 11);
9. Contaminated sites (Article 12); and
10. Health aspects (Article 16).

The Convention also outlines certain processes that will help countries comply with their obligations, and ensure that other countries will do the same. These include:

1. Financial resources and mechanism (Article 13);
2. Capacity-building, technical assistance, and technology transfer (Article 14);
3. Implementation and Compliance Committee (Article 15);
4. Information exchange (Article 17);
5. Public information, awareness, and education (Article 18);
6. Research, development, and monitoring (Article 19); and
7. Implementation plans (Article 20).

The Convention contains obligations related to reporting (Article 21), where each Party is bound to report on the measures it has taken to implement the provisions of the Convention, the effectiveness of these measures, and the possible challenges in meeting the objectives of the Convention. A process for evaluating the effectiveness of the Convention is also included. (Article 22)

C. WHEN CONVENTION OBLIGATIONS BECOME BINDING

Since the Convention, as of this writing, is not yet in force, the timing on when the obligations become binding to a Party will depend on when the country (or regional economic integration organization (REIO)) ratifies the Convention and when the Convention comes into force. The general rules of thumb are as follows:

i. If a country is among the first 50 to ratify the Convention, the Convention obligations become immediately binding when the Convention enters into force. In this case the Convention will enter into force 90 days after the date of deposit of the instrument of ratification by the 50th country ratifying the Convention. (Article 31.1)

ii. When a country ratifies the Convention after it has entered into force, the country will be bound to the Convention 90 days after the date the instrument of ratification is submitted. (Article 31.2)

iii. If a specific Convention obligation has a calendar deadline for compliance (such as 2020), the calendar deadline in the Convention will apply even if the country (or REIO) becomes a Party after the deadline passed. In such cases, the country must be prepared to be in compliance when the Convention enters into force for that country.

iv. A REIO can ratify the Convention and be bound by it. The Convention shall enter into force in this case similar to countries. However, "any instrument submitted by a regional economic integration organization shall not be counted as additional to those member States of that organization". (Article 31.3)

Countries will need to consider that certain obligations under the Convention will require preparatory work since they must be complied with immediately upon the Convention coming into force for that country. This preparatory work will be covered in this Manual as "Issues to Consider Prior to Ratification".

D. THE PROCESS OF "RATIFICATION"

Although the Manual refers generally to "ratification", there are technically four ways to become a Party to the Convention: ratification, acceptance, approval, and accession. Instruments of ratification, acceptance, approval, or accession must be deposited with the Secretary-General of the United Nations (Articles 30.1, 34). No reservations may be made to the Convention (Article 32), thus a State intending to become a Party must be prepared to comply with the entire Convention.

1. *Ratification*. In this process, a State's Constitution or national law will typically specify a national ratification process that needs to be complied with before the final instrument of ratification can be deposited with the Secretary General. For example, a State's national law may require that the treaty be reviewed and/or approved by a legislative body before the instrument of ratification be prepared, signed, and deposited. (*See Annex 1 for sample Instrument of Ratification*)

2. *Acceptance or Approval*. The instruments of "acceptance" or "approval" of a treaty have the same legal effect as ratification. In the practice of certain states, acceptance and approval have been used instead of ratification when, at a national level, constitutional law does not require the treaty to be ratified by the head of state. (*See Annex 1 for sample Instrument of Acceptance and Approval*)

3. *Accession*. Accession is the way a country will become a Party if it has not signed the Convention by October 9, 2014. Accession has the same legal effect as ratification. The State shall be bound by the terms of the treaty as soon as it deposits an instrument of accession. (*See Annex 2 for sample of Instrument of Accession*)

Notes: There is no standard form for instruments of ratification, acceptance, approval, or accession. However, each must include the following:

i. Title, date and place of conclusion of the treaty concerned;

ii Full name and title of the person signing the instrument;

iii. An unambiguous expression of the intent of the State (or REIO), on behalf of the State, to consider itself bound by the treaty and to undertake faithfully to observe and implement its provisions;

iv. Date and place where the instrument was issued; and

v. Signature of the Head of State, Head of Government or Minister for Foreign Affairs or any other person acting in such a position for the time being and with full powers for that purpose.

Chapter 2

Convention Control Measures

This Chapter covers the primary obligations under the Convention, with particular emphasis on those areas that need to be considered by countries as part of their planning and ratification processes. A Party may take additional or more stringent control measures to prevent or minimize mercury exposures which are consistent with the Convention or other international law.

ARTICLE 3:
MERCURY SUPPLY SOURCES AND TRADE

Article 3 contains control measures aimed at limiting the global supply of mercury to complement and reinforce the demand reduction control measures in Articles 4-7. The Article 3 provisions limit the sources of mercury available for use and trade, and specify procedures to follow where such trade is still allowed.

Mercury supply comes from 5 main sources: a) primary mercury mining,[7] b) by-product mercury from mining other metals and natural gas production,[8] c) decommissioning chlor-alkali facilities;[9] d) recovery of mercury from wastes and used products that contain mercury, and e) government or private mercury stocks.

Article 3 restricts potential supplies from primary mercury mining and decommisioning chlor-alkali plants, and seeks to identify any remaining large stocks of mercury. Primary mercury mining is the least favored source of mercury supply under the Convention because it adds new mercury to the global mercury reservoir, and is itself a significant source of mercury releases into the environment.

Mercury from decommissioning chlor-alkali plants was targeted because of the large amount of mercury potentially becoming available from this sector between now and 2025, the phase-out date for mercury use in the chlor-alkali sector under Article 5 (*see Article 5 discussion*). This large quantity of mercury would potentially disrupt demand reduction initiatives in ASGM and other sectors.

In the area of trade, Article 3 establishes a prior-informed consent requirement for any trade of mercury to occur. The relationship and obligations between Parties to trade mercury are specified, and rules governing Party to non-Party trade are also elaborated in this article.

A. MERCURY SUPPLY SOURCES

1. MERCURY FROM MINING:

When the Convention enters into force for a Party, it shall not permit 'new' primary mercury mining—mines that are not operating at that point in time. (Article 3.3)

Parties with primary mining within their territory at the date of entry into force of the Convention for that Party may continue to allow for the existing mines to operate for up to fifteen (15) years after the Convention enters into force for them. (Article 3.4)

Notes:

i. Even Parties with existing mercury mines must prevent the opening of new primary mercury mines after the Convention comes into force for them.

ii. Mercury produced from existing mines cannot be used for ASGM, since ASGM is not included among the allowed uses for this mercury specified in paragraph 4 of Article 3.

ILLUSTRATIVE EXAMPLES

Scenario I: Country X currently engages in primary mercury mining. It ratifies the Convention on September I, 2014 and the Minamata Convention has not yet entered into force because it does not yet have 50 ratifications.

If the Minamata Convention enters into force on January 1, 2015, Country X (being one of the first 50 countries to ratify) must not permit new mercury mines on or after January 1, 2015 and can operate its pre-existing mercury mines until January 1, 2030 with the restrictions on the use of this mercury as specified in the above note.

Scenario 2: Country Y engages in primary mercury mining but it ratifies the Convention after the Convention is already in force. If, for example, Country Y deposits its ratification instrument for the Convention on January I, 2016:

Country Y's date for when the Convention enters into force will be 90 days after ratification: April 1, 2016. It must not permit new mercury mines on or after April 1, 2016. It must cease operations for its pre-existing mercury mines by April 1, 2031 (15 years from the time the Minamata Convention enters into force for Country Y), with the restrictions on the use of this mercury as specified in the above note.

Note: Article 31(2) states that the date of entry into force, in relation to countries that deposit instruments of ratification after the 50th country, is the 90th day after the date of such deposit. Article 3(4) counts the 15-year grace period for the operation of primary mercury mining sites from the "date of entry into force of the Convention for it." The phrase "for it" takes into account the difference in the determination of the Convention's date of entry into force based on whether the country is one of the first 50 to deposit instruments of ratification.

2. MERCURY STOCKPILES:

Each party shall try to identify individual stocks of mercury or mercury compounds exceeding 50 metric tons, as well as sources of mercury supply generating stocks exceeding 10 metric tons per year, that are located within its territory. (Article 3.5)

Notes:

i. Individual stocks and mercury supply generating stocks are two distinct sources of mercury. Individual stocks can include existing inventory or stockpiles by governments, traders, or at operating chlor-alkali facilities.

ii. Mercury supply sources generating stocks can include decommissioning chlor-alkali plants, mercury catalyst recyclers and waste treatment facilities, mercury mines, mercury compound producers, and mercury byproduct generation locations. Thus, if any of these supply generating sources in a country can produce more than 10 tons per year, the country must try to identify these sources per Article 3.5.a.

iii. In this context, the term "mercury compounds" is narrowly defined to include mercury chloride or calomel, mercury oxide, mercury sulphate, mercury nitrate, cinnabar, and mercury sulphide. (Article 3.1.b)

iv. In addition to this Convention obligation, countries will want to know about the existence of these stockpiles for planning associated with the mercury storage and waste requirements of Articles 10 and 11. (*See discussion below*)

3. MERCURY FROM DECOMMISSIONING OF CHLOR-ALKALI PLANTS:

Excess mercury from decommissioning chlor-alkali plants cannot be reused, except at another chlor-alkali plant.[10] (Article 3.5.b)

Mercury from this source which is not reused must be disposed of according to Article 11 requirements (*see Article 11 discussion*), and the restrictions discussed immediately below.

Notes:

i. Disposal operations for mercury from decommissioning chlor-alkali plants covered under Article 11 cannot lead to recovery, recycling, reclamation, direct re-use or alternative uses. (Article 3.5.b) (*See Article 11 discussion*)

ii. Mercury cell chlor-alkali plants are subject to phase-out requirements in Article 5 discussed below. Accordingly, as these plants are decommissioned over time consistent with the Convention, an increasing portion of this mercury will be disposed. Regulatory officials may need to scrutinize carefully the speculative storage of this mercury (i.e., storage without the reuse chlor-alkali plant(s) already identified), to ensure compliance with this Convention supply control measure.

B. TRADE OF MERCURY

The following rules apply to the trade of mercury under the Convention:

Scenario I: *Exporter is a Party —> Importer is a Party (Article 3.6.a)*

1. General Rule: Mercury export is prohibited.
2. Exception: Mercury export is allowed if:
   a. The importing Party has provided the exporting Party with its written consent; and
   b. The mercury is for only for the following purposes:
      i. A use allowed to the importing Party under the Convention (as defined in Article 2.k); or
      ii. Environmentally sound interim storage (Article 10).

Scenario 2: *Exporter is a Party —> Importer is a non-Party (Article 3.6.b)*

1. General Rule: Mercury export is prohibited.
2. Exception: When the non-Party importer has:
   a. Provided the exporting Party with its written consent; and
   b. Certified that:
      i. It has measures in place to ensure the protection of human health and the environment and to ensure its compliance with the provisions of storage (Article 10) and final disposal (Article 11); and
      ii. Such mercury will be used only for a use allowed under this Convention or for environmentally sound interim storage (Article 10).

Scenario 3: *Exporter is a non-Party —> Importer is a Party (Article 3.8)*

1. General Rule: Mercury import is prohibited.
2. Exception: The exporter non-Party has provided certification that the mercury is not from primary mercury mining or decommissioning chlor-alkali facilities, and the importing Party has provided its written consent.

✓ ISSUES SURROUNDING CONSENT REQUIREMENTS:

a. The details of the informed consent procedure will be provided in guidance adopted by the Parties at the first Conference of the Parties (COP1). The INC was charged with preparing the guidance so it is ready for consideration at COP1. This guidance, consisting of the trade consent forms and instructions, was finalized at INC 6 and 7.[11]

b. The Convention recognizes that certain countries may wish to expedite the consent procedure. In this regard, it has created the following mechanisms:

✓ General notification of consent (General Notification). Article 3.7 allows an importing country to issue a General Notification to the Convention Secretariat. The General Notification constitutes an "umbrella consent" from a country, which sets out the terms

and conditions of any importation of mercury to the country. This umbrella consent does not relieve the trading Parties of the obligation to ensure the mercury originates from an allowed source and will be imported for an allowed purpose. The General Notification is revocable at any time, and all such notifications will be kept in a public registry by the Secretariat. (Article 3.7)

✓ The Convention also allows in cases where a General Notification is issued, for a Party to waive the restrictions imposed by the Convention on the imports of mercury from a non-Party. Under such a waiver, a Party could import mercury from primary mining and decommissioning chlor-alkali plants. Such imports, however, will be possible only if the importing Party maintains a comprehensive restriction on the export of mercury and has domestic measures in place to ensure the imported mercury is managed in an environmentally sound manner. The Implementation and Compliance Committee is required to monitor the General Notifications and report back to the COP on how they are used and applied. (Article 3.9)

Notes:

i. The General Notification procedure is primarily designed for developed countries with already established comprehensive controls for handling mercury.

ii. Developing countries and countries with economies in transition should consider carefully whether they would invoke these umbrella consent procedures, since the control of mercury supplies entering their countries can be an important mechanism for achieving compliance with the Convention, particularly the ASGM provisions. A Party seeking to reduce the quantity of mercury available within its borders may withhold consent and oblige exporting countries to prevent unwanted shipments. Limiting mercury imports can also reduce the magnitude of a Party's obligations under Articles 10 (interim mercury storage) and 11 (waste management) of the Convention. The informed consent and non-Party certifications were set up to prevent the dumping of unwanted mercury and to limit global mercury supplies overall.

iii. The import restriction waiver is only available until the 2nd COP. However, this procedure can be extended by the COP (duration unspecified) through a decision adopted at the 2nd COP or if a country submits its intent to apply it before the end of the 2nd COP.

✓ CONDITIONS APPLICABLE TO BOTH SUPPLY SOURCES AND TRADE:

Under Article 3, mercury includes both elemental mercury and mixtures of mercury with other substances, including alloys of mercury, with a mercury concentration of at least 95 per cent by weight. The inclusion of mixtures in Article 3 is intended to prevent mercury exporters from mixing mercury with other substances and later on distilling or recovering the mercury to circumvent the export restrictions. The reference to alloys with a mercury concentration of at least 95% by weight relates to potential mercury added products that are alloys. Alloys falling below the 95% mercury concentration per weight requirement may be covered by Articles 4 (products) and 11 (waste), and is an issue to be addressed under Article 3.13, as discussed below.

Note: The restrictions on supply sources and trade DO NOT APPLY to laboratory or research uses of mercury; other minerals, ores or metals which may contain mercury as an impurity (i.e., coal); or to mercury in products. (Article 3.2)

ISSUES TO CONSIDER PRIOR TO RATIFICATION:

1. *What information do you have or need regarding the production, export or import of mercury and mercury compounds under the Convention (Article 3.1.b) from any of the supply sources covered by the Convention? Do you have primary mercury mining?*

2. *Are there existing mercury cell chlor-alkali facilities in the country that will require decommissioning? If yes, how will the country ensure that mercury from the decommissioning chlor-alkali plants is properly accounted for and reported to the Convention? How will the country ensure that the mercury from this decommissioning will not be reused except within the chlor-alkali sector, and if applicable disposed following the guidelines for environmentally sound management? What are the responsibilities of the chlor-alkali companies in meeting these Convention obligations?*

3. *Which agency or agencies will be designated as the focal point for issuing import consents and for discharging other trade responsibilities under the Convention? Are licensing requirements for mercury traders and large mercury producers needed to ensure compliance with the Article 3 control measures?*

4. *Given the mercury supply sources for your country, what needs can you identify regarding necessary capacity to store or dispose of mercury? (See discussion below on Articles 10 and 11)*

FREQUENTLY RAISED CONCERN: SUPPLY AND TRADE

By imposing different obligations when it comes to trade between Parties to the Convention, and non-Parties, does the Minamata Convention violate the World Trade Organization (WTO) Most Favored Nation clause?

IT DOES NOT. In fact, the provisions of the Convention are not discriminatory between Parties and non-Parties because both must adhere to equivalent requirements for trade of mercury to occur. In case there was any doubt regarding the intent of the Convention, the preamble text indicates "this Convention and other international agreements in the field of the environment and trade are mutually supportive." Furthermore, the Preamble also states that "nothing in this Convention is intended to affect the rights and obligations of any Party deriving from any existing international agreement."

INTERIM WORK ON ARTICLE 3 AND FUTURE COP DECISIONS

In anticipation of adoption required at COP1, the INC developed guidance on the identification of large stocks of mercury and mercury compounds.[12]

At some unspecified time, the COP must also determine if the trade restrictions should be extended to additional mercury compounds (Article 3.13), which may include consideration of those compounds that can be readily converted to elemental mercury. The COP may also receive information from the Implementation and Compliance Committee as to how the import restriction waiver has been utilized, presumably to determine whether the Convention text should be modified in this regard.

ARTICLE 4:
MERCURY-ADDED PRODUCTS

As noted in Article 3, the Convention seeks to reduce global mercury pollution through complementary measures to minimize mercury supply and demand. One important demand for mercury is its use in products ranging from batteries to cosmetics. The Convention will reduce mercury demand in products through a combination of measures which phase out mercury uses in many key products, phase down mercury use in another, require the review of remaining products for possible restrictions within five years, and discourage the manufacture of new products using mercury.

Mercury's unique characteristics and availability as a material throughout the ages has allowed it to be widely used in many products and applications. Mercury is a very good conductor of electricity, forms alloys with other metals, acts as a preservative, and because it is a liquid under standard conditions, it is sensitive to temperature and pressure. However, the manufacture, use and disposal of these products contribute to global mercury pollution, as the mercury in these products is often released during the product life cycle. For example, when these products are no longer wanted at the end of their useful life, mercury release from their disposal in the municipal waste stream is a serious concern, particularly in developing countries. In 2005, UNEP reported over 1,600 MT of mercury was used to manufacture products that year.[13] Much of that use was in products where mercury free alternatives are or will soon be available.[14]

A mercury-added product (MAP) is defined by the Convention as a "product or product component that contains mercury or a mercury compound that was intentionally added". (Article 2.f) The definition under the Convention is broad as it aims to cover all products where the mercury was added in the manufacturing process to provide a specific function or characteristic. The definition does not aim to cover products where mercury was not intentionally added, such as where the mercury comes from a trace contaminant of natural origin in one of the manufacturing raw materials.

The broad nature of this definition does not mean all MAPs are regulated now under the Convention; only those products listed in Annex A are subject to immediate controls. The MAPs covered under the Convention now, and the applicable exemptions, will be discussed in this chapter. This chapter will also discuss related requirements affecting MAPs such as storage and disposal.

A. WHICH MERCURY-ADDED PRODUCTS ARE PHASED OUT UNDER THE CONVENTION?

The following products are ***not allowed*** to be manufactured, imported or exported after 2020 (unless the product is otherwise excluded as discussed below, or a Party seeks an extension of time for the phase-out date under Article 6):

Notes:

i. Annex A, Part I lists MAPs that are phased out under Article 4. In some cases, the product description itself contains limiting language, such as certain lamps used "for general lighting purposes". In such cases, the MAPs must fall within the specified category description, so lamps produced for other purposes do not fall within the product category description.

ii. In some cases, the restricted product category description contains a mercury concentration or limit. In such cases, the prohibition applies to products exceeding the specified concentration or limit.

iii. The table below has three columns. The first column, Covered Mercury-Added Products, contains the treaty text of Annex A, Part I. The second column, Description / Examples, contains a layman's description of the product category listed and/or some examples or products within the category to help readers understand the treaty text. The third column, Notes, provides additional information regarding the product category the reader may find useful.

Covered Mercury-Added Products*	Description / Examples	Notes
Batteries, except for button zinc silver oxide batteries with a mercury content <2% and button zinc air batteries with a mercury content <2%.	The intentional use of mercury in batteries will be prohibited except for two types of button cell batteries. These two button cells types are typically used in hearing aids (zinc air), and watches or cameras (silver oxide). Other button cell types, such as alkaline manganese button cells typically used in toys or cheaper electronics, and mercury oxide button cells (which can contain 40% mercury by weight) are covered by the prohibition.	✓ The vast majority of cylinder batteries (i.e., alkaline rechargeable) manufactured globally are already mercury free. ✓ Governments should pay particular attention to possible mercury oxide battery production or imports, in button cell form or otherwise. Large non-button cell mercury oxide batteries may still be used in medical, industrial or military applications, and can contain substantial quantities of mercury. These batteries are subject to the phase-out requirements, unless otherwise excluded. ✓ The 2% mercury content limit for the zinc air and silver oxide button cell batteries corresponds to the mercury amount now typically used by manufacturers to inhibit battery corrosion, thus the global availability of batteries meeting this content limit should not be challenging.

