Draft guidance on identification of individual stocks of mercury or mercury compounds exceeding 50 metric tons, as well as sources of mercury supply generating stocks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

Note by the secretariat

1. Article 3 of the Minamata Convention on Mercury provides, in paragraph 5 (a), that each party “shall … endeavour 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 tonnes per year, that are located within its territory”. In addition, paragraph 12 of article 3 requires the Conference of the Parties to provide further guidance in regard to the issue at its first meeting.

2. At its sixth session, the intergovernmental negotiating committee discussed the identification of individual stocks and sources of mercury supply, considering the possible factors in the identification of stocks of mercury or mercury compounds put forth in note by the secretariat on the subject (UNEP(DTIE)/Hg/INC.6/9). During the discussion, some representatives said that there was a need for clear guidance on the provision of data on the amounts of mercury stocked or generated, while another said that there was a need to clarify the guidelines and requirements for the interim storage of mercury, which could be considered stocks. A need for caution against establishing an over-elaborate arrangement was also suggested, keeping in mind the limited funding available.

3. The committee agreed that the secretariat should prepare, for consideration by the committee at its seventh session, the second section of draft guidance in relation to Article 3, which would cover the identification of individual stocks of mercury or mercury compounds exceeding 50 metric tons, as well as sources of mercury supply generating stocks exceeding 10 metric tonnes per year, pursuant to paragraph 5 (a) of Article 3, based on submissions to be requested from Governments and other relevant actors, drawing on the factors suggested in document UNEP(DTIE)/Hg/INC.6/9.

* UNEP(DTIE)/Hg/INC.7/1.
4. Following the sixth session, the secretariat circulated to Governments and relevant actors a call for submissions in relation to stocks of mercury and sources of supply. The deadline for the submissions was extended from 30 June until 31 August 2015 based on a request from the bureau of the committee. Nine Governments and one non-governmental organization submitted information in relation to stocks and sources of supply. Their submissions are available at http://mercuryconvention.org/Negotiations/INC7/INC7submissions/tabid/4754/Default.aspx. It should be noted that various views in relation to the guidance were expressed in the submissions, with some requesting a significantly greater degree of detail than others. Using the information submitted and the factors suggested in document UNEP(DTIE)/Hg/INC.6/9, the secretariat has prepared the draft guidance as requested by the intergovernmental negotiating committee. The draft guidance is set out in the annex to the present note.

5. The committee may wish to consider the draft guidance and adopt it on a provisional basis pending formal decision by the Conference of the Parties at its first meeting.
Draft guidance on the identification of individual stocks of mercury or mercury compounds exceeding 50 metric tons and sources of mercury supply generating stocks exceeding 10 metric tons per year

Background

1. Paragraph 5 (a) of article 3 of the Minamata Convention on Mercury provides that each party “shall … endeavour 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”. Paragraph 12 of article 3 requires the Conference of the Parties to provide further guidance in regard to that issue at its first meeting. The present guidance is intended to assist parties in fulfilling their obligation under paragraph 5 (a) of article 3.

2. In the development of the guidance, emphasis has been placed on the need for each party to “endeavour to identify” individual stocks of mercury as well as sources of mercury supply. It is recognized that, for some parties, the resources available to undertake these activities may be limited, and the guidance therefore includes an initial focus on desk studies. Information may also be collected through the development of mercury inventories, which is being facilitated in many countries through Minamata Convention initial assessment projects funded by the Global Environment Facility.

Definitions

3. In article 3 of the Minamata Convention, “mercury” is defined to include mixtures of mercury with other substances, including alloys of mercury with a mercury concentration of at least 95 per cent by weight, and “mercury compounds” is defined as “mercury (I) chloride (known also as calomel), mercury (II) oxide, mercury (II) sulphate, mercury (II) nitrate, cinnabar and mercury sulphide.”. The article does not cover “quantities of mercury or mercury compounds to be used for laboratory-scale research or as a reference standard”, “naturally occurring trace quantities of mercury or mercury compounds present in such products as non-mercury metals, ores, or mineral products, including coal, or products derived from these materials, and unintentional trace quantities in chemical products”, or “mercury-added products.”

Individual stocks of mercury or mercury compounds exceeding 50 metric tons

4. The obligations set out in paragraph 5 (a) of article 3 relate to “individual stocks” of mercury or mercury compounds in the amounts specified. The term “individual stocks”, however, is not defined in the Convention. In the absence of a definition of “stocks” in the convention text, a “stock”, in this context could be considered to be a quantity of mercury or mercury compounds accumulated or available for future use, i.e., mercury that is intended for use is “stock”. A “stock” would not include quantities of mercury disposed of and managed as waste, nor mercury in a contaminated site, nor geologic reserves of mercury. In identifying stocks, it is important to consider both mercury and mercury compounds held at active premises and mercury and mercury compounds (which is not waste mercury) stored in decommissioned facilities.

5. Where mercury or mercury compounds are not intended for a use allowed under the Convention they fall under the definition of mercury wastes set out in Article 11, i.e., “substances or objects … that are disposed of or are intended to be disposed of or are required to be disposed of by the provisions of national law or this Convention.” Thus, should a party decree by national law that mercury stored at a decommissioned plant or facility that has previously used mercury is not to be used but is to be disposed of, it should be managed as mercury waste and should therefore be excluded from the requirements of article 3. The particular requirements of paragraph 5 (b) of article 3 in relation to mercury that a party determines to be excess mercury from the decommissioning of chlor-alkali facilities should be taken into consideration.

