

## SWEDISH INFORMATION ON SUPPLY, TRADE AND DEMAND OF MERCURY

The Swedish information has been compiled by

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### 0. GENERAL INFORMATION

In February 2006 Sweden notified a proposal for a national general ban on mercury to the European Commission and the World Trade Organisation. The ban, with effect from 1 January 2007, would prohibit the marketing of mercury and mercury-containing products on the Swedish market as well as professional import or export of mercury or mercury-containing products. Also, the use of mercury would be prohibited. Mercury-containing goods already in use would not be banned, but may continue to be used. The proposal contains certain exceptions which refer to harmonised EU legislation (for example button-cell batteries and fluorescent lamps) and some time-limited exceptions for the use of mercury in certain applications to make the transition to alternatives possible.

### 1. SUPPLY OF MERCURY

#### **Production of primary mercury**

In smelting works mercury is removed in the ore-dressing processes to prevent large discharges and to stop mercury becoming an unacceptable constituent of the smelted products. In 2004 about 20 tonnes of mercury were removed from primary metal works, mostly copper, in Sweden. This mercury is regarded as waste as there is little demand in Sweden and export of mercury is banned.

At present about 350 tonnes of mercury contained in about 8500 tonnes of waste from mining and smelting of metals are stored. A further 400 tonnes of waste is generated each year, containing about 20 tonnes of mercury.

#### **Mercury recovered from spent products, catalysts and wastes from industrial production processes (excluding any mercury recovered on-site from chlor-alkali wastes)**

About 30 tonnes of mercury from 1800 tonnes of collected batteries are stored. The batteries are being processed and the mercury is separated and stored awaiting treatment and final storage.

At present about 80 tonnes of mercury contained in about 2000 tonnes of waste other than batteries are stored. A further 50-100 tonnes of waste is generated each year, containing about 2-4 tonnes of mercury.

**Mercury in government reserve stocks or inventories**

None.

**Other stocks or sources of mercury, such as mercury recovered from a chlor-alkali factory that has closed or converted to a mercury-free process**

About 250 tonnes of mercury from a chlor-alkali plant (closed in 2005) is stored awaiting treatment and final storage.

**2. TRADE IN MERCURY****Trade statistics**

Mercury compounds are subject to Export Notification within the EU (plant protection products and other pesticide uses including biocides) and to PIC Procedure under the Rotterdam Convention. Information on export and import of mercury compounds is publicly available in the European Database Export Import of Dangerous Chemicals (<http://ecb.jrc.it/edexim/en/index.htm>).

**Additional information**

We have no reason to believe that the data reported to statistical agencies about mercury movements in and out of Sweden are inaccurate.

Sweden has an export ban on mercury, mercury compounds and certain mercury containing products, with the possibility to grant exemptions on a case-by-case basis. The final destination and use must be specified in an application for exemption.

Sweden is exporting mercury naturally contained in ore concentrate. In 2003 Sweden exported 305057 tonnes of zinc concentrate containing an estimated total of 40 tonnes of mercury. In the same year exports of copper concentrate were 125 tonnes, corresponding to about 9 kg of mercury.

**3. DEMAND FOR MERCURY****Mercury-based chlor alkali production**

There is one mercury-based chlor-alkali plant in operation in Sweden 2006 with a capacity of 120000 tonnes of chlorine/year. The annual losses of mercury are about 25 kg. This plant plan to convert to mercury-free technique by 2010.

**Demand in products**

The demand for mercury in products in Sweden has been reduced by about 95 % during the period 1991 – 2003, from >9.1 tonnes (1991) to 0.435 tonnes (2003).

### Mercury supplied to Swedish society in chemical products and goods 1991/92, 1997 and 2003

Table taken from KemI Report No 4/04 except for batteries 2003 which was revised in October 2005 by the Swedish Environmental Protection Agency.

	1991/92	1997	2003	
Thermometers	328	0,13	0,07 (1-2)	
Electrical components	4500	3	-	
Measuring instruments		17	20	
Batteries	2300	800	100-140	
Light sources	300	150	121	
Neon tubes		30	18	
Equipment		40-50		
Dental amalgam	1700	980	103	
Medicinal products, veterinary medicinal products and cosmetics		>0,2	0,2	
Analytical chemicals		<45	53	
<b>Total</b>	<b>&gt;9100</b>	<b>2060</b>	<b>435</b>	<b>kg</b>

#### Metallic mercury (kg)

Import (Statistics Sweden)	56 000	39 000	3000
National trade	12 000	580	
Export (Statistics Sweden)	59 000	0-1000	1000

#### 4. ARTISANAL AND SMALL-SCALE GOLD MINING (ASM)

**Views or suggestions on measures that could be implemented at national or global level to better understand the mercury trade, and to take steps to reduce the potential health effects of mercury on ASM miners, their families and communities**

- Mercury in all forms (metallic as well as in products) should be subjected to the PIC-procedure in the Rotterdam Convention to be able to follow the trade in legitimate uses.
- Information activities/field programmes providing the miners with knowledge about the risks with mercury, of alternative techniques and of better work practices/techniques (retorts).
- Economic support to miners to help them get started with alternative techniques or better work practices/techniques (retorts).