Covered Mercury-Added Products*	Description / Examples	Notes
Switches and relays, except very high accuracy capacitance and loss measurement bridges and high frequency radio frequency switches and relays in monitoring and control instruments with a maximum mercury content of 20 mg per bridge, switch, or relay.	Switches are devices used to open or close an electrical circuit, or a liquid or gas valve. Examples of switches are float switches triggered by a change in liquid levels, tilt switches activated by a change in position, and flame sensors activated by a change in temperature. These switches can be found in pumps, appliances, ranges/ovens, and a variety of machinery. Relays are devices used to open or close electrical contacts to control another device in the same circuit. They are often used to turn off large electrical currents by supplying a small amount of electricity to a control circuit. They can be found in telecommunication circuit boards, and industrial ovens. The term "very high" is not defined in treaty text, but can be interpreted to apply to extraordinary applications, since mercury-free switches and relays are available for most applications. Perhaps the more important exclusion from coverage for switches and relays is for replacements, discussed further below.	✓ Manufacturers of switches and relays for the global market are already producing mercury-free products because of restrictions imposed by the EU's RoHS Directive and comparable laws in other countries.[15,16] ✓ Switches and relays are often components of larger products. Under Paragraph 5 of Article 4, a Party must take measures to prevent switches and relays from being incorporated into larger products. Accordingly, countries where mercury switches are manufactured or imported should determine how the switches and relays will be used.

Covered Mercury-Added Products*	Description / Examples	Notes
Compact fluorescent lamps (CFLs) for general lighting purposes that are ≤ 30 watts with a mercury content exceeding 5 mg per lamp burner.	CFLs are the smaller lamps often used in residential settings as energy efficient substitutes for incandescent lamps.	✓ China is the world's largest manufacturer of CFLs, and has committed to manufacturing CFLs with lower levels of mercury by the end of 2013. Governments may wish to consider lower content limits since achieving lower limits will be the norm by 2020. ✓ Light Emitting Diodes (LEDs) or other technologies are replacing mercury lamps over time. ✓ Continued technology improvements and maximum mercury content limits can minimize mercury usage in the interim, and eliminate outdated lamps and production techniques.
Linear fluorescent lamps (LFLs) for general lighting purposes: a) Triband phosphor < 60 watts with a mercury content exceeding 5 mg per lamp; or b) Halophosphate phosphor ≤ 40 watts with a mercury content exceeding 10 mg per lamp.	Linear lamps (i.e., T5s, T8s) are frequently found in commercial and industrial buildings.	✓ Mercury content limits are consistent with or less stringent than the comparable EU RoHS standard;, thus global suppliers will be achieving these limits sooner than the Convention requires.
High pressure mercury vapour lamps (HPMV) for general lighting purposes.	HPMV lamps are generally used for large area overhead lighting, such as in factories, warehouses, sports arenas, and streetlights.	✓ Prohibited under the EU RoHS Directive effective 2015, due to the availability of lower-mercury alternatives.

Covered Mercury-Added Products*	Description / Examples	Notes
Mercury in cold cathode fluorescent lamps and external electrode fluorescent lamps (CCFL and EEFL) for electronic displays: a) Short length (≤ 500 mm) with mercury content exceeding 3.5 mg per lamp; b) Medium length (> 500 mm and ≤ 1, 500 mm) with mercury content exceeding 5 mg per lamp; or c) Long length (> 1, 500 mm) with mercury content exceeding 13 mg per lamp.	CCFLs and EEFLs are generally used in the backlighting of liquid crystal displays (LCDs), such as computer monitors and television screens.	✓ The growing use of LEDs for backlighting in LCDs should lead to a decline in the use of these mercury lamps.
Cosmetics (with mercury content above 1 ppm), including skin-lightening soaps and creams, and not including eye area cosmetics where mercury is used as a preservative and no effective and safe substitute preservatives are available.	Includes skin lightening cosmetics, which come in the form of soap, cream, or lotion that use mercury as a common pharmacological compound to lighten skin. Products where mercury is intentionally added will typically have a concentration above 1 ppm. The exception for mercury used as a preservative in the eye area appears to track the exception issued by the U.S. Food and Drug Administration (FDA), where the mercury content limit adopted by FDA for this purpose is 65 ppm.[17]	✓ The sale of mercury in cosmetics is already banned in many countries, particularly in developing countries where skin-lightening creams are frequently used.[18] One challenge to date has been enforcing those bans in the face of illegal production or imports.

Covered Mercury-Added Products*	Description / Examples	Notes
Pesticides, biocides, and topical antiseptics.	A biocide is a substance or microorganism that kills or controls the growth of living organisms. In this context, the term biocide includes the principal way mercury has been used to manufacture paints. Historically, mercury was used in paints in very large quantities as a biocide to prevent bacteria from growing in the paint while stored, and to prevent algae and fungi from growing on the applied paint. Mercury ore (cinnabar), used rarely in paint for pigment purposes, is not restricted by the Convention. Topical antiseptics are products with antimicrobial activity designed for use on skin or other superficial tissues. Examples of these products are mercurochrome or merthiolate.	✓ Mercury use in pesticides, biocides, and topical antiseptics is already banned in many countries. Governments should ensure paints manufactured or imported into their countries are not mercury-added.
The following non-electronic measuring devices except non-electronic measuring devices installed in large-scale equipment or those used for high precision measurement, where no suitable mercury-free alternative is available: (a) Barometers; (b) Hygrometers; (c) Manometers; (d) Thermometers; and (e) Sphygmomanometers.	Barometers: instruments for measuring atmospheric pressure used especially in forecasting the weather and determining altitude. Hygrometers: instruments for measuring the humidity of the air or a gas. Manometers: instruments used to measure gas pressures. Thermometers: instruments used to measure temperature. The most common types are fever thermometers to determine if someone is ill, but thermometers are also used in industrial processes, such as food processing. Sphygmomanometers: instruments used to measure blood pressure, otherwise known as blood pressure cuffs.	✓ WHO and Health Care Without Harm launched a global campaign to shift global production of medical thermometers and blood pressure cuffs to mercury-free alternatives by 2017. Many developing countries are already taking steps to eliminate the purchase of mercury medical devices.[19] Materials have been produced to assist governments in making this transition.[20]

* Minamata Convention, Annex A, Part I.

Notes:

i. Article 4 restricts the manufacture, import, or export or mercury-added products. The *use* of listed MAPs present within the country after the phase-out date of 2020 is not prohibited under Article 4. For instance, stock mercury thermometers in a health facility, or mercury batteries already in the stores, can still be purchased and used after 2020.

ii. Countries with MAP manufacturers should determine how stocks of mercury will be managed as the phase out dates approach, and ensure compliance with the mercury storage and waste management obligations of Articles 10 and 11. Similarly, countries with MAP manufacturers potentially retaining large unsold MAP inventories as of the phase-out date should determine the potential waste management implications of these unsold inventories, to ensure compliance with Article 11. These storage and waste management obligations are independent of Article 4. (*See sections on Articles 10 and 11 for a complete discussion of these obligations*)

B. WHICH PRODUCTS ARE EXCLUDED FROM THE PHASE OUT REQUIREMENT OF THE CONVENTION?

In addition to the product-specific exclusions included within the category descriptions, Annex A provides five general exclusions to the product restrictions. Therefore, products falling within the category descriptions but covered by one of these five general exclusions are **not** restricted by the Convention. The five exclusions are as follows:

a. **Products essential for civil protection and military uses.** These are products used for military or police applications where the use of mercury is "essential". Therefore, MAPs used by both the military and consumers would not be considered essential, such as thermostats or lamps in buildings. However, where a military application might require an extraordinary switch or relay, and mercury would serve a necessary function, this may be considered essential. It is up to Parties to determine what will be considered essential for civil protection and military uses.

b. **Products for research, calibration of instrumentation, for use as reference standard.** One relevant example would be a mercury blood pressure cuff produced only for use as a reference standard in a clinical validation study of mercury free devices.

c. **Replacement switches and relays, CCFLs and EEFLs for electronic displays, and measuring devices, where no feasible mercury-free alternatives are available.** This replacement exemption is intended where the MAP is a component of a larger product, and only the mercury-added version of the component is available to maintain the larger product. The classic example is a multi-million dollar industrial machine containing a mercury switch or relay which needs to be replaced, and only the mercury model fits and functions properly in the machine. Note for many switch and relay applications, manufacturers make both mercury and mercury-free models, and thus some level of proof may be sought from companies claiming no feasible mercury-free alternative is available, particularly for recently made machinery.

d. **Products used in traditional or religious practices.** The Convention recognizes that mercury has been used for religious or cultural reasons for hundreds of years, and that there may be deep-rooted sensitivities to replacing or eliminating these practices or uses. Some examples of uses contemplated under this exemption are the use of mercury in religious

statues in Parad Shivling in India and the use of "azogue" by some Hispanic and Caribbean communities in the United States. In spite of this exclusion, however, countries can take additional domestic measures to address the adverse health and environmental impacts these traditional or religious practices using mercury may cause, particularly to children.[21]

e. **Vaccines containing thiomersal (also known as thimerosal) as preservatives.** Thiomersal has also been known as mercurothiolate and sodium 2-ethylmercuriothiobenzoate.

C. THE ALTERNATIVE METHOD FOR ADDRESSING MERCURY IN PRODUCTS

In lieu of complying with the phase-out obligations specified above, a Party may, under Paragraph 2 of Article 4, utilize alternative measures or strategies prohibiting the manufacture, import or export covered MAPs, if it can meet the following conditions:

a. Demonstrate that the Party has already reduced to a *de minimis* level the manufacture, import, and export of the "large majority" of the covered MAPs at the time of its ratification; and

b. The country has implemented measures or strategies to reduce the use of additional MAPs NOT listed in Part 1 of Annex A, at the time of its ratification.

In addition to the two basic conditions just mentioned, the country must also take the following measures:

- Report to the COP, at the first opportunity, of the measures or strategies implemented, including a quantification of the reductions achieved;
- Implement measures or strategies to reduce the use of mercury in any products listed in Part I of Annex A for which a de minimis value has NOT yet been obtained; and
- Consider additional measures to achieve further reductions. (Article 4.2)

Notes:

i. If a country chooses the alternative control measure, it must do so at the time of ratification and will NOT be eligible to seek additional time for complying with the phase-out requirements for any product category under Article 6. Since *de minimis* use of mercury must be achieved for many MAPs by the time of ratification, the alternative compliance approach is best suited for governments already possessing good data on mercury use in MAPs and a history of mercury reduction activities prior to Convention ratification. Developing countries are not typically expected to meet these conditions.

ii. Key terms under the alternative compliance mechanism, such as "large majority" and "*de minimis*" are currently undefined. The COP may decide to provide guidance on what these terms mean. In the absence of guidance, a country may make a determination at the national level of what these terms mean, recognizing that the COP is expressly charged with reviewing the effectiveness of this alternative approach within five years after the Convention comes into force.

D. MEASURES TO PHASE DOWN THE USE OF DENTAL AMALGAM

In addition to the product phase-out provisions discussed above, Parties are required to take measures to phase down use of dental amalgam under Paragraph 3 of Article 4.[22] As specified in Part II of Annex A, countries are required by the Convention to take two or more of the following measures, taking into consideration the country's domestic circumstances and relevant international guidance in choosing which two or more measures to pursue:

a. Setting national objectives aiming at dental caries prevention and health promotion, thereby minimizing the need for dental restoration;

Note: The prevention of dental caries (tooth decay) is a broad goal and its impact on amalgam reduction is uncertain. Thus, dental caries prevention may need to be coupled with other measures that directly address amalgam use reduction.

b. Setting national objectives aiming at minimizing its use;

Note: Setting national objectives to minimize amalgam may be a good way to focus national efforts to start phasing down amalgam. This measure could effectively complement more direct efforts embodied in other measures.

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

Note: Promoting mercury-free alternatives to dental amalgam is important because of the lack of information among dentists, patients, and the general public. For instance, awareness of the environmental problems caused by dental mercury is often low among dental practitioners and the public. Promoting mercury-free alternatives can take a variety of cost-effective forms, such as patient information sheets, posters in dental clinics, consent forms, educational brochures, websites and social media.

d. Promoting research and development of quality mercury-free materials for dental restoration;

Note: This measure may be unnecessary or impractical for many countries, as mercury-free materials have been developed and studied for many years.[23] A higher priority may need to be placed for technology transfer and training, as discussed immediately below.

e. Encouraging representative professional organizations and dental schools to educate and train dental professionals and students on the use of mercury-free dental restoration alternatives and on promoting best management practices;

Note: Training in mercury-free materials and techniques may be prioritized because when dental students learn amalgam first, they can form a preference or habit for amalgam use early on, which can eventually undermine long-term efforts to reduce amalgam use.

f. Discouraging insurance policies and programmes that favour dental amalgam use over mercury-free dental restoration;

g. Encouraging insurance policies and programmes that favour use of quality alternatives to dental amalgam for dental restoration;

Note: These two measures may be impractical for countries where dental insurance is not readily available for the general population. In other countries, if insurance providers have a policy or programme that favors mercury-free alternatives, there is a less likelihood that the covered individuals will be seeking amalgams for their dental restoration needs.

h. Restricting the use of dental amalgam to its encapsulated form;

Note: While this measure is aimed at preventing the diversion of mercury for dental amalgam to other uses, such as ASGM, its value in achieving the goal of reducing amalgam use may be limited. This measure may need to be coupled with other measures that more directly achieve the mercury reduction goal of Annex A, Part II.

i. Promoting the use of best environmental practices in dental facilities to reduce releases of mercury and mercury compounds to water and land.

Notes:

i. This measure will contribute to increased awareness of the environmental impacts of amalgam and better environmentally sound management of amalgam. This measure may also indirectly contribute to amalgam use reduction, especially for developing country dentists, because of technical challenges of storing and disposing of amalgam, and the additional cost and business infrastructure required for installing and maintaining amalgam separators. However, given these challenges, other measures may contribute more directly and efficiently to amalgam use reduction in developing countries.

ii. Dental offices can be a significant source of unused mercury; governments should work with dentists to ensure mercury is properly stored and managed when it is no longer needed, in accordance with Articles 10 and 11 of the Convention.

While Part II of Annex A calls for a phase down in the use of dental amalgam, countries can take more stringent domestic measures consistent with the Convention that can lead to an eventual phase-out of amalgam use within its territory.

E. REQUIREMENTS FOR NEW MERCURY-ADDED PRODUCTS

Under Paragraph 6 of Article 4, each Party must "discourage" the manufacture and the distribution in commerce of MAPs not covered by any known use prior to the entry into force of the Convention for the country. An exception is provided if an assessment of the risks and benefits of the new mercury-added product demonstrates environmental or human health benefits. The Party is required to share with the Secretariat the information it obtains on the new product type.

Note: There is no definition or explanation as to what "discourage" actually means. The effectiveness of this provision will depend upon how it is interpreted. In our view, as a first step, each Party should have a way of identifying potential new types of products, such as an industry reporting requirement. Of course, a broader restriction on the production and trade of new types of MAPs would satisfy the Convention obligation.

F. WHAT IS THE REVIEW PROCESS FOR ANNEX A?

1. Any Party may submit a proposal to the Minamata Secretariat for listing a MAP in Annex A. The proposal must include information related to the availability, technical and economic feasibility and environmental and health risks and benefits of the non-mercury alternatives to the product. (Article 4.7)

2. Article 4.4 of the Convention mandates that the Secretariat of the Convention collect and maintain information on mercury alternatives and disseminate this information to all the Parties. Further, under Article 17.1, a Party is encouraged to share information on alternatives directly through the Secretariat, or in cooperation with other relevant organizations, including the secretariats of chemicals and wastes conventions.

3. No later than five years after the date of entry into force of the Convention, the Conference of the Parties shall review Annex A and may consider amendments to that Annex in accordance with Article 27. (Article 4.8)

4. In reviewing Annex A pursuant to paragraph 8, the COP shall take into account at least:

   a. Any proposal submitted by Parties that conform to the review process requirements (see Article 4.7);

   b. The information made available pursuant to Article 4.4; and

   c. The availability to the Parties of mercury-free alternatives that are technically and economically feasible, taking into account the environmental and human health risks and benefits. (Article 4.9)

ISSUES TO CONSIDER PRIOR TO RATIFICATION:

1. *What is known in your country about the MAPs covered by Article 4?*

2. *Is there mercury-added product manufacturing in your country? Or is your country primarily importing MAPs? Will mercury-free alternatives from domestic or international sources be commercially available in your country in time to meet the 2020 phase out date? Or will your country need to apply for an Article 6 extension for one or more of the product categories listed in Annex A, Part I?*

3. *What plans need to be put in place (by industry or otherwise) to address stocks of mercury or unused MAPs requiring storage or management?*

4. *Which measures will your country pursue to phase down the use of dental amalgam?*

5. *What should be done to discourage the manufacture and distribution in commerce of new types of mercury products?*

ARTICLE 5: MANUFACTURING PROCESSES IN WHICH MERCURY OR MERCURY COMPOUNDS ARE USED

Some manufacturing processes consume large quantities of mercury, thus control measures to prohibit or restrict mercury use in manufacturing processes is an important element of reducing global mercury demand. Two manufacturing processes alone accounted for over 1,500 MT of mercury demand in 2005.[24] In one of these processes, mercury is used as an electrolyte to produce chlorine and caustic soda, at mercury-cell chlor-alkali plants (MCCAPs). In the other process, mercury is used in a catalyst to produce vinyl chloride monomer (VCM), a precursor to PVC.

Mercury consumption is not the only area of concern at industrial processes. In the case of the MCCAPs, there is often a huge quantity of mercury at the sites when they close or convert to a non-mercury technology. Moreover, since these facilities have handled and used large quantities

of mercury for many years, the likelihood of contamination at the sites is high. As UNEP reports, older MCCAPs are typically contaminated sites which will continue to release mercury into the environment for many years.[25]

Mercury use in VCM production primarily occurs in China. Meeting the huge demand for mercury from that sector in China is the principal justification for continued primary mercury mining in that country. Reducing or eliminating mercury demand in China VCM production will have the dual benefit of substantially reducing global mercury demand and accelerating the phase-out of primary mercury mining.

The Convention will reduce mercury demand in the manufacturing sector utilizing similar measures for products under Article 4. The Convention will phase out mercury uses in two manufacturing processes, phase down or restrict mercury use in three others, require the review of remaining manufacturing processes for possible restrictions within five years after entry into force, and discourage mercury use in new manufacturing processes. To avoid duplication, Article 5 of the Convention does not cover processes using or producing mercury-added products (covered under Article 4) or processes managing mercury-containing wastes (covered under Article 11).

The manufacturing processes now regulated under the Convention, and the applicable restrictions, will be discussed in this chapter. This chapter will also address related requirements affecting these processes such as trade, emissions, releases, storage and disposal.

A. WHAT MANUFACTURING PROCESSES ARE TO BE PHASED OUT UNDER THE CONVENTION?

The use of mercury or mercury compounds in the following manufacturing processes is ***not allowed*** after the specified phase-out dates (unless the Party seeks an extension of time under Article 6):

Notes:

i. Article 5 prohibits the use of mercury, unlike Article 4 where the prohibition focused on the manufacture and trade of mercury products. This reflects the difference between regulating a manufacturing process and a product, whereby a product is produced and traded while a manufacturing process occurs at a fixed location. In either case, once the phase-out dates are triggered, mercury trade related to making the product or using it in the manufacturing process is prohibited because they are no longer allowed uses under the Convention (unless an Article 6 extension of time is obtained).

ii. The table below has 4 columns. The first column, Mercury-Using Process, contains the treaty text of Annex B, Part I. The second column indicates the respective phase-out dates. The third column, Descriptions/Examples contains a layman's description of the manufacturing processes to help readers understand the treaty text. The fourth column, Notes, provides additional information regarding the manufacturing category the reader may find useful.

