

SESSION 8

Regulations & Policies on Management of Mercury Stockpiles & Mercury-Bearing Waste Outside of the U.S.

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Mercury Retirement in the European Union

1. The European Union

The European Union (EU) of today has 15 Member States (MSs) and 13 Accession Countries (ACs), of which ten are expected to become members in 2004. EU legislation is or will be implemented in all of these countries. There is also extensive cooperation with the four states of the European Free Trade Association (EFTA).

The European Union is not a new state replacing existing ones. The Member States delegate sovereignty for matters of joint interest to independent institutions which represent the interests of the Union as a whole, its member countries and its citizens. All decisions and procedures are derived from the basic treaties ratified by the Member States.

The Commission traditionally upholds the interests of the Union as a whole, while each national government is represented within the Council, and the European Parliament is directly elected by citizens. The Council of the Union and the European Parliament are the legislators of the European Union, while the Commission is the driving force for initiatives and the executive body, the “watchdog” of the treaties.

2. European Union mercury legislation

EU legislation concerning mercury and its compounds includes, for example, restrictions on marketing and use, ban on use in certain products and applications, regulations concerning emissions to air and water and waste treatment legislation. A comprehensive list of EU legislation was submitted to UNEP for its ‘Global Assessment of Mercury’ and can be found at <http://www.chem.unep.ch/mercury/gov-sub/EC.htm>.

Mercury policies differ widely between Member States, Sweden, for example, has an export/import ban on mercury and has banned most of its uses, while Spain, as Europe’s only primary mercury producer, is maintaining mercury production in the Almadén mercury mine and sells it all over the world. On the EU level, and in most MSs, metallic mercury is a freely traded commodity.

3. Mercury from decommissioned European chlor-alkali plants

The largest volume of mercury used within the EU is in mercury-based chlor-alkali plants, where the cathode is liquid mercury. Mercury cells in the EU currently contain some 10000-12000 tonnes of mercury. Mercury is also contained in equipment, buildings and waste and the total amount of mercury which will have to be dealt with when the EU plants are decommissioned is approximately 12000-15000 tonnes. Approximately another 2000 tonnes of mercury are expected to come from the mercury-based chlor-alkali plants in EFTA and EU Accession Countries.

There will be a phase-out of the mercury-cell process in the European chlor-alkali industry in the coming years as old plants approach the end of their economic lifetime and/or get their permits up-dated according to the requirements of the IPPC Directive¹ and OSPAR Decision 90/3². This phase-out could take from eight years to more than twenty years.

Euro Chlor, a trade association representing the European chlor-alkali industry, has an agreement in place with Minas de Almadén, the Spanish mercury mine. The agreement states that Minas de Almadén will buy the surplus mercury from the western European chlor-alkali plants and put it on the market instead of virgin mercury. All western European chlor-alkali producers have agreed to sell their surplus mercury to Almadén (or some other European mercury producer).

In the year 2000 transfers of mercury to Minas de Almadén from western European chlor-alkali plants amounted to 354 tonnes. In 2001 this rose to 506 tonnes and for the year 2002 it is estimated that a quantity in the order of 450 tonnes will be transferred. According to Euro Chlor these transfers enabled Minas de Almadén to reduce the mining of fresh mercury to a level in the order of 200-300 tonnes of virgin annual production. This, according to Euro Chlor, demonstrates that their agreement with Almadén is meeting its objective which is to reduce the fresh mining of new mercury and also that the amount of mercury that comes into the commercial circuit has not increased despite the fact that the chlor-alkali industry has closed down existing mercury cells.

The handling of the decommissioned mercury is at the moment the responsibility of the chlor-alkali industry in compliance with national legislation. The European Commission is preparing a report to the EU Environment Council about mercury from the chlor-alkali industry and these issues will be discussed at one of the next Council meetings.

¹ Council Directive 96/61/EC on integrated pollution prevention and control (IPPC) requires installations to have permit conditions based on best available techniques (BAT) by 30 October 2007. The mercury-cell process is not considered to be BAT for the chlor-alkali sector (Reference Document on Best Available Techniques in the Chlor-alkali Manufacturing Industry, October 2000, publicly available from the internet at <http://eippcb.jrc.es>).

² Oslo and Paris (OSPAR) Convention for the Protection of the Marine Environment of the North-East Atlantic. Decision 90/3 recommends that the phase-out should be completed by 2010.