

Toolkit for Identification and Quantification of Mercury Releases

Guideline for Inventory Level 1

> Version 1.3 April 2015



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Citation: UNEP, 2013. Toolkit for Identification and Quantification of Mercury Sources, Guideline for Inventory Level 1, Version 1.2. UNEP Chemicals Branch, Geneva, Switzerland

This Toolkit for Inventory Level 1 represents the third version of this publication. It will be further developed and updated as appropriate.

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Funding

The work to develop the Inventory Level 1 guideline and calculation spreadsheet has been funded by the Government of Denmark, and revised with funding from the Nordic Council of Ministers.

Produced by

UNEP Division of Technology, Industry and Economics, Chemicals Branch International Environment House 1 11-13, Chemin des Anémones CH -1219 Châtelaine, Geneva Switzerland Tel: +41 (0) 22 917 12 34 Fax: +41 (0) 22 797 34 60 Email: metals.chemicals@unep.org Website: http://unep.org/hazardoussubstances/ The Toolkit can be found on UNEP Chemicals Branch's website: <u>http://www.unep.org/hazardoussubstances/Mercury/MercuryPublications/GuidanceTr</u> <u>ainingMaterialToolkits/MercuryToolkit/tabid/4566/language/en-US/Default.aspx</u>

Acknowledgements

The Toolkit was developed for UNEP by COWI A/S, Denmark, and revised with contributions from the AMAP Secretariat, Norway, IVL, Sweden, and the Artisanal Gold Council.

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Introduction

Welcome to the Toolkit for identification and quantification of mercury releases - Inventory Level 1. The Toolkit consists of 6 separate documents:

- This Guideline for Inventory Level 1;
- An electronic spreadsheets for calculation of estimates of mercury inputs and releases on Inventory Level 1;
- Two templates for data collection letters;
- An Inventory Reporting Template; and
- A Toolkit Reference Report.

The Toolkit Reference Report gives additional guidance on inventory development and describes the background inventory principles and the mercury source categories in more detail. It also describes Inventory Level 2 which gives guidance to performing more detailed and potentially more technically accurate mercury inventories.

This guideline works closely together with the Toolkit electronic Inventory Level 1 spreadsheet for calculation of estimates of mercury inputs and releases¹. The guideline and the calculation spreadsheet bring you step by step through the development of your mercury inventory on Inventory Level 1. The design of Inventory Level 1 makes it simple to organise and calculate your first national mercury inventory. We acknowledge however that mercury inventory development is generally challenging, especially getting hold of the needed data types for your country. We have made every effort to collect and organise the needed background information to pave the way for a resource-saving and efficient mercury inventory development for you.

The Inventory Level 1 guideline and calculation spreadsheet is organised with the following steps:

Step 1: Getting started;

Step 2: Energy consumption and fuel production;

Step 3: Domestic production of metals and raw materials;

Step 4: Domestic production and processing with intentional mercury use;

Step 5: Waste treatment and recycling;

Step 6: General consumption of mercury in products, as metal mercury and as mercury containing substances;

Step 7: Crematoria and cemeteries;

Step 8: Miscellaneous mercury sources not quantified on Inventory Level 1;

Step 9: Reporting your inventory and

Step 10: Refining your inventory (optional).

Steps 2 through 7 provides brief descriptions of the mercury source categories included, the data types needed and ideas for where to search for data, and the main factors informing your decisions of whether to refine your inventory further for this category or not. Step 8 lists source categories which are not quantified via Inventory Level 1.

¹ All the UNEP Mercury Toolkit documents can be found on UNEP's website: <u>http://www.unep.org/hazardoussubstances/Mercury/MercuryPublications/GuidanceTrainingMaterialToolkits/MercuryToolkit/tabid/4566/language/en-US/Default.aspx</u>

Steps 1, 9 and 10 give you general guidance on performing and reporting your inventory.

Background

The UNEP Governing Council (GC) concluded in 2003 that there is sufficient evidence of significant global adverse impacts from mercury to warrant international action to protect human health and the environment from mercury and its compounds. The GC decided that national, regional and global actions should be initiated as soon as possible and urged all countries to adopt goals and take actions, as appropriate, to identify populations at risk and to reduce human-generated releases.

In response to the Governing Council's request, UNEP established a Mercury Programme to encourage all countries to adopt goals and take actions, as appropriate, to identify exposed populations, minimize exposures through outreach efforts, and reduce anthropogenic mercury releases. An important part of the UNEP Mercury Programme is to develop training materials, guidance documents and toolkits on a number of relevant topics that may be of use to Governments and others in their efforts to evaluate and address mercury pollution.

A certain level of knowledge is required to evaluate risks posed by mercury and to take appropriate action to reduce potential risks. This "Toolkit for identification and quantification of mercury releases" (Toolkit) assists countries to develop part of the required knowledge through the development of a mercury inventory that identifies sources of mercury releases in their country and quantify their releases.

A Pilot Draft version of the Toolkit was published by UNEP in November 2005, providing the initial version of what is now referred to as Inventory Level 2 and the "Toolkit Reference Report" in the current guideline document. Pilot tests in a number of countries have identified a need for further simplification of the Toolkit, thus the development of Inventory Level 1.

More reading on the Toolkit and mercury as a pollutant

For more information on the background for this Toolkit, see Section 1 and 2 of the Toolkit Reference Report. For more information on mercury release fundamentals, see Section 3 of the Toolkit Reference Report. Two other reports published by UNEP Chamicals the Global Mercury Assessment² and the Global Mercury Assessment

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