Mercury- Using Process	Phase- Out Date	Descriptions/Examples	Notes
Chlor-alkali production	2025	MCCAPs produce chlorine and caustic soda from brine using mercury to conduct an electric current for an electro-chemical reaction. The electro-chemical reaction separates the salt into chlorine and sodium; in the reaction, mercury combines with the sodium forming a sodium mercury amalgam separating it from the chlorine. The amalgam is continuously drawn out of the cell and reacted with water to decompose the mercury into sodium hydroxide and mercury.	✓ Mercury-free technologies are widely available for chlor-alkali production, particularly the membrane technology. ✓ According to an inventory of global MCCAPs published in early 2011, 28% of the global MCCAAP chlorine production capacity closed or converted to a mercury-free technology in the previous five years, and an additional 21% would close or convert in the next five years.[26] An updated inventory reflecting some 2012 data was recently prepared.[27] ✓ The EU has the largest number of mercury chlor-alkali plants of any global region. Under the Industrial Emissions Directive (IED), with the Best Available Technique Reference Document (BREF) on the industry finalized, the mercury-cell technology cannot be considered a Best Available Technique (BAT) under any circumstances, triggering a phase-out requirement well in advance of the Convention deadline.[28] ✓ In India, a voluntary agreement between government and industry, initiated by the (Indian) Central Pollution Control Board, led to the closure of most MCCAPs in the country by 2012.[29]
Acetaldehyde production in which mercury or mercury compounds are used as catalyst	2018	Chisso Corporation, the polluter that caused the Minamata tragedy in Japan, used a mercury catalyst in its acetaldehyde production process.	✓ Currently, there is no known facility that uses mercury or mercury compounds in acetaldehyde production.

Notes:

i. The reuse of mercury from decommissioning chlor-alkali facilities is restricted, as discussed in Article 3 above (Article 3.5.b). If the mercury is not reused, the mercury must be disposed of in accordance with Paragraph 3(a) of Article 11.

ii. Parties with chlor-alkali facilities operating prior to the phase-out dates must bear in mind the stockpile identification obligations of Article 3, and the storage requirements of Article 10.

iii. A Party cannot allow new MCCAPs or acetaldehyde production facilities once the Convention enters into force for it, and cannot seek an exemption from Article 6 to delay this prohibition. (Article 5.6)

B. WHAT MANUFACTURING PROCESSES ARE TO BE RESTRICTED (OR PHASED DOWN) UNDER THE CONVENTION?

The table below contains 3 columns. Columns 1 and 2, "Mercury-Using Process" and "Provisions" are the actual treaty text under Annex B, Part II. Column 3, "Description and Notes", provides additional information regarding the manufacturing category that the reader may find useful.

Mercury using process	Provisions	Description/Notes
Vinyl chloride monomer production	Measures to be taken by the Parties shall include but not be limited to: i. Reduce the use of mercury in terms of per unit production by 50 per cent by the year 2020 against 2010 use; ii. Promoting measures to reduce the reliance on mercury from primary mining; iii. Taking measures to reduce emissions and releases of mercury to the environment; iv. Supporting research and development in respect of mercury-free catalysts and processes; v. Not allowing the use of mercury five years after the Conference of the Parties has established that mercury-free catalysts based on existing processes have become technically and economically feasible; and vi. Reporting to the Conference of the Parties on its efforts to develop and/or identify alternatives and phase out mercury use in accordance with Article 21.	✓ In China, manufacturers use a mercury catalyst because they make VCM from a coal-based feedstock, while other manufacturers elsewhere in the world use a petroleum-based feedstock. The Convention text implicitly accepts continued use of the coal-based feedstock by triggering a phase out when the COP finds a mercury free alternative is economically feasible for "existing processes". Research and testing is underway to find this mercury free alternative. ✓ Since the phase-out of mercury use for VCM will be triggered by a COP determination, amendments to Annex B will not be required to completely phase out this mercury use. ✓ China is pursuing the deployment of a catalyst containing about half as much mercury as the traditional catalyst as a way of meeting the 50% use reduction mandate by 2020.

Mercury using process	Provisions	Description/Notes
Sodium or Potassium Methylate or Ethylate	Measures to be taken by the Parties shall include but not be limited to: i Measures to reduce the use of mercury, aiming at the phase-out of this use as fast as possible and within 10 years of the entry into force of the Convention; ii. Reduce emissions and releases in terms of per unit production by 50 per cent by 2020 compared to 2010; iii. Prohibiting the use of fresh mercury from primary mining; iv. Supporting research and development in respect of mercury-free processes; v. Not allowing the use of mercury five years after the Conference of the Parties has established that mercury-free processes have become technically and economically feasible; and vi. Reporting to the Conference of the Parties on its efforts to develop and/or identify alternatives and phase out mercury use in accordance with Article 21.	✓ Sodium methylate is a compound used mainly as a catalyst in the manufacture of biodiesels. ✓ Only two manufacturing plants based in Germany still use mercury to make these compounds. Mercury-free processes to produce sodium methylate are used elsewhere in the world. ✓ Since the phase-out of mercury use for production of these compounds will be triggered by a COP determination, amendments to Annex B will not be required to completely phase out this mercury use.

Mercury using process	Provisions	Description/Notes
Production of polyurethane (PU) using mercury-containing catalysts	Measures to be taken by the Parties shall include but not be limited to: i. Taking measures to reduce the use of mercury, aiming at the phase-out of this use as fast as possible, within 10 years of the entry into force of the Convention; ii. Taking measures to reduce the reliance on mercury from primary mercury mining; iii. Taking measures to reduce emissions and releases of mercury to the environment; iv. Encouraging research and development in respect of mercury-free catalysts and processes; and v. Reporting to the Conference of the Parties on its efforts to develop and/or identify alternatives and phase out mercury use in accordance with Article 21. Paragraph 6 of Article 5 shall not apply to this manufacturing process.	✓ It is estimated that 300-350 tonnes of mercury catalyst may be used globally in PU elastomer applications, of which some 60-105 tonnes is used in the EU.[30] The EU has prohibited five mercury catalysts for PU production where the mercury concentration of the mixtures exceeds 0.01%, beginning in October 2017.[31] ✓ Viable substitutes to mercury catalysts are already in use for over 95% of PU elastomer systems, and have been in use for many years.[32] ✓ Amendments to Annex B may be required to completely phase out this mercury use.

Notes:

i. It remains to be seen whether the provisions requiring "measures...aiming at the phase out...within 10 years" for PU and methylates/ethylates production will be viewed by Parties as a hard, binding obligation or a softer aspirational goal.

ii. A Party cannot allow the operation of new factories using mercury to make VCM, sodium methylate, potassium methylate, or potassium ethylate once the Convention comes into force for it, and cannot seek an extension of time from this prohibition. There is no similar prohibition for polyurethane manufacturing, since Annex B Part II stipulates Paragraph 6 of Article 5 does not apply to this mercury use in manufacturing processes. Readers may note the apparent inconsistency of aiming to phase out mercury use in polyurethane manufacturing within 10 years, while still allowing new plants using mercury to be built.

C. REQUIREMENTS COMMON TO BOTH PROCESSES THAT ARE TO BE PHASED OUT AND RESTRICTED

Article 5.5 of the Convention requires that a Party with one or more facilities that use mercury or mercury compounds in the manufacturing processes listed in Annex B shall:

a. Take measures to address emissions and releases of mercury or mercury compounds from those facilities;

Notes:

i. Article 5.5 expressly requires Parties to address emissions and releases from manufacturing facilities. However, Article 5 does not provide specific guidance on how emissions and releases should be addressed. Countries may refer to Articles 8 (Emissions) and 9 (Releases) of the Convention for possible approaches on how to comply with the Article 5.5 requirement. *(Please see Article 8 and 9 discussions for more details on emissions and releases.)*

ii. For the manufacturing processes covered in Article 5, fugitive (non-stack) air emissions may be significant, therefore Parties should address both potential stack and fugitive air emissions.

b. Include in its Article 21 report, information on the measures it has taken to address emissions and releases; and

c. Make an effort to identify all the facilities within its territory that use mercury or mercury compounds for processes listed in Annex B and submit to the Secretariat, no later than three years after the date of entry into force of the Convention for it, the following:

- Information on the number and types of such facilities; and
- Estimated annual amount of mercury or mercury compounds used in those facilities.

The Secretariat shall make such information publicly available.

D. REQUIREMENTS FOR NEW MANUFACTURING PROCESSES USING MERCURY OR MERCURY COMPOUNDS

Under paragraph 7 of Article 5, each Party must "discourage" the development of any facility using other manufacturing processes in which mercury or mercury compounds are intentionally used that did not exist prior to the entry into force of the Convention for the country. An exception is provided if the "Party can demonstrate to the satisfaction of the COP that the manufacturing process provides significant environmental and health benefits and that there are no technically and economically feasible mercury free alternatives available providing such benefits."

Note: Similar to the Article 4.6 provision, under Article 5.7 there is no definition or explanation as to what "discourage" actually means. In our view, as a first step, the Party should have a mechanism for identifying potential new processes, so that information can be submitted to the Secretariat and steps can be taken to discourage the use of such processes. Of course, a broader restriction on the use of mercury in new processes would satisfy the Convention obligation. Readers should note that the provision governing new processes sets a higher standard of proof than the products provision, and anticipates COP assent or acquiescence in allowing new processes.

E. WHAT IS THE REVIEW PROCESS FOR ANNEX B?

1. Any Party may submit a proposal to the Minamata Secretariat for listing a manufacturing process in which mercury and mercury compounds are used in Annex B. The proposal shall include information related to the availability, technical and economic feasibility and environmental and health risks and benefits of the non-mercury alternatives to the process. (Article 5.9)

2. Article 5.4 of the Convention mandates that the Secretariat of the Convention collect and maintain information on mercury alternatives and disseminate this information to all the Parties. Further, under Article 17.1, a Party is encouraged to share information on alternatives directly through the Secretariat, or in cooperation with other relevant organizations, including the secretariats of chemicals and wastes conventions.

3. No later than five years after the date of entry into force of the Convention, the Conference of the Parties shall review Annex B and may consider amendments to that Annex in accordance with Article 27. (Article 5.10)

4. In reviewing Annex B pursuant to paragraph 9, the COP shall take into account at least:

   a. Any proposal submitted by Parties that conform to the review process requirements (see Article 5.9);

   b. The information made available pursuant to Article 5.4; and

   c. The availability to the Parties of mercury-free alternatives that are technically and economically feasible, taking into account the environmental and human health risks and benefits. (Article 5.11.c)

ISSUES TO CONSIDER PRIOR TO RATIFICATION:

1. Does your country have within its territory one or more manufacturing processes listed in Annex B that uses mercury or mercury compounds? If yes, what steps will you take to develop an inventory of the facilities with these processes?

2. What steps will you take to determine the volume of mercury used in these processes, the mercury supply sources, the emissions and releases from the facilities, and how waste mercury or mercury compounds are managed?

3. Are mercury-free alternative processes available in your country in time to meet the applicable phase out dates? If not, do you know the obstacles or challenges to embracing these alternatives? Will your country need to apply for an Article 6 extension for Annex B, Part I?

4. What measures will be taken to phase out mercury use in these manufacturing processes as soon as possible?

5. Are there existing mercury cell chlor-alkali facilities in the country that will require decommissioning? If yes, how will the mercury at the chlor-alkali plants be properly accounted for and reported to the Convention? How will the country ensure that the mercury from this decommissioning will not be reused except within the chlor-alkali sector, and if applicable disposed following the guidelines for environmentally sound management? What are the responsibilities of the chlor-alkali companies in meeting these Convention obligations?

6. *What measures will be taken to assess and address emissions and releases from the facilities with manufacturing processes listed in Annex B?*

7. *How will your country implement the measures to restrict the use of mercury in the manufacturing processes listed in Annex B, Part II?*

8. *For VCM production, what measures will be taken to reduce reliance on primary mercury mining as the mercury supply source for this sector, and what measures will be taken to achieve a 50% mercury use reduction by 2020?*

9. *What mechanisms will be put in place to prevent new facilities using the processes listed in Annex B and to discourage new manufacturing processes that likewise use mercury?*

ARTICLE 6: EXEMPTIONS AVAILABLE TO A PARTY UPON REQUEST

A Party seeking additional time to comply with the deadlines for the phase-out of mercury use in products (Article 4) or industrial processes (Article 5) must use the procedures specified in Article 6. Under Article 6, two different procedures are established, each potentially allowing a Party to extend the deadline for five years. All exemptions expire ten years after the applicable Article 4 and 5 deadlines.

Notes:

i. The Article 6 process is about obtaining more time to comply, and thus should be viewed as a "temporary" exemption, or more accurately "an extension of the compliance deadline." It does not relieve a Party from complying with the Article 4 or Article 5 obligations permanently or indefinitely.

ii. The Article 6 provisions for an extension of time only apply to Articles 4 and 5—there are no extensions of time available to meet deadlines in other articles of the Convention.

A. THE INITIAL EXEMPTION

The initial exemption filing must be made in writing to the Secretariat upon becoming a Party to the Convention, or in other words, with the ratification instrument submitted to the Secretariat. As a practical matter, this means a Party should determine whether it can meet the Article 4 and 5 deadlines before it ratifies the Convention.[33]

The filing may cover one or more categories of products and/or processes listed in Annexes A and B of the Convention. It can also cover a sub-category of products or processes as warranted. For example, if an extension of time is needed for only one type of battery or measuring device, a Party can tailor its exemption request for only that particular type of battery or measuring device.

Unless a Party requests a shorter exemption, the extension of time granted will be five years from the applicable deadline in Annex A or B. A country becoming a Party after a deadline passed in Annex A or B will not receive the full five year extension of time, since the maximum five year

extension runs from the phase-out dates in the Annexes, not from when the country becomes a Party. Article 6 was drafted this way to eliminate any incentive for delaying ratification of the Convention.

This initial filing must be accompanied by a statement explaining the need for the exemption. The Secretariat will create a public "register" of the exemptions received. The formats for registering the initial exemption were finalized at INC 6, and can be found at http://docs.nrdc.org/international/files/int_14120401b.pdf.

ILLUSTRATIVE EXAMPLES

Scenario I: Country I becomes a Party to the Convention when the Convention enters into force. Accompanying the ratification instrument, Country I registered an exemption for thermometers. Under Annex A of the Convention, mercury thermometers are subject to a 2020 phase-out deadline. Since Country I did not specify a shorter date for achieving compliance in its filing, Country I has until 2025 to meet the product restrictions for mercury thermometers in Article 4.

Scenario 2: Country 2 becomes a Party to the Convention in 2022. Accompanying the ratification instrument, Country 2 registered an exemption for thermometers. Since Country 2 did not specify a shorter date for achieving compliance in its filing, Country 2 also has until 2025 to meet the product restrictions for mercury thermometers in Article 4. Country 2's later ratification did does not affect when the initial extension of time expires for all Parties.

Scenario 3: Country 3 becomes a Party to the Convention in 2027. Accompanying the ratification instrument, Country 3 attempts to register for an exemption for thermometers. At the time Country 3 attempts to register for the exemption, the COP had not granted a second extension of time for mercury thermometers to any Party (*see discussion below*). Country 3's attempted registration is not allowed, under Paragraph 8 of Article 6. If the COP had granted a second extension of time for mercury thermometers to one or more Parties, Country 3's exemption registration will be successful, and will expire in 2030. No other extensions of time are available to Country 3.

B. THE SECOND AND FINAL EXEMPTION

If a Party needs more than a five-year extension of time, it may apply to the COP for a second extension of time, again for a period of time of up to five years. Unlike the first filing, this process involves COP review and approval, and will require a more detailed filing by the Party. Paragraph 6 of Article 6 specifies the information a Party must provide:

a. A report from the Party justifying the need to extend the exemption and outlining activities undertaken and planned to eliminate the need for the exemption as soon as feasible;

b. Available information, including in respect of the availability of alternative products and processes that are free of mercury or that involve the consumption of less mercury than the exempt use; and

c. Activities planned or under way to provide environmentally sound storage of mercury and disposal of mercury wastes.

Note: Since an affirmative act of the COP is required to grant the second extension, it is reasonable to assume these second extensions will be subject to greater scrutiny and harder to obtain. The COP may further elaborate upon the level of detail required for these applications as 2025 approaches.

ISSUES TO CONSIDER PRIOR TO RATIFICATION:

1. The timing of ratification may depend upon when a Party determines its readiness to meet the product and process phase-out deadlines in Articles 4 and 5.

2. If exemptions under Article 6 will be sought, decisions must be made about how broadly or narrowly the exemption requests should be made for the relevant product and process categories.

FREQUENTLY RAISED CONCERN: EXEMPTIONS

What if a country will have difficulties meeting deadlines in the Convention other than the deadlines involving products and processes?

The Article 15 Implementation and Compliance Committee may be the appropriate forum for consultation under these circumstances.

ARTICLE 7:
ARTISANAL AND SMALL-SCALE GOLD MINING

Article 7 applies to artisanal and small-scale gold mining (ASGM), in which mercury is used to extract gold.

ASGM is defined in Article 2 as "gold mining conducted by individual miners or small enterprises with limited capital investment and production." This sector produces about 12-15% of the world's gold, and employs an estimated 10-15 million miners, including 4-5 million women and children.[34]

Mercury is used to extract gold from ore by forming a mercury-gold mixture called an amalgam. Heating the mixture evaporates the mercury, leaving only gold and other precious metals present in the ore. This mercury-based process is currently favored by many ASGM miners over other methods of gold extraction because mercury is currently affordable relative to the price of gold, accessible, simple to use and can be processed anywhere, and allows miners to produce gold quickly, often on the same day the gold is extracted.

ASGM is the largest use of mercury in the world.[35] Mercury emissions to air from ASGM are estimated by UNEP at 727 tonnes annually, making this the largest emitting sector, accounting for more than 35% of global man-made air emissions. Additionally over 800 tons are reportedly released directly to aquatic systems.[36]

ASGM is a complex development issue. While the practice frequently poses major environmental concerns, it also provides an important economic resource for miners and rural communities often in areas or regions where there are very limited economic alternatives.

Article 7 acknowledges the challenge of addressing mercury use in ASGM, especially for developing countries that rely on the economic benefits of mining, by providing these countries the flexibility to tailor their approach to the conditions of the sector in their jurisdiction. The mechanism for providing this flexibility is the National Action Plan.

A. WHAT IS THE SCOPE OF ARTICLE 7?

Article 7 has a very specific scope, covering artisanal and small-scale gold mining that uses mercury amalgamation to extract gold. (Article 7.1)

Article 7 does not cover:

1. Large-scale gold mining.

Note: Emissions and releases from large-scale gold mining operations may be covered under Articles 8 and 9, respectively.

2. Artisanal and small-scale mining for materials OTHER THAN GOLD.

Note: Where gold AND other materials are recovered in the same operations, Article 7 does apply. Moreover, if there is artisanal and small-scale mining of non-gold materials using mercury, other provisions of the Convention may apply, e.g., Article 9 on releases to land and water, Article 10 on storage, and Article 11 on waste management.

3. Artisanal and small-scale gold mining that DOES NOT USE mercury. If the ASGM sector in a country is engaged in mercury-free mining, Article 7 does not apply.

B. WHAT IS ARTISANAL AND SMALL-SCALE GOLD MINING?

Artisanal and small-scale gold mining is defined as "gold mining conducted by individual miners or small enterprises with limited capital investment and production." (Article 2.a)

Notes:

i. The Convention definition includes individuals and "small enterprises", both qualified by "limited capital investment and production".

ii. Countries define ASGM in a variety of ways. The definition under the Convention is broad to allow for variations in differing national contexts. A country will need to examine its national definition of ASGM to determine if it conforms to the Convention or if it needs to further define ASGM to enable it to implement Article 7.

iii. Formal vs. Informal? The scope of Article 7 does not distinguish between formal and informal ASGM operations, thus both types are covered. The Convention envisions the development of formal ASGM operations by mandating that specific steps to facilitate formalization or regulation of ASGM operations be included in the development of a country's National Action Plan (NAP).
(*See NAP discussion below*)

iv. Legal or Illegal? Article 7 applies to both legal and illegal ASGM activities, as explained further immediately following the substantive obligations of Article 7.

C. WHAT ARE THE OBLIGATIONS UNDER THE CONVENTION AFFECTING MERCURY USE IN ASGM?

1. A Party to the Convention must "take steps to reduce, and where feasible eliminate, the use of mercury and mercury compounds in ASGM, and the emissions and releases to the environment of mercury from such mining and processing." (Article 7.2)

Note: Article 7 places this fundamental obligation on all Parties with mercury use in ASGM, even those with insignificant ASGM activity not required to prepare a NAP.

2. A Party must determine if ASGM in the Party's territory is "more than insignificant". (Article 7.3)

Notes:

i. The term "more than insignificant" is undefined in the Convention itself. It us up to the Party to make this determination.

ii. A country may utilize various metrics or criteria to make this determination, such as the amount of mercury used, the number of miners, the volume of gold produced, the number or size of mining sites, and/or the ASGM impacts on public health and the environment.

iii. For funding under the GEF, once the Convention enters into force, a country must determine that its ASGM is more than insignificant, and make this declaration to the Secretariat, in order to qualify for financial assistance. During the interim period before the Convention enters into force, countries must make note of the significance of ASGM in the endorsement letter accompanying the GEF proposal.