6. An “individual stock” of mercury or mercury compounds” could be considered to be the total quantity of mercury and mercury compounds under the control of an economic and/or legal entity, encompassing, for example all production facilities or sites under an entity’s control. Under this definition, small quantities of mercury stored at a number of sites throughout a country would collectively be identified as an individual stock exceeding 50 metric tons if they were all under the control of a single entity such as a government ministry or a large company such as a lamp manufacturer. Should each of the sites have a separate economic or legal identity, the stock might be determined by the Government not to exceed 50 metric tons.
7. It should be noted that the obligation in paragraph 5(a) regarding identifying stocks exceeding 50 tons is an ongoing obligation, not limited to stocks in existence at the time of entry into force of the convention for a Party. As stocks may be of a dynamic nature, depleted by the use of mercury for allowed uses and added to by the generation of mercury from sources of mercury supply, it will be useful for a party to keep track of the movement of mercury through commerce, perhaps through tracking the demand for or sale of mercury by the concerned entities.

8. In determining the levels of mercury stocks at any given time, initial actions will rely on the identification of entities that may store or use mercury and related facilities. Such entities and facilities might include:

   (a) Mercury traders that buy and sell, including through imports and exports, mercury or mercury compounds and may have varying amounts on hand at any time;

   (b) Primary mercury mines, which may have stocks of mercury awaiting sale and therefore may have large quantities on hand at certain times, depending on demand;

   (c) Other facilities or activities that produce mercury or mercury compounds, including mercury waste treatment facilities, which may also have large stocks on hand, depending on the overall mercury demand or on whether mercury is held pending a final decision on whether it is destined for disposal;

   (d) National Governments, which may have stocks of mercury on hand resulting from the seizure of mercury and from authorized uses such as military storage;

   (e) Production facilities for mercury-added products or for facilities reliant on processes that use mercury or mercury compounds, which may also maintain significant stocks of mercury depending on the supply chain and current demand.

9. The assessment of such facilities may be assisted by considering any registered exemptions under the Convention, as well as data presented under tools such as the global chlor-alkali inventory published by UNEP. As discussed above, information gathered through a national mercury inventory, developed for instance under a Minamata initial assessment, may also assist in the identification of stocks, as well as consideration of permits issued to store mercury or mercury compounds if such a system of issuing permits is in place.

10. Following the identification of relevant facilities it may be necessary to undertake a desk evaluation to determine whether the facilities hold stocks of more than 50 tonnes. Elements to be considered in this determination might include:

   (a) Current and past quantities of mercury or mercury compounds used;

   (b) Quantities of mercury or mercury compounds purchased;

   (c) Process design capacity of any facility that uses or produces mercury or mercury compounds;

   (d) Existing on-site storage capacity;

   (e) Quantities of mercury waste disposed of or managed;

   (f) Quantities of mercury sold;

   (g) Estimated quantities of mercury or mercury compounds lost to the environment or recovered from processes.

11. Information may be available from the national processes for managing imports of mercury, from information on marketing mercury nationally and from registries of facilities subject to environmental permits. Annual reporting requirements for facilities and the keeping of detailed records may facilitate such assessments. A detailed assessment of records relating to a facility may be required, as well as direct communication and on-site inspection.

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12. In assessing the level of stocks actually held at facilities, visual inspection may be required to verify the quantities of mercury held in storage. As a guide, a 35 kg flask of mercury would have approximate dimensions of 30 cm height and 12.5 cm diameter. A container for 1 metric ton of mercury would have the dimensions of approximately 50 cm height and 50 cm diameter. Based on this, 50 metric tons of mercury would fill at least 50 large flasks, which would occupy approximately 12.5 square metres of floor space.

13. In addition, unprocessed ore that contains mercury or mercury compounds may be assessed as part of stocks provided the mercury is present in more than trace quantities.

**Sources of mercury supply generating stocks exceeding 10 metric tons per year**

14. There are a number of possible sources of mercury supply that may generate stocks exceeding 10 metric tons per year and may be located within the territory of a party. These sources do not include imports of mercury or mercury compounds as such imports are not sources located within the territory of the party.

15. Possible sources include the following:
   (a) Primary mining;
   (b) Decommissioning of industrial facilities that have previously used mercury or mercury compounds, such as chlor-alkali facilities, which may produce mercury not only from defined chlor-alkali cells but also through the cleaning of equipment and structures where mercury may have deposited;
   (c) Collection of mercury and mercury compounds from non-ferrous metal mining;
   (d) Collection of mercury and mercury compounds recovered during the cleaning of fossil fuels such as natural gas;
   (e) Mercury compound and catalyst producers; and
   (f) Recovery, recycling or reclamation of mercury from mercury waste.

16. The identification of possible sources of mercury supply may be undertaken initially as a desk exercise, including an examination of records such as transaction records, evidence of the distribution of mercury or mercury compounds and import or export records that could be compared with estimated quantities used. The intention of such a comparison is to identify any significant discrepancies that may highlight previously unknown uses of mercury or indicate the existence of other sources of supply.

**Guiding questions to identify stocks of mercury or mercury compounds or sources of mercury supply**

17. Taking into account the elements set out above, the following questions may assist in identifying whether a country has stocks of mercury or mercury compounds exceeding 50 metric tons or sources of mercury supply that generate more than 10 metric tons per year:
   (a) Is primary mining occurring within the country’s territory?
   (b) Are there identified sites where mercury is stored prior to use within the territory?
   (c) Are recycling or recovery activities that may produce mercury undertaken within the territory? If so, what quantity of mercury is produced by those activities?
   (d) Is there any proposed decommissioning of chlor-alkali plants, vinyl chloride monomer plants, or other facilities with manufacturing processes in which mercury or mercury compounds are used?
   (e) Are there facilities that may result in the production of by-product mercury within the territory? If so, what quantity of mercury is generated by those facilities?