3. If there is more than insignificant ASGM activity in its territory, a country must notify the Secretariat, and develop and implement a NAP in accordance with Annex C. A Party may make this determination at any time.

4. After developing the NAP, the country must submit the NAP to the Secretariat no later than 3 years after the Convention enters into force for it, or 3 years after notifying the Secretariat, whichever is later.

5. A Party must then report progress made in meeting its obligations under Article 7 every 3 years thereafter, and include this report under the Article 21 reporting requirement.

Notes:

i. ASGM is a "use allowed" under the Convention (Article 2.k) and thus Parties may trade mercury for this purpose under certain conditions. As discussed under Article 3, mercury from primary mining and decommissioning chlor-alkali plants is not allowed to be used for ASGM.

ii. Moreover, to be "allowed", the use in ASGM must be consistent with the requirements of Article 7 and the importing country's domestic law and NAP. Therefore, mercury uses in ASGM may be considered "not allowed" if the use is illegal under domestic law, contrary to restrictions in the NAP, or in excess of limits in the NAP. Parties are required to manage mercury trade accordingly through the Article 3 consent process. The cooperation of mercury exporting Parties to prevent unwanted or non-conforming shipments of mercury to ASGM countries will enable quick and effective mercury use reduction in ASGM.

iii. A Party may elect to include its NAP as part of an optional National Implementation Plan under Article 20. However, since the preparation of a NAP is a mandatory Convention obligation, Parties may find there are advantages to seeking financial and technical assistance for NAP preparation separately. (*See Article 13 discussion below*)

Article 7 is intended to be a self-contained and comprehensive vehicle for addressing ASGM. However, Article 7 does not expressly address the issues of mercury storage and waste. Further, the Convention text for storage (Article 10) and waste (Article 11) do not expressly address whether these provisions apply to ASGM sites, yet are broad enough to be interpreted to cover ASGM. To fulfill the intention behind Article 7 and uphold the obligations under Articles 10 and 11, we recommend governments address mercury storage and waste management at ASGM sites in their National Action Plans. We note the recently issued NAP guidance (see below) addresses mercury storage and waste (tailings) management.

D. WHAT MUST THE NAP CONTAIN?

Annex C of the Convention specifies that the National Action Plan must contain:

1. National objectives and reduction targets. Although Article 7 does not provide for specific phase-out dates or quantity restrictions on ASGM mercury use (such as in Articles 4 and 5), Parties are required to specify national objectives and mercury use reduction targets as part of the NAP. These targets must be consistent with the Article 7 mandate to take steps to "reduce, and where feasible eliminate" the use of mercury in ASGM. Accordingly, the NAP may include an objective of eliminating mercury use by a future date. The reduction targets must also reflect the steps which will eliminate the worst practices, and the strategies for promoting mercury free ASGM practices, as discussed below.

2. Specific actions to eliminate the worst practices.

    a. Whole ore amalgamation. This is a process where mercury is added to all of the ore during crushing, grinding, or sluicing. This is the most wasteful and polluting process that uses mercury in ASGM, and accounts for a large portion of global ASGM mercury use and releases;

    b. Open burning of amalgam or processed amalgam. To recover the gold, miners heat the amalgam. They often do so in an open fire, pit, or some form of vessel, e.g. clay pot. When the amalgam is burned without the use of a retort or fume hood to capture mercury emissions, the mercury vapors are inhaled by the miners and those around them, and the vapors also contribute to wider mercury contamination;

    c. Burning of amalgam in residential areas. Because women and children are most vulnerable to mercury exposure, amalgam burning should be avoided in residential areas, where women and children are most likely to be exposed. Exposure can occur immediately during the burn, but can also continue over time as mercury deposited on surfaces of structures in the residential areas is re-emitted; and

    d. Cyanide leaching in sediment, ore or tailings contaminated with mercury. Since mercury amalgamation as often used is inefficient, the gold that is not extracted ends up in tailings or residues or materials left over from processing. To recover the gold in the tailings, miners or other processors sometimes use cyanide to dissolve the gold from the tailings. The mixture of cyanide and mercury is highly undesirable and dangerous as cyanide can form soluble complexes with mercury that enhance mercury mobility, and make it more bioavailable.

3. Steps to facilitate the formalization or regulation of ASGM.

Note: Most artisanal and small-scale miners operations are informal in nature with very little organization. The lack of formal organizations contributes to the difficulty of regulating and assisting the sector, and also stands in the way of miners obtaining capital necessary to invest in better practices. Formalization acts to bring miners into the formal economy, offers them an opportunity for more access to capital and longer-term stability, and provides the means to regulate the environmental management practices in the sector, as well as promoting occupational safety and health.

4. Inventories or baseline estimates of the quantities of mercury used in ASGM, and the typical practices used in ASGM. It is necessary to know baseline quantities in order to set and measure progress toward reduction targets. It is also necessary to understand typical practices in order to identify and eliminate the worst practices. Creating inventories will usually require collection of field information in mining communities, as the official statistics on gold production and mercury trade and use are not typically reliable or readily available.

5. Strategies for:

   a. Promoting reduction of emissions and releases of, and exposure to, mercury in ASGM and processing, including mercury-free methods.

Note: As ASGM operations make the transition to mercury-free mining, one focus may initially be on reducing emissions and releases from ongoing mercury use, but over time Parties should aim for elimination of all mercury use, where feasible, as quickly as possible. As discussed above, we recommend that mercury storage and waste management at ASGM sites be addressed in the NAPs, and this element of the NAP would be the appropriate place for inclusion.

   b. Managing trade and preventing diversion of mercury to ASGM.

Note: As discussed above, trade measures (either general ones under Article 3 or strategies taken by the individual Parties under the NAP) aim to restrict the supply of mercury, in order to make it more expensive and less available to miners, and thus incentivizing mercury use reduction and elimination. To accomplish this task, Parties must manage trade and enforce associated import and licensing requirements, including but not limited to preventing the domestic diversion of mercury from another use in the country (like dental amalgam or lamp manufacturing) to ASGM.

   c. Involving stakeholders in the implementation and continuing development of the NAP.

Note: While not specified in the Convention, it is assumed that the term "stakeholder" includes both multiple relevant ministries in the government (environment, mining, health, labor) as well as external stakeholders such as small-scale mining associations, NGOs, large-scale mining interests, and others. In many jurisdictions miners are operating illegally. In this case, their illegal status may make it difficult for governments to engage them. Nevertheless, a successful NAP will need to be based on engagement with small-scale miners, in order to devise strategies that will work on the ground in the mining communities. Governments will need to overcome this obstacle and find avenues of dialogue with the miners to incorporate their feedback and most importantly their participation in the NAP.

d. Protecting public health from the exposure of ASGM miners and their communities to mercury. The strategy should include gathering of health data, training of health care workers, and awareness-raising through health care facilities.

Notes:

i. The gathering of health data is not necessarily limited to health data related to mercury.

ii. Training is necessary for health care workers because they are often unaware of the effects of mercury and unable to recognize and diagnose mercury poisoning.

iii. Existing health care structures that are already integrated into and trusted by communities can provide a readily-available platform for awareness-raising about mercury and its dangers.

iv. Significant mercury exposure can be assumed in many cases due to the way mercury is used and managed at these sites. Actions necessary to protect public health should not be delayed because of a lack of site-specific exposure data.

e. Preventing the exposure of vulnerable populations, particularly children and women of childbearing age, especially pregnant women.

Notes:

i. This element is included to reinforce the importance of limiting exposure to women and children, who are most vulnerable to the effects of mercury. Vulnerable populations should also be interpreted to mean those that rely heavily on eating fish contaminated by ASGM operations.

ii. Children are often engaged at ASGM sites, as laborers or participants in family mining. The use of child labor is a sensitive and important issue in ASGM. The International Labor Organization (ILO) estimates that about one million children aged 5 to 17 are engaged in small-scale mining and quarrying activities worldwide (this figure includes all kinds of mining, not just gold mining using mercury).[37] Thus, strategies to prevent exposure of children to mercury should also consider strategies to eliminate child labor practices in ASGM, especially those aspects of ASGM that require work with amalgam.

f. Providing information to miners and affected communities. Parties should determine how mining communities obtain their information (i.e., radio, community boards, opinion leaders), and design their communication strategies accordingly.

6. Schedule for the implementation of the NAP. The NAP schedule for implementation should be structured so that activity timetables can be readily tracked. Mercury use reduction targets should be consistent with the activity timetables.

Note: At INC 7, guidance on preparing the NAP was provisionally adopted and recommended for use.[38]

E. THE APPLICATION OF ANNEX C TO BOTH LEGAL AND ILLEGAL ASGM

A closer look at the measures under Annex C indicates how Article 7 applies to both legal and illegal ASGM operations:

- Include steps to facilitate formalization (Annex C.1.b)—informal operations are often considered illegal in many jurisdictions, as these operations may not have the necessary permits or requirements to operate. Thus, countries would need to include illegal operations under its NAP;
- Strategies for promoting the reduction of emissions and releases of and exposure to mercury in ASGM (Annex C.1.e)—this measure focuses on the reduction of emissions and releases regardless whether the sources are from legal or illegal operations;
- Strategies for managing trade and preventing diversion of mercury and mercury compounds to ASGM (Annex C.1.f)—this measure requires measures to address the potential illegal trade of mercury and diversion of domestic mercury for use in ASGM;
- Strategies for involving stakeholders in the implementation and continuing development of the NAP (Annex C.1.g)—ASGM miners, whether operating legally or illegally, are stakeholders that have a direct impact on NAP development and implementation. Their engagement and participation in implementing Article 7 is indispensable; and
- Public health strategy on the exposure of ASGM miners and their communities (Annex C.1.h)—the Convention applies equally to both legal and illegal miners, with regard to the protection of public health.

ISSUES TO CONSIDER PRIOR TO RATIFICATION:

1. Do you have ASGM in your territory? Do ASGM miners use mercury?

2. Is ASGM within your country more than insignificant?

3. To make this determination, has your country considered the following:

- *How many miners are working in the ASGM sector?*
- *Is mercury being used in the sector? If so, what production techniques are being used?*
- *How much mercury is being used?*
- *How much gold is produced from ASGM using mercury?*
- *What is the geographic extent and distribution of the mercury-using ASGM operations in your country? In which region or provinces are there ASGM operations, and in which of these is the greatest concentration of operations?*
- *Are mercury-using ASGM operations near bodies of water? Are downstream communities being affected? What is the extent of the affected population?*

4. If your country has not yet collected information to answer these questions, what challenges are your country facing to gather the data or make such an assessment?

5. What are the steps necessary to develop your country's NAP, considering the timeline needed to meet Convention obligations? What information and assistance will your country need to fully develop its NAP?

6. *What options are available for financial and technical assistance? How will those options affect your planning for NAP preparation and overall Convention implementation?*

7. *What is the current policy of your country with respect to ASGM? Are there existing laws governing ASGM? Will these laws need to be amended to accommodate the requirements of the Convention?*

8. *Which agency or department is in charge of the ASGM sector? What is the level of coordination between this agency or department with other agencies or departments that may need to be engaged in addressing ASGM mercury use concerns? Who will lead the creation of the National Action Plan? What formal or informal agreements are needed among ministries who must participate in the formulation of the action plan?*

9. *Where does the mercury used in ASGM come from? To what extent is mercury diverted from other uses in your country? Does your country import mercury, legally or illegally? Do you know the origin of the exports? How can you coordinate with those exporting countries to better control mercury imports for ASGM? Are there opportunities for regional coordination on this issue?*

FREQUENTLY RAISED CONCERNS: ASGM

1. *The "more than insignificant" ASGM determination is a key requirement of Art. 7. Who will review this determination by the Parties?*
   A country has the discretion to determine whether there is a "more than insignificant" level of ASGM in its territory. There is currently no explicit review mechanism for this determination, other than the Article 15 provisions for overall Convention compliance. We note the Secretariat is only required to be informed of positive findings of significance, therefore it is unclear to what extent the justifications for a negative finding will be made routinely available to Parties and stakeholders.

2. *What are the negative consequences of making an insignificant determination if it is a close call?*
   A country will not be eligible to receive funding under the GEF for Article 7, both for the NAP preparation and development, and for its NAP implementation.

3. *What if ASGM is insignificant now, but becomes significant in the future?*
   A Party, at any time, may notify the Secretariat of the Minamata Convention if it determines that the level of ASGM in its territory is more than insignificant. (Article 7.3)

4. *Who will review the NAPs Parties have prepared?*
   There is no explicit procedure for review of the NAPs, but since they must be submitted to the Secretariat under Article 7, they will presumably be available for review by all the Parties and other stakeholders. Moreover, the required three-year progress reports must be submitted to the Secretariat as well in conjunction with the Article 21 reporting obligations, and thus will also be available for public review. Issues related to Article 7 compliance will be addressed under the overall Convention Article 15 compliance provisions.

ARTICLE 8: EMISSIONS[39]

The purpose of Article 8 is to reduce mercury emissions to air from five of the most significant source categories identified during the Convention negotiations. According to the 2013 United Nations Environment Programme's Global Mercury Assessment, current man-made sources are responsible for about 30% of annual emissions of mercury to air, which was estimated at 1,960 tonnes in 2010.[40] Man-made emissions also contribute to the vast majority of mercury re-released into the environment annually from surface soils and oceans, now accounting for about 60% of the global air pollution pool.[41] Progress in reducing mercury global pollution cannot be achieved without significant reductions in atmospheric emissions leading to corresponding direct and re-release declines over time.

Coal and other fossil fuels contain mercury as a natural impurity. A significant amount of mercury is released into the atmosphere and environment from the volume of coal combusted in coal-burning power plants, industrial boilers, and residential heating units. Metal ores and limestone also contain naturally occurring mercury, which can be emitted during metal smelting and refining, and cement manufacturing. Mercury is also intentionally added to certain products, and is released to air when these products or wastes from their manufacturing are incinerated.

A. WHICH AIR EMISSION SOURCES ARE COVERED BY THE CONVENTION?

Annex D lists the five source categories covered by the Convention:

1. Coal-fired power plants;
2. Coal-fired industrial boilers;
3. Smelting and roasting processes used in the production of lead, zinc, copper, and industrial gold;
4. Waste incineration facilities; and
5. Cement production facilities.

Notes:

i. Waste incineration facilities includes incinerators burning hazardous waste, municipal waste, medical waste, and/or sewage sludge. The cement production source category can be expected to cover the co-burning of wastes in cement plants as well.

ii. Small, artisanal gold mining is covered under Article 7. The gold mining facilities covered in Article 8 are large, industrial operations where mercury is present as an impurity in the mined ore body, and can be captured in emission control devices.

iii. Governments may choose not to regulate every source in each of these categories, provided the sources regulated account for at least 75% of the emissions in the source category. (Article 8.2.b) Guidance on how to set these potential regulatory thresholds or criteria was provisionally adopted at INC 7. (*See discussion below*)

iv. For developing countries with a limited number of sources, it may be easier to cover all sources in the five categories. Coal-fired industrial boilers will frequently be the source category where establishing thresholds may be considered, given the potentially large number of facilities in varying sizes within this category.

B. WHAT EMISSION CONTROL MEASURES ARE REQUIRED FOR THE REGULATED OR RELEVANT SOURCES?

1. For New Sources. Parties MUST use best available techniques (BAT) and best environmental practices (BEP) to control and reduce emissions, as soon as practicable but no later than five years after the Convention enters into force for that Party.

Notes:

i. A "new" source is a source where construction (or substantial modification) begins one year after the Convention enters into force for the Party. (Article 8.2.c)

ii. Even though compliance is not required until five years after the Convention comes into force, the definition of "new" applies to facilities starting construction after just one year, so as a practical matter, facilities identified as "new" should be designed, constructed, and operated to meet BAT/BEP from their start-up.

iii. The identification of BAT/BEP should take into consideration cross-media transfers/effects. Guidance on BAT/BEP was provisionally adopted at INC 7 (*See discussion in next section*).

iv. Emission limit values may be used to regulate new facilities as long as they are consistent with the application of BAT/BEP.

2. For Existing Sources. A government may choose among five options to control mercury emissions from existing sources. Regardless of the option chosen, compliance with the control measures should be achieved as soon as practicable, but certainly no later than 10 years after the Convention becomes effective for the country. The five options specified in the Convention text are:

a. A quantified goal for controlling and, where feasible, reducing emissions from relevant sources;

b. Emission limit values for controlling and, where feasible, reducing emissions from relevant sources;

c. The use of best available techniques and best environmental practices to control emissions from relevant sources;

d. A multi-pollutant control strategy that would deliver co-benefits for control of mercury emissions; and

e. Alternative measures to reduce emissions from relevant sources.

Notes:

i. An existing source is any source that is not a new source. (Article 8.2.e)

ii. The BAT/BEP requirements for new and existing facilities may be different. The emission limit values adopted for existing facilities should be consistent with the BAT/BEP requirements for existing facilities, in much the same way the consistency requirement applies to new facilities, as discussed above.

iii. If countries decide to take the approach of setting a quantified goal for controlling, and where feasible, reducing emissions from relevant sources, this will require a quantitative inventory of current emissions from relevant sources, from which the reduction goal can be set. The reduction goal can apply to individual sources (e.g., reductions at each power plant), to a source category overall (e.g., reduction in emissions across all power plants combined), or to all source categories combined.

iv. A multi-pollutant control strategy refers to a strategy that takes advantage of optimizing existing air pollution control originally installed to capture other pollutants, such as particulate, sulfur dioxide (SO_2) or nitrogen oxide (NOx), in order to capture mercury as well.

v. The "alternative measures" option under (e) requires overall "reduction" of emissions from the sector or sectors, not just control of individual sources. This distinction is important where a large number of new facilities are anticipated.

vi. A country may apply the same approach to all relevant existing sources, or adopt varying approaches for different source categories. Regardless of the option(s) selected, the objective is for these measures to achieve reasonable progress in reducing emissions over time. (Article 8.6)

C. WHAT ADDITIONAL MEASURES APPLY TO BOTH NEW AND EXISTING SOURCES?

1. A country MAY prepare an optional plan which will set out its expected targets, goals and outcomes. If a country decides to develop a plan, this must be submitted to the COP within 4 years after the Convention comes into force for the Party (Article 8.3).[42] The regulatory approach of setting a quantified goal overall or for a particular sector is compatible with plan preparation, since the approach requires a good understanding of existing baseline emissions and how the quantified reductions will be achieved.

2. Countries are required to submit information on what measures are being taken and their effectiveness, as part of the Article 21 reporting requirements. (Article 8.11)

3. Each Party must establish and maintain an inventory of emissions, as soon as practicable, but no later than five years after the Convention enters into force for that Party. (Article 8.7)

ARTICLE 8: GUIDANCE ASSIGNED TO AN EXPERT GROUP TO PREPARE FOR COP1

As part of the Final Act adopted at the Diplomatic Conference for the Convention in October 2013, an expert group was formed to develop the guidance specified in Article 8. The expert group completed its deliberations to prepare the required guidance prior to INC 7.[43] This group prepared:

- Guidance on BAT/BEP, taking into account difference between new and existing sources, and the need to minimize cross-media effects (Article 8.8.a);
- Guidance on how to implement the various regulatory options for existing facilities, including determining goals and setting emission limit values (Article 8.8.b);
- Guidance for setting discretionary regulatory thresholds for excluding sources in each of the five covered sectors (Article 8.9.a); and
- Guidance for how to prepare emission inventories (Article 8.9.b).

The guidance was revised and provisionally adopted at INC 7, in anticipation of COP1.

ISSUES TO CONSIDER PRIOR TO RATIFICATION:

1. *Do you have facilities included within the five source categories covered by the Convention? Do you have an inventory of emissions from these sources? What additional information do you need regarding any of these source categories?*

2. *Are there mercury emission standards or legally required control measures in place for the relevant source categories in your country? Do any of the relevant sources have in place measures to reduce mercury emissions? Can these measures be further optimized?*

3. *Which control measure approaches for existing facilities do you want to consider, given your national circumstance? What information and assistance will you need to fully consider the options?*

4. *Considering the types and number of air emission sources covered by the Convention in your country, is the preparation of a plan warranted to implement Article 8? If yes, what are the steps necessary to develop your plan, considering the timeline needed to meet Convention obligations?*

5. *Will the Article 8 plan be included within a broader National Implementation Plan under Article 20, if your country is preparing one?*

6. *If relevant, have you accessed and reviewed the Process Optimization Guidance for coal-fired power plants developed by UNEP?*[44]

FREQUENTLY RAISED CONCERNS: EMISSIONS

1. *Can BAT/BEP be applied to existing sources?*

   YES. Countries have the option to adopt the BAT/BEP measures approach as the way to control emissions from existing sources. BAT/BEP is mandatory for new sources.

2. *Can an existing source become a new source, making application of the BAT/BEP requirements mandatory?*

   YES. An existing source becomes a new source if it is "substantially modified" after one year from when the Convention comes into force for a government. The term "substantial modification" is defined as a modification resulting in a significant increase in mercury emissions, excluding any change in emissions resulting from by-product recovery, as determined by the government (Article 8.2.d). Typically, such modifications may include a major expansion in capacity or output.

ARTICLE 9:
RELEASES

The purpose of Article 9 is to reduce mercury releases to land and water from sources not addressed by other provisions of the Convention. The 2013 UNEP Global Mercury Assessment reported that the anthropogenic releases of mercury to water in 2010 totaled hundreds of tonnes at a minimum.[45]

Many of the provisions of Article 9 are patterned after Article 8, but there are important differences which will be highlighted below.

A. WHICH SOURCES OF RELEASES TO LAND AND WATER ARE COVERED BY ARTICLE 9?

Under Article 9, each Party must identify significant point sources of mercury releases to land and water that are not addressed by other provisions of the Convention. There is no required list of sources like in Article 8, so the sources controlled under Article 9 may vary from country to country.

Notes:

i. Countries need to identify these "relevant point sources" no later than 3 years after the Convention enters into force for that Party, and regularly thereafter. (Articles 9.2.b, 9.3)

ii. ASGM sites and waste management facilities covered under Article 11 are examples of sources of releases which may be addressed in other parts of the Convention.

B. WHAT CONTROL MEASURES FOR RELEASES ARE REQUIRED FOR REGULATED OR RELEVANT SOURCES?

A Party must take measures to "control" the releases to land and water using one or more of the following approaches:

a. Release limit values;

b. The use of BAT and BEP;

c. A multi-pollutant control strategy that will deliver co-benefits for control of mercury releases; and

d. Alternative measures to reduce releases from relevant sources. (Article 9.5)

Notes:

i. There is no distinction between new and existing sources regarding the control measure approaches authorized in Article 9; the same mechanisms can be used for both.

ii. The definition of BAT/BEP in Article 2 applies to both Article 8 and 9.

iii. The COP must, as soon as practicable, adopt guidance on BAT/BEP, taking into account difference between new and existing sources (sources that are not new sources), and the need to minimize cross-media effects. (Article 9.7) The definitions of new and existing facilities are the same as Article 8. (Article 9.2)

iv. Release limit value means a limit on the concentration or mass of mercury or mercury compounds, often expressed as "total mercury", released from a point source.

v. A country may apply a similar approach to all relevant sources, or adopt varying approaches for different source categories similar to Article 8.

vi. Although Article 9 omitted the approach of developing quantified goals for controlling and reducing releases from relevant sources found in Article 8, a Party may include such targets or goals if they prepare an optional national plan for implementing Article 9 or a National Implementation Plan under Article 20.

C. WHAT ADDITIONAL MEASURES ARE AVAILABLE UNDER ARTICLE 9 TO CONTROL RELEASES?

a. As noted above, a country MAY prepare a plan, which will set out its expected targets, goals and outcomes.

Note: If a country decides to develop an optional plan, the plan must be submitted to the COP within 4 years after the Convention comes into force for that country. A country may also combine this plan with the optional National Implementation Plan. (*See discussion on Article 20*)

b. A Party must establish and maintain an inventory of emissions from the relevant sources, as soon as practicable, but no later than 5 years after entry into force of the Convention for that Party. (Article 9.6)

Note: Countries are required to submit information on what measures are being taken and their effectiveness. The information required under Article 9 must be submitted pursuant to the Article 21 reporting requirements.

ISSUES TO CONSIDER PRIOR TO RATIFICATION:

1. *Do you know if you have significant sources of mercury releases to land or water in your country which are not addressed by other parts of the Convention? If not, what are the main obstacles in identifying such facilities and what additional information do you need regarding any of these potential source categories?*

2. *Are there mercury release standards or legally required control measures in place for the relevant source categories in your country? Do any of the relevant sources have in place measures to reduce mercury? Can these measures be optimized?*

3. *Which control measure approaches for existing facilities do you want to consider, given your national circumstance? What information and assistance will you need to fully consider the options?*

4. *Is the preparation of a plan warranted to implement Article 9? If yes, what are the steps necessary to develop your plan, considering the timeline needed to meet Convention obligations?*

5. *Will the Article 9 plan be included within a broader National Implementation Plan under Article 20, if your country is preparing one?*

ILLUSTRATIVE EXAMPLES

Subject to further clarification in future guidance, sources of significant releases to land and water not addressed by other provisions of the Convention may include:

- Existing primary mercury mines operating prior to the phase-out deadline in Article 3;
- The air emission sources identified in Annex D; and
- Non-ferrous mining operations not covered under Annex D or Article II.

ARTICLE 10: ENVIRONMENTALLY SOUND INTERIM STORAGE OF MERCURY, OTHER THAN WASTE MERCURY

Improper or inadequate care in the collection, handling, transport and storage of mercury and mercury compounds can result in emissions and releases of the toxic material that can eventually harm humans and the environment. To prevent the possible adverse effects of mercury as it is held in various locations prior to its intended use, the Convention requires countries to take measures to ensure the environmentally sound storage of mercury under Article 10.

Article 10 only covers the environmentally sound interim storage of mercury and mercury compounds. The Article 10 scope is limited to "interim" or temporary storage since this is storage associated with an allowed use under the Convention. The environmentally sound management of waste mercury and mercury compounds is covered in the following section, Article 11: Mercury Wastes. Article 11 covers the long-term management/disposal of waste mercury and mercury compounds, which will become increasingly important as allowed uses are phased out over time.

A. WHAT ARE THE CONVENTION OBLIGATIONS ON INTERIM ENVIRONMENTALLY SOUND STORAGE?

Article 10 prescribes the following:

1. Take measures to ensure the interim storage of mercury and mercury compounds, other than wastes, intended for a use allowed to a Party under this Convention is undertaken in an environmentally sound manner. (Article 10.2)

Notes:

i. Article 10 of the Convention does not define "environmentally sound interim storage". Instead the Convention instructs the COP to develop and adopt guidelines on "environmentally sound interim storage". There is no deadline in the Convention text for completion of this work, but at INC 7, a roadmap to develop guidelines for consideration at COP1 was approved.

ii. In the guidelines to be developed, the COP may address issues such as: quantity limits, defining what is considered an appropriate interim period of storage, best practices for handling and transportation, public safety, etc. The extent of the issues to be covered will be determined by the COP.

iii. The COP may also adopt interim storage requirements as binding obligations by including them as a proposed new annex to the Convention. In this case, the Article 27 procedures for adding or amending annexes will be followed.

iv. In developing the guidelines, the COP will take into account guidelines developed under the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal and other relevant guidelines. (Article 10.2)

✓ The Basel Convention has developed draft technical guidelines on the environmentally sound management of mercury wastes.[46]

v. As a practical matter, the "interim" storage to facilitate allowed uses under the Convention may occur at:

- Facilities supplying mercury or mercury compounds (*see Article 3 for a discussion of mercury supply sources*) and facilities associated with the trading of mercury or mercury compounds for an allowed use;
- Mercury-added product manufacturing plants;
- Sites with industrial processes using mercury; and
- Other designated interim storage locations.

vi. The storage obligation applies to "mercury compounds" as well as mercury. However, in this context, the term "mercury compounds" is narrowly defined to include only the six compounds listed in Article 3.1.b. The storage obligation also does not apply to mercury-added products.

vii. As discussed under Article 7, we interpret the Article 10 obligation as applying to mercury to be used in ASGM, since ASGM is an allowed use. Accordingly, storage at ASGM sites should be addressed in the ASGM National Action Plans, as indicated in the ASGM NAP guidance.

viii. Mercury and mercury compounds in "interim" storage under Article 10 may become "wastes" when the intended "allowed use" for the mercury or mercury compounds is phased out or terminates for other reasons. Article 11 will apply when the mercury or mercury compounds become wastes. (*For more details on mercury wastes, please see succeeding section on Article 11.*)

2. Cooperate with each other and with intergovernmental organizations and other entities, such as NGOs, academe, etc. to enhance capacity building for environmentally sound interim storage of such mercury and mercury compounds. (Article 10.4)

i **Note:** Countries will need to assess whether they have any of the types of facilities which may need to store mercury, as discussed above, and prepare the appropriate industry or sector for environmentally sound interim storage compliance. This will entail preparatory work such as facility identification, data gathering, and developing guidance or regulations outlining handling and storage procedures, all of which can be facilitated by having close consultations with the affected stakeholders.

ISSUES TO CONSIDER PRIOR TO RATIFICATION:

1. *Do you have one or more of the types of facilities which may store mercury or mercury compounds prior to an allowed use under the Convention?*

2. *Do you have existing storage requirements that cover all the relevant facilities? If not, how would you approach developing storage requirements?*

3. *What control measures or administrative mechanism(s) do you need to ensure compliance with storage requirements at the relevant facilities?*

ARTICLE 10 TASKS ASSIGNED TO THE COP:

1. Adopt guidelines on environmentally sound interim storage; and

2. May adopt requirements for storage under Article 10 as an additional annex to the Convention.

ISSUE TO CONSIDER: REPORTING ON MERCURY STORAGE

Large stockpiles of mercury and certain mercury compounds should be reported to the Secretariat (see Article 3). In addition, Parties can be expected to report on the measures taken to ensure environmentally sound storage. To meet national needs, a country may wish to consider monitoring and tracking requirements necessary to ensure mercury is not stored longer than intended and is destined for an allowed use under the Convention and national law.

ARTICLE 11: MERCURY WASTES

Mercury wastes can come in a variety of forms, depending upon the source. Industrial processes using mercury will create wastes from both the manufacturing process and pollution control operations, such as sludges and spent catalysts. Mercury-added products become wastes when discarded, typically at the end of their useful life. Products also become wastes if the product cannot be sold legally or lacks a market due to consumer preference. The cleanup of contaminated sites may generate mercury wastes, such as treatment residuals and contaminated soil. Finally, mercury and mercury compounds can and will become wastes when they are destined for disposal instead of an allowed use. The Convention anticipates mercury becoming waste as a consequence of restrictions on global supply and trade (*see Article 3 discussion*) and reduced global demand. (*See Articles 4-7 discussions*)

Article 11 is the provision of the Convention addressing these mercury wastes, and its implementation will eventually result in the final disposal of these hazardous wastes.

The Convention is mutually supportive of the Basel Convention and complementary in addressing the mercury waste issue. (¶ 10, Preamble)

Developing countries should be looking at what both Conventions can offer to help them implement their obligations with respect to the environmentally sound management (ESM) of mercury waste.

At the core of Article 11 is the focus on ESM of mercury wastes and controls over its transboundary movement. The Convention aspires to prevent both improper management of the waste at the domestic level and unwanted mercury waste dumping among nations.

A. WHAT IS COVERED UNDER ARTICLE 11?

Article 11 of the Minamata Convention defines mercury wastes to mean substances or objects ***consisting***, ***containing***, or ***contaminated*** with mercury or mercury compounds in a quantity above the relevant thresholds that are:

- Disposed of;
- Intended to be disposed of; or
- Required to be disposed of by the provisions of national law or this Convention. (Article 11.2)

Notes:

i. In this context, the term "mercury compounds" is broadly defined to mean any substance containing mercury and other chemicals separable only through chemical reactions. (Article 2.e)

ii. The "relevant threshold" for mercury waste is still undefined. The COP will define the threshold in collaboration with the Basel Convention. (Article 11.2) There is no deadline in the Convention for determining this threshold.

iii. The relevant definitions of waste-related terms under Article 11 are the same definitions that would apply under the Basel Convention (Article 11.1).[47] Thus, the term "disposal" under the Minamata Convention has the same definition as the Basel Convention's definition of disposal. The Basel Convention defines disposal "as any operation specified in Annex IV." [48] Annex IV of the Basel Convention enumerates various disposal operations.[49]

iv. Article 11 does not define "intent to dispose", nor does it provide criteria that will help ascertain intent. The Basel Convention likewise has no definition for the phrase "intent to dispose". This is an issue which may require clarification in the future.

B. WHAT IS EXCLUDED UNDER ARTICLE 11?

Article 11 does not cover overburden, waste rock and tailing from mining, except from primary mercury mining, unless they contain mercury or mercury compounds above thresholds defined by the Conference of the Parties. (Article 11.2)

Notes:

i. In mining, overburden refers to the soil or the natural rock that sits above or around the ore body. The Convention makes an assumption that the overburden will not be heavily contaminated with mercury.

ii. Tailings are different from overburdens, as the former refers to remaining materials after the valuable components have been extracted from the processed ore.

iii. As noted above, the relevant threshold under Article 11.2 will be defined by the COP.

iv. As discussed under Article 7, we interpret the Article 11 obligation as applying to ASGM mercury wastes. Therefore, ASGM wastes such as tailings should be addressed in National Action Plans under Article 7, as indicated in the ASGM NAP guidance.

C. WHAT MEASURES ON MERCURY WASTES ARE REQUIRED UNDER ARTICLE 11?

Article 11 requires Parties to take the following appropriate measures:

1. Ensure that mercury waste is managed in an environmentally sound manner, taking into account Basel guidelines and requirements to be developed by the COP. (Article 11.3.a)

Notes:

i. Article 11 mandates that the COP develop additional requirements for ESM. These requirements shall be adopted as an additional annex to the Convention. The only guidance provided by Article 11 in developing additional ESM requirements is for the COP to take into account the Parties' waste management regulations and programmes.

ii. While both the Basel and Minamata Conventions will address mercury wastes, they can be expected to bring different strengths to the global management of mercury wastes. For example, since the Basel Convention technical guidelines for ESM of specific hazardous wastes do not generally trigger corresponding mandatory obligations for Basel Parties, the Minamata Convention may have a stronger impact on local implementation of ESM, depending upon how the anticipated new annex is drafted and then adopted.

iii. The COP shall seek to cooperate closely with the relevant bodies of the Basel Convention in the review and update, as appropriate, of the Basel guidelines referred to in this measure. (Article 11.4)

2. Ensure that mercury waste can only be recovered, recycled, reclaimed or directly re-used for a use allowed under the Convention, or for environmentally sound disposal. (Article 11.3.b)

Notes:

i. As discussed earlier in Article 3, the Convention seeks to reduce global mercury pollution through complementary measures to minimize mercury supply and demand. Controlling how mercury derived from waste is used is one mechanism to minimize the global mercury supply, by requiring controls to prevent the diversion of this mercury to illegal uses.

ii. Mercury from decommissioning chlor-alkali plants is specifically regulated under Article 3. As we interpret Article 3, this mercury cannot be reused, except at another chlor-alkali plant. Absent such reuse, this mercury is a waste and must be disposed in accordance with Article 11. (*For more information on mercury waste coming from decommissioning chlor-alkali facilities, please see Article 3 discussion.*)

3. Not to transport mercury wastes across international boundaries, except for environmentally sound disposal in conformity with Article 11 and the Basel Convention, and except where Basel does not apply. (Article 11.3.c)

Notes:

i. The situation covered by the above provision is when NEITHER the exporter and importer are Parties to the Basel Convention, but at least one country is a Party to the Minamata Convention. As of this writing, the Basel Convention has 181 Parties; therefore, the likelihood that the Basel Convention is inapplicable is very small.[50]

ii. Given the current conditions, a majority of the mercury waste exports will occur between Parties to the Basel Convention. In a situation where one country is not a Party to the Basel Convention, Article 11 of the Basel Convention shall apply for the Basel Party.

iii. In circumstances where the Basel Convention does not apply to transport across international boundaries, a Party to the Convention shall allow such transport only after taking into account relevant international rules, standards, and guidelines. (Article 11.3.c)

4. Parties "are encouraged" to cooperate with each other and with intergovernmental organizations and other entities to develop and maintain global, regional and national capacity for the management of mercury wastes in an environmentally sound manner. (Article 11.5)

ISSUES TO CONSIDER PRIOR TO RATIFICATION:

1. *Is your country a party to the Basel Convention? Does your country have existing bilateral or regional agreements with countries that are not party to the Basel Convention?*

2. *What are the potential sources and types of mercury wastes generated in your country? What current regulations apply to such wastes? How are Basel Convention related requirements applied to such wastes?*

3. *What capabilities are there in your country to safely manage mercury wastes? What additional capabilities are required? What role should the private sector, such as product manufacturers and importers, play in adding or improving current management capabilities?*

FREQUENTLY RAISED CONCERN: MERCURY WASTES

1. *Is the Minamata Convention in conflict with the Basel Convention?*
   NO. The Convention recognizes it is mutually supportive with other multi-lateral environmental agreements and that the newly created obligations under it are not intended to affect the rights and obligations of any Party deriving from any existing international agreement. (¶ 10 and 11, Preamble)

   Moreover, in the development of guidelines and requirements on mercury wastes under the Minamata Convention, the COP is instructed to collaborate with relevant bodies of the Basel Convention, as well as consider appropriate Basel Convention Guidelines. (Article 11)

2. *How can the Minamata Convention assist my country in implementing the mercury waste provisions of Article 11?*
   The Minamata Convention establishes mechanisms and structures that cover the financial, technical, and information needs of countries to better implement obligations created under the Convention. (*See Chapter 3 discussion for details*) Countries should also look at opportunities and support from the Basel Convention and its regional centers.

ARTICLE 11: TASKS ASSIGNED TO THE COP

1. Define relevant thresholds in mercury wastes. No timeframe is specified in the Convention.

2. Adoption of additional requirements for ESM. No timeframe is specified in the Convention.

3. Cooperate closely with relevant bodies of the Basel Convention, as well as consider appropriate Basel Convention Guidelines, in the review and update of guidelines or requirements for ESM of mercury wastes.

ARTICLE 12: CONTAMINATED SITES

Contaminated sites come in many forms. They can be active, where existing processes or practices continue to contribute to the contamination, and historical, where such processes or practices have stopped but the pollution remains. The cause of the contamination can vary as well, from large industrial operations such as chlor-alkali facilities to smaller operations such as ASGM sites. Moreover, the sources of the contamination may be waste management activities, stack emissions, fugitive emissions, and/or spills and emergency incidents. The risks to local communities and exposed populations is the principle concern at contaminated sites, although UNEP estimates global mercury releases to water from contaminated sites are approximately 8-33 tonnes per year.[51]

No matter which form the contaminated site may take, many similar matters need to be addressed, such as determining the nature and extent of contamination, the risks to exposed populations, remediation options, and the identity of entities or persons who should assume liability for some or all or the remediation costs. These can sometimes be complex issues, technically and legally, particularly where polluter liability in a particular situation is not clearly defined.

Article 12 calls for the creation and adoption of guidance in approaching contaminated sites, but contains no mandatory obligations to propel progress in cleaning up contaminated sites. Nor does it advance the development of pollution liability frameworks to facilitate site remediation. In this sense, Article 12 can be viewed as principally a capacity building provision, with governments largely left to their own devices to develop the legal framework, and the financial and technical capability, to remediate mercury contaminated sites.

A. WHAT ARE THE SALIENT POINTS OF ARTICLE 12 ON CONTAMINATED SITES?

1. Parties shall "endeavor" to develop strategies for identifying and assessing sites contaminated by mercury or mercury compounds. (Article 12.1)

2. Any action to reduce risks posed by contaminated sites shall be done in an environmentally sound manner, incorporating where appropriate, an assessment of risks to human health and the environment. (Article 12.2)

3. Parties are encouraged to cooperate in developing strategies and implementing activities for identifying, assessing, prioritizing, managing, and remediating contaminated sites. (Article 12.4)

4. The COP shall adopt guidance on managing contaminated sites that may include methods and approaches for:

   a. Site identification and characterization;

   b. Engaging the public;

   c. Human health and environmental risk assessments;

   d. Options for managing the risks posed by contaminated sites;

   e. Evaluation of benefits and costs; and

   f. Validation of outcomes. (Article 12.3)

Notes:

i. No deadline is specified for the adoption of this guidance, although at INC 7 a roadmap for developing the guidance was requested from the Secretariat for consideration at COP1.

ii. Whether a Party may designate contaminated sites, by type or sector source, as "relevant sources" of releases to land and water to be controlled under Article 9 is an issue which may be addressed in the upcoming Article 9 guidance (*see Article 9 discussion above*). If such a designation can be made, the obligation to control releases to land and water from the relevant sources becomes a mandatory obligation.

FREQUENTLY RAISED CONCERN: CONTAMINATED SITES

Does the Convention provide recourse against those responsible for mercury-contaminated sites?

NO, it does not. Governments need domestic legal authorities to establish the requisite liability. Moreover, the absence of mandatory obligations under Article 12 may adversely impact efforts to obtain financial assistance through the Convention mechanisms, therefore the development of domestic legal authorities may be especially important for addressing contaminated sites.

ARTICLE 16: HEALTH ASPECTS

Mercury adversely impacts both human health and the environment. Article 16 promotes program development related to the health aspects of mercury, recognizing the activities will involve WHO, public health ministries, and other stakeholders involved in the delivery of health services.

Article 16 provides guidance to health ministries on the activities they can undertake to minimize the mercury exposure of vulnerable populations, and the adverse consequences of such exposures.

A. WHAT HEALTH-RELATED MEASURES ARE PARTIES ENCOURAGED TO UNDERTAKE UNDER ARTICLE 16?

1. Promote the development and implementation of strategies and programmes to identify and protect populations at risk, particularly vulnerable populations;[52]

Notes:

i. The above activities may include:

- Adopting science-based health guidelines relating to the exposure to mercury and mercury compounds;
- Setting targets for mercury exposure reduction, where appropriate; and
- Public education, with the participation of public health and other involved sectors. (Article 16.1.a)

ii. Fish consumption advisories are perhaps the most common example of a mercury health guideline.

2. Promote the development and implementation of science-based educational and preventive programmes on occupational exposure to mercury and mercury compounds;

3. Promote appropriate health-care services for prevention, treatment and care for populations affected by the exposure to mercury or mercury compounds; and

Note: Under Article 7 and Annex C, development of a public health strategy to address mercury exposures at ASGM sites is a mandatory obligation for countries with more than insignificant ASGM activity.

4. Establish and strengthen, as appropriate, the institutional and health professional capacities for the prevention, diagnosis, treatment and monitoring of health risks related to the exposure to mercury and mercury compounds.

ARTICLE 16 TASKS ASSIGNED TO THE COP:

Under Article 16.2 the COP should:

1. Consult and collaborate with the WHO, ILO and other relevant intergovernmental organizations, as appropriate; and

Note:

In May 2014, the World Health Assembly encouraged WHO member countries to take the necessary domestic measures to promptly sign, ratify and implement the Minamata Convention.[53] The World Health Assembly also requested the WHO Director General to:

- Facilitate WHO's efforts to provide advice and technical support to Member States to assist them towards the implementation of the Minamata Convention on Mercury in all health aspects related to mercury;

- Support WHO member countries to develop and implement strategies and programmes to identify and protect populations at risk, particularly vulnerable populations, which may include adopting science-based health guidelines relating to the exposure of mercury and mercury compounds, setting targets for mercury exposure reduction, where appropriate, and public education, with the participation of health and other involved sectors; and
- Cooperate closely with the Minamata Convention Intergovernmental Negotiating Committee, the Conference of the Parties and other international organizations and bodies, to fully support the implementation of the health-related aspects of the Minamata Convention and to provide information to the Committee and the COP on WHO's progress.[54]

2. Promote cooperation and exchange of information with the WHO, ILO, and other relevant intergovernmental organizations, as appropriate.

Chapter 3

Convention Support Mechanisms

The effectiveness of the Convention will depend in part on the support the Convention is able to provide countries, particularly developing countries and countries with economies in transition, least developed countries (LDCs), and small-island developing states (SIDS), toward implementing their Convention obligations.

This Chapter will discuss the various support mechanisms under the Convention, which can be grouped into six different areas:

a. Financial Support (Article 13);

b. Technical Assistance (Article 14);

c. Information Sharing (Articles 17-19);

d. Implementation and Dispute Settlement (Articles 20 and 25);

e. Monitoring and Evaluation Mechanisms (Articles 15, 21 and 22); and

f. Convention Administration (Articles 23 and 24).

New data and technologies, changing social contexts, and other factors can combine and influence the implementation of the Convention. The ability of countries to amend and update the Convention to respond to these factors is critical to promoting the Convention's effectiveness and ensuring the Convention will meet the needs of the global community. This Chapter will also discuss the process of amending the Convention (Article 26) and its annexes (Article 27).

I. Financial Support

ARTICLE 13: FINANCIAL RESOURCES AND MECHANISM

The Convention recognizes that providing financial assistance to developing countries will improve the effective implementation of the Convention. (Article 13.2)

To provide this assistance, Article 13 establishes a Financial Mechanism with two components: (1) the Global Environment Facility Trust Fund, and (2) a Specific International Programme to support capacity building and technical assistance. Article 13 also elaborates on the governance of the Financial Mechanism and provides specific guidance on its operation. The Financial Mechanism is meant to support developing country Parties and Parties with economies in transition in implementing their obligations under the Convention. (Article 13.5)

A. WHAT IS THE GLOBAL ENVIRONMENT FACILITY TRUST FUND?

1. The Global Environment Facility Trust Fund (Trust Fund) is one of several trust funds administered by the Global Environment Facility (GEF). The Trust Fund will provide new, predictable, adequate and timely financial resources in support of implementation of the Convention. (Article 13.7)

Notes:

i. The Trust Fund is replenished every 4 years based on donor pledges that are funded over a four-year period. It received a total of $15.225 billion during its five previous replenishments.[55] For the 6th Phase (GEF 6), covering the period from July 1, 2014 through June 30, 2018, the replenishment value is US$4.54 billion.

ii. The Trust Fund resources are made available for activities within the GEF Focal Areas. For the GEF 6 replenishment, an integrated GEF Focal Area for Chemicals and Waste (Mercury, Persistent Organic Pollutants, Ozone Depleting Substances, and the Strategic Approach to International Chemicals Management) has been created. The replenishment has allocated US$141 million to support the Minamata Convention for the period 2014-2018. At its sixth meeting in November 2014, the INC requested that the GEF make this money available to developing countries and countries with economies in transition which are Parties to the Convention, signatories to the Convention undertaking activities to facilitate early implementation and ratification, or non-signatories to the Convention for enabling activities where those governments are taking meaningful steps towards becoming a Party.[56]

iii. Under the 5th GEF Replenishment (which expired in June 2014), approximately US$10 million was made available for Convention-related support after the Convention was finalized, building upon $15 million previously provided for mercury related work. Under the GEF guidelines for administering the Convention support, this money was directed to either pre-ratification program activity support (i.e., the performance of Minamata Initial Assessments (MIAs) in which governments would assess their situations and identify the tasks they must undertake to enable ratification) of up to US$200,000 per eligible country, and/or ASGM National Action Plan (NAP) development, up to US$500,000 per eligible country.[57] No co-financing was required. Only countries that had signed the Convention were eligible for this support.

2. The Trust Fund will be operated under the guidance of and be accountable to the COP, which will provide guidance on:

   a. Overall strategies;

   b. Policies;

   c. Programme priorities;

   d. Eligibility for access to and utilization of financial resources; and

   e. An indicative list of categories of activities to receive support from the Trust Fund. (Article 13.7)

Notes:

i. The Convention text is intended to ensure that Trust Fund monies are spent consistent with Convention obligations and priorities, as determined by the COP. COP guidance for the Trust Fund has not yet been finalized, but the INC was requested to conduct interim work regarding arrangements for the operation of the Financial Mechanism, so that the guidance will be ready for COP1. At INC 6, the INC requested the GEF to prioritize the enabling activities outlined in the GEF Initial Guidelines (i.e., MIAs, ASGM NAPs), and activities that relate to legally binding obligations, facilitate early entry into force, and allow for mercury emission and release reductions and address mercury health and environmental impacts. At INC 7, a Memorandum of Understanding between the COP and the GEF regarding administration of the Trust Fund was provisionally adopted.

ii. In providing resources for an activity, the Trust Fund should take into account the potential mercury reductions of a proposed activity relative to its costs. (Article 13.8)

B. WHAT IS THE SPECIFIC INTERNATIONAL PROGRAMME TO SUPPORT CAPACITY-BUILDING AND TECHNICAL ASSISTANCE (SIP)?

The parameters of the SIP are still to be determined. Article 13, however, provides that the SIP will be operated under the guidance of and be accountable to the COP. Parties at the 1st COP meeting will decide on the hosting institution, which shall be an existing entity, and shall provide guidance to that institution, including the duration of the Programme. (Article 13.9)

To support the SIP, all Parties and other relevant stakeholders are invited to provide financial resources to it, on a voluntary basis. (Article 13.9)

Note: As of INC 7, some key decisions regarding the SIP still need to be made, such as the hosting institution, the governance structure, and the duration of the programme. It is anticipated only Parties can apply for funding under the SIP, and proposed projects will be subject to approval by the governing body. Improving capacity for information collection and reporting were examples of SIP activities identified by some governments at INC 7.

C. WHAT OTHER FUNDING CONSIDERATIONS ARE RAISED IN ARTICLE 13?

1. "Each Party undertakes to provide, within its capabilities, resources in respect of those national activities that are intended to implement this Convention, in accordance with its national policies, priorities, plans and programmes. Such resources may include domestic funding through relevant policies, development strategies and national budgets, and bilateral and multilateral funding, as well as private sector involvement." (Article 13.1)

   The implication of this text is that Parties should be seeking ways to support Convention activities in addition to the Financial Mechanism, including but not limited to national budgets and costs borne by the private sector in undertaking the required Convention obligations.

2. "Multilateral, regional and bilateral sources of financial and technical assistance, as well as capacity-building and technology transfer, are encouraged, on an urgent basis, to enhance and increase their activities on mercury in support of developing country Parties in the implementation of this Convention relating to financial resources, technical assistance and technology transfer." (Article 13.3)

Besides the GEF, other donor organizations will be contributing financial support for Convention-related work. Developing countries should be investigating potential financial support from various donor organizations and donor governments working in areas such as sustainable development or public health.

3. "The Parties, in their actions with regard to funding, shall take full account of the specific needs and special circumstances of Parties that are small island developing States or least developed countries." (Article 13.4) It is anticipated that ASGM-related work will be a funding priority under this Convention.

ARTICLE 13 TASKS ASSIGNED TO THE COP:

1. At COP1: The COP and the entities comprising the Financial Mechanism shall agree upon arrangements to implement Article 13.

2. At COP3 *and on a regular basis thereafter*: The COP will review the level of funding, its financial assistance guidance provided to the entities entrusted to operationalize the Financial Mechanism, and the effectiveness of such entities including their ability to address the needs of developing countries and countries with economies in transition.

Note: Based on the regular review it will conduct, the COP shall take appropriate action to improve the effectiveness of the Financial Mechanism. (Article 13.11)

II. Technical Assistance

The Convention recognizes the importance of a country's local capacity, and access to and availability of appropriate technology. This is reflected in the capacity building provision of Article 14 (Capacity Building, Technical Assistance and Technology Transfer).

ARTICLE 14: CAPACITY-BUILDING, TECHNICAL ASSISTANCE AND TECHNOLOGY TRANSFER

A. HOW IS CAPACITY BUILDING PROMOTED UNDER ARTICLE 14?

1. Parties should cooperate to provide, within their respective capabilities, timely and appropriate capacity-building and technical assistance to developing country Parties, in particular LDCs and SIDS and Parties with economies in transition, to assist these countries in implementing their obligations under the Convention. (Article 14.1)

2. Developed country Parties and other Parties within their capabilities shall promote and facilitate, supported by private sector and other relevant stakeholders as appropriate:

   a. Development;

   b. Transfer and diffusion; and

   c. Access to up-to-date environmentally sound alternative technologies to developing countries, in particular LDCs, SIDS, and Parties with economies in transition.

Note: The COP will make recommendations on how capacity-building technical assistance and technology transfer can be further enhanced, as discussed further below.

B. HOW WILL CAPACITY-BUILDING AND TECHNICAL ASSISTANCE BE DELIVERED TO DEVELOPING COUNTRY PARTIES?

Article 14.2 enumerates the following modes of delivery:

a. Regional, sub-regional, and national arrangements, including existing regional and sub-regional centres;

b. Other multilateral and bilateral means; and

c. Partnerships, including partnerships with private sectors.

Notes:

i. An example of existing regional and sub-regional arrangements, which the Convention can access, are the Basel Convention Regional Centres (BCRCs).[58]

ii. The UNEP Global Mercury Partnerships (GMPs) may be an example of partnerships that can help in delivering capacity-building and technical assistance resources to developing countries. These partnerships were initiated in 2005 at UNEP Governing Council 23 to undertake immediate actions on mercury reductions.[59] The future role of the partnerships under the Convention will be considered by the COP.

iii. Other IGOs, such as UNIDO, also have programmes for capacity-building and technical assistance that countries can access.

ARTICLE 14 TASKS ASSIGNED TO THE COP:

1. The COP, by its second meeting and on a regular basis thereafter, and taking into account the submissions and reports from Parties, including those reports provided for in Article 21, and information by other stakeholders, shall:

   a. Consider information on existing initiatives and progress made in relation to alternative technologies;

   b. Consider the needs of Parties, particularly developing country Parties, for alternative technologies; and

   c. Identify challenges experienced by Parties, particularly developing country Parties, in technology transfer. (Article 14.4)

2. Recommend how capacity-building technical assistance and technology transfer can be further enhanced. (Article 14.5)

III. Information Sharing

The generation and sharing of information among countries, by governments to the public, and by countries and stakeholders through the Secretariat is an important pillar in supporting effective implementation under the Convention. The Convention contains at least one Article dedicated to each of these information pathways: Articles 17 (Information Exchange), 18 (Public Information, Awareness, and Education) and 19 (Research, Development, and Monitoring). Article 21 (Reporting) could also fit within this latter category, but we chose to include it within the monitoring and compliance section of this chapter since the reporting targets activities and information related to Convention obligations.

ARTICLE 17: INFORMATION EXCHANGE

Article 17 focuses on the exchange of information between countries. It identifies key information that Parties to the Convention need to share with each other and identifies mechanisms for sharing the information.

A. PRIORITY INFORMATION FOR COUNTRIES TO SHARE

Parties to the Convention shall facilitate the exchange of:

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

b. Information on the reduction or elimination of the production, use, trade, emissions, and releases of mercury and mercury compounds;

c. Information on technically and economically viable alternatives to:

   i. Mercury-added products;

   ii. Manufacturing processes in which mercury or mercury compounds are used; and

   iii. Activities and processes that emit or release mercury or mercury compounds, including information on the health and environmental risks and economic and social costs and benefits of such alternatives; and

d. Epidemiological information concerning health impacts associated with exposure to mercury and mercury compounds, in close cooperation with the World Health Organization and other relevant organizations, as appropriate. (Article 17.1)

Note: Articles 4 (products) and 5 (processes) contain information sharing obligations related to these mercury uses and relevant non-mercury alternatives. (*See discussions of Articles 4 and 5, Chapter 2*)

B. HOW SHOULD PARTIES EXCHANGE INFORMATION?

1. Parties may exchange information directly, through the Secretariat, or in cooperation with other relevant organizations, including the secretariats of chemicals and wastes conventions, as appropriate. (Article 17.2)

Notes:

i. Each Party shall designate a national focal point for the exchange of information under the Convention, including exchanging information related to providing consent for mercury trade transactions under Article 3. (*See Article 3 discussion above*) (Article 17.4)

ii. Article 11 (Waste) requires the close cooperation between the Minamata and Basel Conventions to review and update guidance on the ESM of mercury wastes. The information identified in Article 17.1 will be useful in developing the ESM guidelines. (*See Article 11 discussion, Chapter 2*)

2. The Secretariat of the Convention is required to facilitate cooperation in the exchange of information, among countries and stakeholders, including the secretariats of multilateral environmental agreements and other international initiatives, and from intergovernmental and non-governmental organizations with expertise in the area of mercury. (Article 17.3)

Note: To facilitate the exchange of information, the Convention specifies that information on the health and safety of humans and the environment shall not be regarded as confidential. Examples of such non-confidential information may include mercury levels in fish and mercury concentrations in products. Countries that exchange other information pursuant to the Convention, however, shall protect any confidential information mutually agreed upon. (Article 17.5) The Convention recognizes that in instances where technical information on mercury-free or emission control technologies is shared, certain aspects may be considered proprietary, thus a country should be able to protect this information as confidential.

ARTICLE 18: PUBLIC INFORMATION, AWARENESS AND EDUCATION

Article 18 focuses on the sharing of information between government and the public. Similar to Article 17, Article 18 identifies key information that governments need to share with the public and the mechanisms that can be employed for public awareness-raising.

A. WHAT INFORMATION IS PRIORITIZED UNDER ARTICLE 18, AND HOW SHOULD IT BE DISSEMINATED?

Parties to the Convention are required, within their capabilities to promote and facilitate:

1. Provision to the public of available information on:

   a. The health and environmental effects of mercury and mercury compounds;

   b. Alternatives to mercury and mercury compounds;

   c. The topics identified in Article 17 (*See discussion above*);

d. The results of its research, development and monitoring activities under Article 19 (*See discussion below*); and

e. Activities to meet its obligations under this Convention.

2. Education, training and public awareness related to the effects of exposure to mercury and mercury compounds on human health and the environment, in collaboration with relevant intergovernmental and NGOs and vulnerable populations, as appropriate. (Article 18.1)

Notes:

i. This mandate for education, training, and public awareness encourages collaborations with NGOs and vulnerable populations, therefore the Convention anticipates governments will take steps to identify NGO stakeholders and vulnerable populations, and include them in the Convention ratification and implementation processes.

ii. Information on preventative measures in order to protect against mercury exposure, such as fish advisories, although not expressly mentioned under Article 18, is equally important for the public to know. (*See related discussions under Article 16*)

B. HOW SHOULD INFORMATION ON EMISSIONS AND RELEASES BE COLLECTED AND DISSEMINATED?

Parties shall use existing mechanisms or consider the development of mechanisms, such as pollutant release and transfer registers (PRTR) where applicable, for the collection and dissemination of information on estimates of its annual quantities of mercury emissions and releases. (Article 18.2)

Mercury emission and release inventories will be developed under Articles 8 and 9. In carrying out these inventory obligations, governments may wish to establish inventories for other pollutants besides mercury. The United Nations Institute for Training and Research has a PRTR Programme, which assists countries in the design of national PRTRs through multi-stakeholder processes.[60]

ARTICLE 19: RESEARCH, DEVELOPMENT AND MONITORING

Article 19 seeks cooperation among countries to develop and improve on key areas of research that can support effective implementation of the Convention. These research areas include, among others, inventories of mercury use and consumption; the levels of mercury in people, aquatic food sources, and wildlife; and information on mercury commerce and trade.

A. WHAT AREAS OF RESEARCH ARE IDENTIFIED FOR COOPERATION?

Under Article 19.1, each Party will endeavor to cooperate in the following areas:

a. Inventories of use, consumption, and anthropogenic emissions to air and releases to water and land of mercury and mercury compounds;

b. Modelling and geographically representative monitoring of levels of mercury and mercury compounds in vulnerable populations and in environmental media, including biotic media such as fish, marine mammals, sea turtles, and birds, as well as collaboration in the collection and exchange of relevant and appropriate samples;

Note: The periodic measuring of mercury levels in humans, biotic media, and the environment may become an important way of determining the effectiveness of the Convention over time, as foreseen under Article 22.2 of the Convention.

c. Assessments of the impact of mercury and mercury compounds on human health and the environment, in addition to social, economic, and cultural impacts, particularly in respect of vulnerable populations;

d. Harmonized methodologies for the activities undertaken under subparagraphs (a), (b), and (c);

Note: Developing harmonized systems for collecting these data is necessary so the data can be used to monitor the effectiveness of the Convention.

e. Information on the environmental cycle, transport (including long-range transport and deposition), transformation and fate of mercury and mercury compounds in a range of ecosystems, taking appropriate account of the distinction between anthropogenic and natural emissions and releases of mercury and of remobilization of mercury from historic deposition;

The GMP has an existing Fate and Transport Partnership Area whose aim is to increase global understanding of mercury emission sources, fate and transport. As noted above, the COP will consider the future role of the partnerships under the Convention framework.[61]

f. Information on commerce and trade in mercury and mercury compounds and mercury added products; and

g. Information and research on the technical and economic availability of mercury-free products and processes and on best available techniques and best environmental practices to reduce and monitor emissions and releases of mercury and mercury compounds.

Notes:

i. Parties should, where appropriate, build on existing monitoring networks and research programmes in undertaking the identified activities under Article 19. (Article 19.2)

ii. The Secretariat will assume information gathering obligations related to mercury products and processes, and their alternatives, under Articles 4 and 5. (*See discussions of Articles 4 and 5, Chapter 2*)

IV. Implementation

Article 20 provides for the development of a national implementation plan (NIP), an optional tool that can assist countries in fulfilling their obligations under the Convention. While the tool is optional, governments should consider the utility of developing a NIP and the organizational structure NIP development can provide. Moreover, a NIP may be useful for involving stakeholders in Convention obligation activities and otherwise engaging in the information sharing activities under Article 18.

ARTICLE 20: IMPLEMENTATION PLANS

Article 20 provides the following guidance on the development of NIPs:

1. Following an initial assessment, a country may develop and execute a NIP. (Article 20.1)

Notes:

i. The development and execution of implementation plans under Article 20 needs to take into account the domestic circumstances of the country. (Article 20.1) This will make implementation plans different from one country to another.

ii. A NIP should be submitted to the Secretariat as soon as it has been developed. (Art. 20.1) Whether or not a NIP is prepared, governments are encouraged to submit information on the measures taken to implement the Convention when the ratification instrument is submitted (Article 30.4), and at regular intervals during the Convention as determined by the COP. (Article 21.1)

2. Review and update of the NIP may be undertaken, and a country may refer to guidance from the COP and other relevant guidance. Stakeholders should be consulted by a Party to facilitate the development, implementation, review and updating of the Implementation Plan. (Articles 20.2, 20.3)

Note: The Convention does not specify a date for completion of the guidance on the review and update of NIPs.

3. Regional plans may be developed and coordinated to facilitate implementation of the Convention. (Article 20.4)

Note: Regional (transnational) plans would be useful to tackle issues that are transboundary in nature, such as supply and trade, storage and waste management.

FREQUENTLY RAISED QUESTION: NIPs vs. NAPs

The main difference between NIPs and NAPs is that NIPs have a broader scope incorporating all Convention obligations into a cohesive plan, while NAPs are focused plans devoted to a specific set of obligations. For instance NAPs are a mandatory obligation for some governments under Article 7 (ASGM), and an optional mechanism under Article 8 (Emissions) and Article 9 (Releases). These NAPs may become part of a NIP, but this is not required. Whether a government chooses to combine these efforts will depend upon timing, the scope of available financial assistance, and other relevant factors. Governments may not receive financial assistance from the GEF for some optional Convention activities.

V. Monitoring And Evaluation Mechanisms

Three Articles make up the monitoring and evaluation mechanisms under the Convention: Article 15 (Implementation and Compliance Committee), Article 21 (Reporting) and Article 22 (Effectiveness Evaluation).

Article 15 establishes an Implementation and Compliance Committee (ICC) under the Convention, and prescribes the composition, responsibilities, and function of the ICC. The ICC serves as the main pillar in promoting compliance with Convention obligations.

Article 21 on Reporting complements Article 15. Article 21 specifies the reporting obligations countries must undertake. The ICC, COP, and Secretariat will use the information or reports generated under Article 21 in a variety of ways for monitoring Convention compliance and effectiveness.

Lastly, Article 22 requires the COP to periodically evaluate the effectiveness of the Convention. The article also provides guidance to the COP on how the evaluation will be conducted.

ARTICLE 15:
IMPLEMENTATION AND COMPLIANCE COMMITTEE

A. WHAT IS THE OBJECTIVE AND MANDATE OF THE ICC?

1. The ICC shall promote implementation of, and review compliance with, all the provisions of the Minamata Convention. (Article 15.2)

Notes:

i. The ICC is a subsidiary body of the COP. (Article 15.1)

ii. The ICC mechanism shall be facilitative in nature and shall pay particular attention to the respective national capabilities and circumstances of countries. (Article 15.1)

2. The ICC will examine both individual and systemic issues of implementation and compliance and make recommendations, as appropriate, to the COP. (Article 15.2)

Note: The ICC can look at not only individual country implementation challenges, but also issues or challenges that affect a broad number of countries. For instance, should systemic issues arise regarding the completeness of ASGM NAPs, the ICC may recommend to the COP how improved compliance with Article 7 and Annex C may be achieved.

B. WHAT IS THE COMPOSITION OF THE ICC, AND HOW ARE ITS RECOMMENDATIONS MADE?

1. The ICC is composed of 15 members, who are nominated by Parties and elected by the COP, giving due consideration to equitable geographical representation based on the five UN regions. (Article 15.3)

2. The first members will be elected at COP1, and thereafter in accordance with the rules of procedures set up by the ICC and approved by the COP.

Notes:

i. The ICC will develop its own rules of procedure, subject to approval by the COP at its second meeting.

ii. The COP may adopt further terms of reference for the ICC.

3. Members of the ICC must have competency in a field relevant to the Convention and the composition must reflect an appropriate balance of expertise. (Article 15.3)

4. The ICC will try to adopt its recommendations by consensus. If consensus cannot be reached, a three-fourths majority vote of the members present and voting is needed to approve a recommendation, based on a quorum of two-thirds of the members. (Article 15.6)

C. WHAT ISSUES MAY THE ICC CONSIDER?

The ICC may consider issues on the basis of the following:

a. Written submissions from any Party with respect to its own compliance;

b. National reports based on Art. 21; and

c. Requests from the COP. (Article 15.4)

Note: One government cannot directly raise compliance issues regarding another government, nor can NGOs and other concerned stakeholders directly raise issues before the ICC. These concerns will need to be raised through the COP or pursued by the ICC on its own initiative (presumably through its review of the Article 21 reporting, among other information).

ARTICLE 15 TASKS ASSIGNED TO THE COP

1. COP1 will elect the ICC members.

2. COP2 will consider the Rules of Procedure developed by ICC.

3. Any COP may request the ICC to look into specific issues.

SETTLEMENT OF DISPUTES UNDER THE CONVENTION

In the course of implementing the Convention, countries may find themselves in a disagreement over the interpretation or application of the Convention. To manage disputes among countries, the Convention lays down the following rules:

1. Countries shall seek to settle any dispute between them concerning the interpretation or application of the Convention through negotiation or other peaceful means of their own choice. (Article 25.1)

2. A country or a regional economic integration organization may declare at the time it ratifies the Convention, or at any time thereafter, in a written instrument submitted to the Depositary that, with regard to any dispute concerning the interpretation or application of the Convention, it recognizes one or both of the following means of dispute settlement as compulsory in relation to any country accepting the same obligation:

   a. Arbitration in accordance with the procedure set out in Part I of Annex E (*The details of this procedure are beyond the scope of this manual. Readers are referred to the Convention text and Annex E for more information*[62]); and

   b. Submission of the dispute to the International Court of Justice. (Article 25.2)

Notes:

   i. The declaration shall remain in force until it expires in accordance with its terms or until three months after written notice of its revocation has been deposited with the Depositary. (Article 25.4)

   ii. The expiry of a declaration, a notice of revocation or a new declaration shall in no way affect proceedings pending before an arbitral tribunal or the International Court of Justice, unless the parties to the dispute otherwise agree. (Article 25.5) The rationale of this provision is to discourage the use of technicalities to disrupt the dispute settlement proceedings. The Convention places a priority on peaceful and negotiated settlements of dispute. (Article 25.1)

3. If the parties to a dispute have not accepted the same means of dispute settlement, and if they have not been able to settle their dispute through negotiations or other peaceful means within twelve months following notification by a country to another that a dispute exists between them, the dispute shall be submitted to a conciliation commission at the request of any party to the dispute. (Article 25.6) The procedure set out in Part II of Annex E shall apply to conciliation proceedings. (*Readers are again referred to Annex E for more details on the conciliation process*.)

ARTICLE 21
REPORTING

The simplicity of Article 21 belies its importance. As stated above, the Article 21 reporting will be a principal basis for evaluating both individual government compliance and the overall effectiveness of the Convention. As drafted, Article 21 is largely a general grant of authority to the COP to develop the details of the reporting requirements and format. Toward this end, the INC was requested to prepare guidance on the timing and format of reporting for adoption at the first meeting of the COP. This work was not completed at INC 7, thus the final reporting forms, and the frequency of reporting, will be considered at COP1.

A. WHAT MATTERS MUST COUNTRIES REPORT ON?

1. Measures taken to implement the provisions of the Convention, the effectiveness of such measures, and the possible challenges in meeting the objectives of the Convention. (Article 21.1)

2. Information as called for in Articles 3 (Supply and Trade), 5 (Processes), 7 (ASGM), 8 (Emissions) and 9 (Releases). (Article 21.2)

Notes:

i. Countries shall report to the COP through the Secretariat. (Article 21.1)

ii. The information required under Articles 3, 5, 7, 8 and 9 relate to specific control measures under each of these Articles. (*See Articles 3, 5, 7, 8 and 9 discussions in Chapter 2 for more details on the reporting requirements*)

ARTICLE 21 TASKS ASSIGNED TO THE COP

The COP shall, at its first meeting, decide upon the timing and format of the reporting to be followed by the Parties, taking into account the desirability of coordinating reporting with other relevant chemicals and wastes conventions. (Article 21.3)

ARTICLE 22:
EFFECTIVENESS EVALUATION

The COP is charged with evaluating the effectiveness of the Convention. The first evaluation will take place beginning no later than six years after the date of entry into force of the Convention. (Article 22.1) The COP shall decide afterwards on how often it will conduct the evaluation.

A. WHAT IS THE COP'S BASIS FOR THE EFFECTIVENESS EVALUATION?

The evaluation shall be conducted by the COP on the basis of available scientific, environmental, technical, financial and economic information, including:

a. Reports and other monitoring information provided to the COP;

b. Reports submitted pursuant to Article 21 (Reporting);

c. Information and recommendations provided pursuant to Article 15 (ICC); and

d. Reports and other relevant information on the operation of the financial assistance, technology transfer and capacity-building arrangements put in place under the Convention. (Article 22.3)

Notes:

i. Since there is no limitation on the information the COP can consider, it is reasonable to anticipate a process with significant NGO and stakeholder involvement.

ii. The COP shall, at its first meeting, initiate the establishment of arrangements for providing itself with comparable monitoring data on the presence and movement of mercury and mercury compounds in the environment as well as trends in levels of mercury and mercury compounds observed in biotic media and vulnerable populations. (Article 22.2) At INC 7, the Secretariat was requested to prepare a report with recommendations for establishing these arrangements, and a roadmap for developing a draft effectiveness evaluation strategy, for consideration at COP1.

iii. The use of bio-monitoring to monitor the treaty's effectiveness may trigger the creation of a global framework to measure mercury level trends in fish and other aquatic food sources, and vulnerable human populations.

VI. Administrative Mechanisms

The Administrative Mechanism under the Convention is composed of two distinct entities: the Conference of Parties (Article 23) and the Secretariat. (Article 24)

The COP is established under the Convention (Article 23.1) and acts as its governing body. All countries that are Parties to the Minamata Convention are represented at the COP. The COP is the principal decision-maker for all facets of the Convention.

The Secretariat is established under Article 24.1 to support the goals of the Convention. The principal function of the Secretariat is to provide support for the COP, and thereby prepare for, and service, meetings of the COP and its subsidiary bodies. The Secretariat also performs an important information sharing function, and coordinates with other international bodies.

ARTICLE 23:
CONFERENCE OF THE PARTIES

A. WHAT IS THE FUNCTION OF THE COP?

The COP shall keep under continuous review and evaluation the implementation of the Convention. The COP shall also perform the functions assigned to it by the Convention and, to that end, shall:

a. Establish such subsidiary bodies as the COP considers necessary for the implementation of the Convention;

b. Cooperate with competent international organizations and intergovernmental and non-governmental bodies;

c. Regularly review all information made available to it and to the Secretariat pursuant to Article 21 (Reporting);

d. Consider any recommendations submitted to it by the ICC;

e. Consider and undertake any additional action that may be required for the achievement of the objectives of the Convention; and

f. Review Annexes A and B pursuant to Article 4 (Products) and Article 5 (Processes). (Article 23.5)

Readers are referred to Annex 3 of this Manual for a chronological index of the tasks assigned to the COP in the Convention text.

B. HOW OFTEN DOES THE COP MEET AND HOW ARE THE MEETINGS CONDUCTED?

1. The UNEP Executive Director shall convene the first meeting of the COP no later than one year after the date of entry into force of the Convention. (Article 23.2)

   a. Ordinary meetings of the COP shall be held at regular intervals to be decided by the COP.

   b. The COP shall decide on when to hold extraordinary meetings, or such meetings may be organized at the written request of any Party to the Convention, provided that, within six months of the request being communicated to the other Parties by the Secretariat, it is supported by at least one third of the Parties.

Notes:

i. An ordinary meeting is generally understood to mean a regular or scheduled meeting. Extraordinary meetings are generally unscheduled or special meetings called by the COP, which could be to address an urgent or special issue.

ii. Each Party to the Convention shall have one vote (Article 28.1). A regional economic integration organization shall exercise its right to vote with a number of votes equal to the number of its member States that are Parties to the Convention. Such an organization shall not exercise its right to vote if any of its member States exercises its right to vote, and vice versa. (Article 28.2)

2. The COP will by consensus agree upon and adopt at its first meeting rules of procedure and financial rules for itself and any of its subsidiary bodies, as well as financial provisions governing the functioning of the Secretariat. (Article 23.4) The COP rules of procedure will include how decisions will be made by the COP (particularly where consensus cannot be reached), and the admission and participation of observers, as discussed immediately below.

3. The United Nations, its specialized agencies, and the International Atomic Energy Agency, as well as any country that is not part of the Convention, may be represented at meetings of the COP as observers. Any body or agency, whether national or international, governmental or NGO, that is qualified and has informed the Secretariat of its wish to be represented at a meeting of the COP as an observer, may also be admitted unless at least one third of the Parties present object. (Article 23.6)

Note: The admission and participation of observers shall be subject to the rules of procedures adopted by the COP. (Article 23.6)

ARTICLE 24: SECRETARIAT

A. WHAT ARE THE FUNCTIONS OF THE SECRETARIAT?

Under Article 24.2, the Secretariat has the following functions:

a. To make arrangements for meetings of the COP and its subsidiary bodies and to provide them with services as required;

b. To facilitate assistance to Parties, on request, in the implementation of the Convention;

c. To coordinate, as appropriate, with the secretariats of relevant international bodies, particularly other chemicals and waste conventions;

d. To assist Parties in the exchange of information related to the implementation of the Convention;

e. To prepare and make available to the Parties periodic reports based on information received pursuant to Articles 15 and 21 and other available information;

f. To enter, under the overall guidance of the COP, into such administrative and contractual arrangements as may be required for the effective discharge of its functions; and

g. To perform the other Secretariat functions specified in the Convention and such other functions as may be determined by the COP.

Notes:

i. The Secretariat functions for the Convention will be performed by UNEP, unless the COP decides, by a three fourths majority of the Parties present and voting, to entrust the Secretariat functions to one or more other international organizations. (Article 24.3)

ii. The COP may provide for enhanced cooperation and coordination between the Secretariat and the secretariats of other chemicals and wastes conventions. The COP may provide further guidance on this matter. (Article 24.4)

iii. Before the Convention comes into force, the interim Secretariat is located at UNEP. We expect there will be consideration of merging the Minamata Convention Secretariat with the Secretariat of the Basel, Stockholm, and Rotterdam Conventions at COP1 or thereafter.

VIII. Convention Amendments

The Convention provides two mechanisms for countries to make changes to the Convention. One applies to changes to the Convention text itself (Article 26), and the second applies to the adoption and amendment of annexes. (Article 27)

ARTICLE 26: AMENDMENTS TO THE CONVENTION

A. WHAT IS THE AMENDMENT PROCESS UNDER ARTICLE 26?

1. Any country that is a party to the Convention may propose amendments to it.

2. Amendments shall be adopted at a meeting of the COP.

Notes:

i. The text of any proposed amendment shall be communicated to countries that are part of the Convention (Parties) by the Secretariat at least six months before the meeting at which it is proposed for adoption. The Secretariat shall also communicate the proposed amendment to the *signatories to the Convention* and, for information, to the Depositary. (Article 26.2)

ii. The Secretary General of the UN is the depositary of the Convention. (Article 34)

3. Parties shall make every effort to reach agreement by consensus on any proposed amendment to the Convention. If consensus cannot be reached, the amendment shall as a last resort be adopted by a three-fourths majority vote of the Parties present and voting at the meeting. (Article 26.3)

4. An adopted amendment shall be communicated by the Depositary to all Parties for ratification, acceptance or approval.

5. Ratification, acceptance or approval of an amendment shall be notified to the Depositary in writing.

B. WHEN WILL AN AMENDMENT ENTER INTO FORCE?

1. *For countries who consent to be bound by an amendment **BEFORE** it enters into force:*

   An amendment shall enter into force for countries that have consented to be bound by it ninety days after the date of deposit of instruments of ratification, acceptance or approval by at least three-fourths of the countries that were Parties to the Convention at the time at which the amendment was adopted. (Article 26.5)

Note: This rule is similar to Article 31 (Entry Into Force). The main difference is that under Article 31, the ratification that triggers the entry into force countdown lies with the 50th country ratification. Under Article 26.5, the trigger is for there to be at least three-fourths of the Parties to have deposited their instruments of ratification with the Depositary to start the 90-day entry into force countdown.

2. *For countries who consent to be bound by an amendment **AFTER** it enters into force:*

   The amendment shall enter into force on the ninetieth day after the date on which a country deposits its instrument of ratification, acceptance or approval of the amendment. (Article 26.5)

ARTICLE 27: ADOPTION AND AMENDMENT OF ANNEXES

The annexes to the Minamata Convention contain the products and processes to be phased out or otherwise controlled, the specific substantive obligations related to mercury use in ASGM, the list of sources subject to air emission regulation, and the arbitration dispute settlement procedure. Consequently, the annexes are an integral part of the Convention, and may become even more so as the COP conducts the mandated annex reviews under Articles 4 and 5, evaluates whether trade in mercury compounds should be restricted through the addition of a new annex, and otherwise evaluates the effectiveness of the Convention. The Convention text anticipates two scenarios under Article 27: adding a new annex (additional annex) and amending an existing annex (amendment).

A. WHAT IS THE PROCEDURE FOR ADOPTING AND AMENDING ANNEXES?

The procedure for adopting an additional annex and amending an existing annex of the Convention follow the procedures laid down under Article 26 (Amendment). (Articles 27.3.a and 27.4) (*See preceding discussion for more details*)

Notes:

i. Any additional annexes adopted after the entry into force of the Convention shall be restricted to procedural, scientific, technical or administrative matters. (Article 27.2)

ii. If an additional annex or an amendment to an annex is related to an amendment to the Convention, the additional annex or amendment shall not enter into force until such time as the amendment to the Convention enters into force. (Article 27.5)

B. HOW WILL AN ADDITIONAL ANNEX ENTER INTO FORCE?

An additional annex shall enter into force for all countries who are part of the Convention one year from the date the Depositary communicates the adoption of the additional annex, unless a country has submitted a notification of non-acceptance of the annex. (Article 27.3.c)

✓ FILING A NOTIFICATION OF NON-ACCEPTANCE

A country that is unable to accept an additional annex shall notify the Depositary, in writing, within one year from the date of communication by the Depositary of the adoption of such annex. The Depositary shall without delay notify all Parties of any such notification received. (Article 27.3.b)

i **Note:** A country may at any time notify the Depositary, in writing, that it withdraws a previous notification of non-acceptance in respect of an additional annex. (Article 27.3.b) The annex shall become binding for that country in accordance with Article 27.

C. HOW WILL AN AMENDMENT TO AN ANNEX ENTER INTO FORCE?

The proposal, adoption and entry into force of amendments to annexes follow the same procedures for adding a new annex to the Convention, except that countries have the option of declaring that amendments to annexes will not enter into force for them without their affirmative consent (an "opt-in" mechanism). (Article 27.4 and 30.5)

i **Notes:**

i. The opt in mechanism for annex amendments is authorized under Article 30.5, whereby in its instrument of ratification, acceptance, approval or accession, a country declares that any amendment to an annex shall enter into force for it only upon the deposit of its instrument of ratification, acceptance, approval or accession to the amended annex.

ii. When a country decides to be bound by an amendment, it shall enter into force for such a country on the ninetieth day after the date it has deposited with the Depositary its instrument of ratification, acceptance, approval or accession with respect to such amendment. (Article 27.4)

Conclusion

Adoption of the Minamata Convention on Mercury was a significant international achievement, given the relatively rapid time in which negotiations were concluded and the comprehensive nature of the final text. Nevertheless, the promise of sharp mercury supply, use and emissions reductions is yet to be realized. Thus in a very real sense, the most important work still lies ahead.

As of this writing, implementation of the Convention is an early work in progress. During the interim period before the Convention enters into force, the INC prepared for COP consideration much of the guidance needed for the Convention to function effectively. In parallel, governments developed the legal and administrative frameworks necessary for achieving the mercury reductions sought under the Convention, and initiated mercury reduction activities.

As an initial text, the Convention contains provisions which require further elaboration and leaves issues for future resolution. The authors anticipate future strengthening of the Convention in response to new information and technologies, and a collective recognition of what can be achieved globally. However, the effectiveness of the Convention will ultimately depend on the strength of the mercury reduction activities taken by the Parties. With this in mind, the authors hope this Manual may contribute to their timely and aggressive mercury reduction activities.

ANNEX 1:
MODEL INSTRUMENT OF RATIFICATION, ACCEPTANCE OR APPROVAL

(To be signed by the Head of State, Head of Government or Minister for Foreign Affairs)

[RATIFICATION / ACCEPTANCE / APPROVAL]

WHEREAS the Minamata Convention on Mercury was opened for signature at Kumamoto, Japan on October 10, 2013,

AND WHEREAS the said [treaty, convention, agreement, etc.] has been signed on behalf of the Government of [name of State] on [date],

NOW THEREFORE I, [name and title of the Head of State, Head of Government or Minister for Foreign Affairs] declare that the Government of [name of State], having considered the above-mentioned [treaty, convention, agreement, etc.], [ratifies, accepts, approves] the same and undertakes faithfully to perform and carry out the stipulations therein contained.

IN WITNESS WHEREOF, I have signed this instrument of [ratification, acceptance, approval] at [place] on [date].

[Signature]

ANNEX 2:
MODEL INSTRUMENT OF ACCESSION

(To be signed by the Head of State, Head of Government or Minister for Foreign Affairs)

ACCESSION

WHEREAS the Minamata Convention on Mercury was opened for signature at Kumamoto, Japan on October 10, 2013,

AND WHEREAS the said [treaty, convention, agreement, etc.] has been signed on behalf of the Government of [name of State] on [date],

NOW THEREFORE I, [name and title of the Head of State, Head of Government or Minister for Foreign Affairs] declare that the Government of [name of State], having considered the above-mentioned [treaty, convention, agreement, etc.], accedes to the same and undertakes faithfully to perform and carry out the stipulations therein contained.

IN WITNESS WHEREOF, I have signed this instrument of accession at [place] on [date].

[Signature]

ANNEX 3:
INDEX OF COP TASKS

This Annex presents an index of tasks assigned to the Conference of the Parties, as specified in the Convention text. The COP tasks are divided into two tables. The first table enumerates the mandatory tasks assigned to the COP, following the timelines enumerated below:

- At its first (1st) meeting;
- By its second (2nd) meeting;
- No later than its third (3rd) meeting;
- Within five (5) years after the date of entry into force of the Convention;
- No later than six (6) years after the date of entry into force of the Convention;
- As soon as practicable;
- At any time (no time indicated in the Convention).

The second table enumerates the permissive tasks assigned to the COP, which it can accomplish at any time.

Period/Time	Tasks. The COP shall:	Source
1st Meeting	1. Provide guidance on how to identify individual stocks of mercury or mercury compounds exceeding 50 metric tons, as well as sources of mercury supply generating stocks exceeding 10 metric tons per year.	Article 3.12
	2. Provide guidance on mercury supply and trade obligations, particularly the consent and certification requirements related to mercury trade.	Article 3.12
	3. Adopt guidance on: • BAT and BEP to control air emissions from listed sources; and • Support for Parties implementing the various air emission control measure approaches for existing facilities, particularly determining goals and setting emission limit values.	Article 8.8
	4. Decide on the hosting institution for the International Programme component of the Financial Mechanism and provide guidance to it, including the duration of this programme.	Article 13.9
	5. Together with the GEF and the host institution of the International Programme, agree upon the arrangements that give effect to the provisions of Article 13.	Article 13.10
	6. Elect the first 15 members of the Implementation and Compliance Committee.	Article 15.3
	7. Decide upon the timing and format of the reporting to be followed by the Parties.	Article 21.3
	8. Initiate the establishment of arrangements for providing itself with comparable monitoring data on the presence and movement of mercury and mercury compounds in the environment as well as trends in levels of mercury and mercury compounds observed in biotic media and vulnerable populations.	Article 22.2
	9. Agree upon and adopt rules of procedure and financial rules for the Convention, as well as financial provisions governing the functioning of the Secretariat.	Article 23.4
By Its 2nd Meeting, and Thereafter on a Regular Basis	1. Consider whether to extend the availability of the mercury import restriction waiver (second meeting only).	Article 3.10
	2. Consider information on existing initiatives and progress made by Parties and their needs, in relation to alternative technologies.	Article 14.4
	3. Identify challenges experiences by Parties, particularly developing country Parties, in technology transfer.	Article 14.4
	4. Decide on proposed ICC rules of procedure (second meeting only).	Article 15.5

Period/Time	Tasks. The COP shall:	Source
No Later Than Its 3rd Meeting, and Thereafter on a Regular Basis	1. Review the level of funding, the guidance operationalizing the Financial Mechanism, the effectiveness of the entities administering the Mechanism, their ability to address the changing needs of developing country Parties and Parties with economies in transition, and take action to improve the effectiveness of the Mechanism.	Article 13.11
No Later Than 5 Years After the Date of Entry Into Force of the Convention	1. Review the progress and effectiveness of the alternative method of complying with the mercury-added product phase-out obligations of the Convention.	Article 4.2
	2. Review Annex A (Mercury-added products) and may consider amendments to it.	Article 4.8
	3. Review Annex B (Manufacturing processes in which mercury or mercury compounds are used) and may consider amendments to it.	Article 5.10
No Later Than 6 Years After the Date of Entry Into Force of the Convention, and Periodically Thereafter	1. Evaluate the effectiveness of the Convention.	Article 22.1
As Soon as Practicable	1. Adopt guidance on criteria that Parties may develop to identify the sources to be regulated within a source category listed in Annex D, and methodologies for preparing inventories of air emissions.	Article 8.9
	2. Adopt guidance on BAT and BEP to address releases to land and water from relevant sources, and the methodology for preparing inventories of releases to land and water.	Article 9.7
At Any Time (No Time Indicated in the Convention)	1. Evaluate whether the trade in specific mercury compounds compromises the objective of the Convention and thus should be restricted through the adoption of an additional annex.	Article 3.13
	2. Review and consider applications for a new type of manufacturing process that uses mercury or mercury compounds.	Article 5.7
	3. Keep under review, and update as appropriate, the guidance developed under Article 8.	Article 8.10
	4. Adopt guidelines on the environmentally sound interim storage of mercury and mercury compounds, taking into account any relevant guidelines developed under the Basel Convention and other relevant guidance.	Article 10.3

Period/Time	Tasks. The COP shall:	Source
At Any Time (No Time Indicated in the Convention)	5. Set relevant thresholds for defining mercury wastes covered under the Convention.	Article 11.2
	6. Adopt an additional annex containing requirements for the environmentally sound management of mercury wastes.	Article 11.3.a
	7. Seek to cooperate closely with the Basel Convention in the review and update of the guidelines developed under the Basel Convention on mercury waste.	Article 11.4
	8. Adopt guidance on managing contaminated sites.	Article 12.3
	9. Provide guidance on overall strategies, policies, programme priorities, eligibility for access to and utilization of financial resources, and an indicative list of activities to receive support from the GEF Trust Fund.	Article 13.7
	10. Make recommendations on how capacity building, technical assistance, and technology transfer could be further enhanced under Article 14.	Article 14.5
	11. Review recommendations submitted by ICC.	Article 15.2
	12. On health-related issues, consult and , collaborate, and promote cooperation and exchange of information with the WHO, the ILO, and other relevant intergovernmental organizations, as appropriate.	Article 16.2
	13. Develop guidance on optional National Implementation Plans.	Article 20.2
	14. Keep under continuous review and evaluation the implementation of this Convention and perform the functions assigned to it by this Convention.	Article 23.5
	15. Assign functions and provide overall guidance to the Secretariat on administrative and contractual arrangements as may be required for the effective discharge of Secretariat's functions.	Article 24.2 (f-g)

Period/Time	Tasks. The COP may:	Source
At Any Time (No Time Indicated in the Convention)	1. Decide, at the request of a Party, whether to extend an exemption from the phase-out deadlines for a mercury product or process for up to five years.	Article 6.6
	2. Adopt requirements for interim storage as an additional annex to the Convention.	Article 10.3
	3. Adopt further terms of reference for the ICC.	Article 15.5
	4. Provide for enhanced cooperation and coordination between the Secretariat and the secretariats of other chemicals and wastes conventions, in consultation with appropriate international bodies.	Article 24.4

Endnotes

1 The term "ratification" in this Manual includes all the various ways a government may become a Party to the Convention, including ratification, acceptance, approval, and accession.

2 Article 1, Minamata Convention on Mercury.

3 United Nations Environment Programme (hereinafter UNEP), *Global Mercury Assessment*, December 2002, available at: http://www.unep.org/chemicalsandwaste/Portals/9/Mercury/Documents/final-assessment-report-25nov02.pdf.

4 UNEP, *Global Mercury Assessment 2013*, January 2013, www.unep.org/PDF/PressReleases/GlobalMercuryAssessment2013.pdf.

5 http://www.mercuryconvention.org/Portals/11/documents/mandates/e-GC-25-17_PROCEEDINGS.pdf.

6 UNEP Minamata Convention on Mercury website, mercuryconvention.org.

7 The extraction and production of mercury from naturally occurring ores where the principal material sought is mercury, as defined in Article 2.

8 Metal extraction and production activities where the primary material sought is not mercury. Gold, zinc, lead, copper, and silver production are examples of activities where mercury can be produced as a by-product, because mercury is also present in the mined ore body.

9 See discussion of Article 5, below, for a description of chlor-alkali plants.

10 The Paragraph 5(b) disposal mandate applies to "excess" mercury from the decommissioning. Since the meaning of this term excess is undefined, its meaning will be determined by each Party. We believe the interpretation most consistent with the intent of the drafters is excess within the chlor-alkali sector, since the provision was intended to preserve the one reuse option of mercury from the decommissioning of one plant being reused at another chlor-alkali plant until that second plant is decommissioned. Less clear to the authors is whether this "excess" is determined on a Party or global basis. If ultimately interpreted to apply on a Party basis, then this mercury cannot be exported for reuse, even at another chlor-alkali plant.

11 The guidance can be found at UNEP, "Annex: Guidance on Completing the Forms Under Article 3 Related to Trade in Mercury," March 15, 2016, www.nrdc.org/sites/default/files/int_16032101a.pdf.

12 The guidance is available at www.nrdc.org/international/files/int_16032101b.pdf.

13 UNEP, "Mercury: Time to Act," 2013, p. 18, www.unep.org/PDF/PressReleases/Mercury_TimeToAct.pdf.

14 UNEP Global Mercury Partnership, "List of Alternatives to Mercury-Added Products," www.unep.org/chemicalsandwaste/Portals/9/Mercury/Products/flyer%20final1%20%20mercury-free%20alternatives.pdf.

15 Directive 2002/95/EC of the European Parliament and of the Council of 27 January 2003 on the Restriction of the Use if Certain Hazardous Substances in Electrical and Electronic Equipment, ec.europa.eu/environment/waste/weee/index_en.htm.

16 UNEP, Ad Hoc Open-ended Working Group on Mercury, *Report on the Major Mercury-Containing Products and Processes, Their Substitutes and Experience in Switching to Mercury-Free Products and Processes*, October 6–10, 2008, www.unep.org/chemicalsandwaste/Portals/9/Mercury/Documents/OEWG2/2_7_add_1.pdf.

17 U.S. Food and Drug Administration, CFR—Code of Federal Regulations, Title 21, revised as of April 1, 2015, www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfcfr/cfrsearch.cfm?fr=700.13.

18 World Health Organization (hereinafter WHO), "Mercury in Skin Lightening Products," 2011, http://www.who.int/ipcs/assessment/public_health/mercury_flyer.pdf.

19 https://noharm-global.org/issues/global/hcwh-who-mercury-free-healthcare-collaboration.

20 WHO, *Replacement of Mercury Thermometers and Sphygmomanometers in Health Care*, May 2011, www.who.int/water_sanitation_health/publications/2011/mercury_thermometers/en/.

21 For more information, please see UNEP, *Module 5: Cultural Uses of Mercury*, www.unep.org/chemicalsandwaste/Portals/9/Mercury/AwarenessPack/English/UNEP_Mod5_UK_Web.pdf.

22 Dental amalgam is an alloy of mercury and other metals used for dental fillings.

23 Ferracane, Jack L. "Resin Composite—State of the Art," *Dental Materials* 27, no. 1 (Jan. 2011): 29-38, accessed April 11, 2016, www.odon.uba.ar/uacad/materialesdentales/docs/ferracane.pdf.

24 UNEP, "Mercury: Time to Act," p. 18.

25 UNEP, *Module 2: Mercury and Industry*, accessed April 25, 2014, www.unep.org/chemicalsandwaste/Portals/9/Mercury/AwarenessPack/English/UNEP_Mod2_UK_Web.pdf.

26 UNEP, "Global Inventory of Mercury Cell Chlor-Alkali Facilities," January 24–28, 2011, www.mercuryconvention.org/Portals/11/documents/meetings/inc2/English/INC2_17_chloralkali.pdf.

27 For an Excel spreadsheet of UNEP's updated inventory, see www.unep.org/chemicalsandwaste/Portals/9/Mercury/Chloralkali/Updated%20Hg-cell%20CA%20Inventory.xlsx.

28 For more information, see: European Commission, Joint Research Centre, Institute for Prospective Technological Studies, "Reference Documents Under the IPPC Directive and the IED," eippcb.jrc.ec.europa.eu/reference/.

29 UNEP, Global Mercury Partnership Chlor-Alkali Area, "Conversion from Mercury to Alternative Technology in the Chlor-Alkali Industry," June 2012, accessed April 23, 2014, www.unep.org/chemicalsandwaste/Portals/9/Mercury/Documents/chloralkali/Partnership%20Document%20on%20the%20Conversion%20from%20Mercury%20to%20Alternative%20Technology%20in%20the%20Chlor-Alkali%20Industry.pdf.

30 European Commission, Directorate-General Environment, "Options for Reducing Mercury Use in Products and Applications, and the Fate of Mercury Already Circulating in Society: Final Report," December 2008, p. 117, accessed April 25, 2014, ec.europa.eu/environment/chemicals/mercury/pdf/study_report2008.pdf.

31 Commission Regulation (EU) No 848/2012, amending Annex XVII to Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation, and Restriction of Chemicals (REACH) as regards phenylmercury compounds, September 19, 2012, eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32012R0848&from=EN.

32 European Commission, Directorate-General Environment, "Options for Reducing Mercury Use," p. 118.

33 When the Convention is amended to phase out the use of mercury in additional products or processes, a Party must submit the initial exemption request before the Convention amendment enters into force for the Party.

34 UNEP, "Reducing Mercury in Artisanal and Small-Scale Gold Mining (ASGM)," accessed Marcy 11, 2014, http://www.unep.org/chemicalsandwaste/Portals/9/Mercury/Documents/ASGM/Techdoc/UNEP%20Tech%20Doc%20APRIL%202012_120619%20with%20links_web.pdf.

35 UNEP, "Mercury: Time to Act," p. 17.

36 Arctic Monitoring and Assessment Programme and UNEP, *Technical Background Report for the Global Mercury Assessment 2013*, June 2013, Table 4.2.

37 See: International Labour Organization, "The Burden of Gold Child Labour in Small-Scale Mines and Quarries, *World of Work*, no. 54, August 2005, www.ilo.org/global/publications/magazines-and-journals/world-of-work-magazine/articles/WCMS_081364/lang--en/index.htm.

38 UNEP, "Draft Guidance on Developing a National Action Plan to Reduce and, Where Feasible, Eliminate Mercury Use in Artisanal and Small-Scale Gold Mining," March 2016. This guidance is available in English at https://www.nrdc.org/sites/default/files/int_16032101c.pdf.

39 Article 8, 2.a: "'Emissions' means emissions of mercury or mercury compounds to the atmosphere."

40 UNEP, *Global Mercury Assessment 2013*, accessed March 5, 2014.

41 Ibid. at p. i.

42 This plan can be combined with the optional National Implementation Plan under Article 20 (see discussion of Article 20).

43 UNEP, Minamata Convention on Mercury, "Expert Group on BAT/BEP," www.mercuryconvention.org/Negotiations/ExpertGrouponBATBEP/tabid/3634/Default.aspx.

44 See: UNEP, Division of Technology, Industry and Economics, Chemicals Branch, *Process Optimization Guidance for Reducing Mercury Emissions From Coal Combustion in Power Plants*, November 2010, www.unep.org/chemicalsandwaste/Portals/9/Mercury/Documents/coal/UNEP%20Mercury%20POG%20FINAL%202010...pdf.

45 UNEP, *Global Mercury Assessment 2013*, p. 25.

46 Basel Convention, "Draft Technical Guidelines for the Environmentally Sound Management of Wastes Consisting of Elemental Mercury and Wastes Containing or Contaminated with Mercury ," December 2013, www.basel.int/Implementation/TechnicalMatters/DevelopmentofTechnicalGuidelines/MercuryWaste/tabid/2380/Default.aspx.

47 Minamata Convention, Article 11.2. Note that countries that are Parties to the Minamata Convention but are not Parties to the Basel Convention shall use the Basel Convention definitions as guidance as applied to wastes covered under this Convention.

48 Basel Convention, Article 2.4, www.basel.int/TheConvention/Overview/TextoftheConvention/tabid/1275/Default.aspx.

49 For more information on Annex IV of the Basel definition of disposal, see Basel Convention, http://www.basel.int/Portals/4/Basel%20Convention/docs/text/BaselConventionText-e.pdf.

50 Basel Convention, "Parties to the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal," http://www.basel.int/Countries/Statusofratifications/PartiesSignatories/tabid/1290/language/en-US/Default.aspx.

51 UNEP, Global Mercury Assessment 2013, p. 24.

52 See also the Convention preamble text related to the health concerns for vulnerable populations and future generations, and the particular vulnerabilities of Arctic ecosystems and indigenous communities.

53 For the complete text of the resolutions, see World Health Assembly, "Public Health Impacts of Exposure to Mercury and Mercury Compounds: The Role of WHO and Ministries of Public Health in the Implementation of the Minamata Convention," January 2014, apps.who.int/gb/ebwha/pdf_files/EB134/B134_R5-en.pdf.

54 Ibid.

55 See Global Environment Facility (hereinafter GEF), "What Is the GEF," www.thegef.org/gef/whatisgef.

56 Evidence of meaningful steps taken by non-signatories must be provided in a letter from the relevant minister to UNEP and the GEF. For additional information on how the GEF initially plans to allocate the $141 million, see UNEP, "Input to Preliminary Draft Guidance on Overall Strategies, Policies, Programme Priorities and Eligibility for Access to and Utilization of Financial Resources, and on an Indicative List of Categories of Activities to Be Funded by the Global Environment Facility Trust Fund," August 2014, www.mercuryconvention.org/Portals/11/documents/meetings/inc6/English/6_21_e_FR.pdf.

57 GEF, "Initial Guidelines for Enabling Activities for the Minamata Convention on Mercury," January 2014, www.thegef.org/gef/sites/thegef.org/files/documents/GEF.C.45.Inf_.05.Rev_.1%20Initial%20Guidelines%20for%20Enabling%20Activities%20for%20the%20%20Minamata%20Convention%20on%20Mercury%20Jan%2023%202014.pdf.

58 For more information, see Basel Convention, "The Basel Convention Regional and Coordinating Centres," www.basel.int/Partners/RegionalCentres/Overview/tabid/2334/Default.aspx.

59 For more information, see UNEP, "UNEP Global Mercury Partnership," www.unep.org/chemicalsandwaste/Mercury/GlobalMercuryPartnership/tabid/1253/Default.aspx.

60 For more information, see United Nations Institute for Training and Research, "Pollutant Release and Transfer Registers," www.unitar.org/cwm/prtr.

61 For more information, see UNEP, "Mercury Air Transport and Fate Research," www.unep.org/chemicalsandwaste/Mercury/PrioritiesforAction/AirTransportandFateResearch/Reports/tabid/4498/language/en-US/Default.aspx.

62 Minamata Convention on Mercury, www.mercuryconvention.org/Convention/tabid/3426/Default.aspx.

zeromercury.org