



SHORT BACKGROUND TO LEAD MANAGEMENT AT INTERNATIONAL LEVEL

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L O N D O N



INTRODUCTION

Lead has been a subject of concern by environmental and health authorities for a long time, and a significant number of control programmes and management initiatives have been launched at national, corporate and international levels. This paper gives a brief background to the main international initiatives concerned with lead risk reduction. These may address lead exposure generally, or focus on specific uses such as gasoline, paints or batteries. It should be recalled that presently the major economic use of lead is in batteries, with other uses becoming more and more marginal in terms of volume (although not necessarily in terms of local exposure). The main international programmes have tended to address lead in the form of end-products rather than as a raw material, or as ambient air or water pollution from mines and smelters since these are supposed to be already regulated by national environmental standards.

1. WHO

Health authorities have long been concerned about lead, and WHO has provided extensive documentation on lead toxicity through its various technical arms, and through joint programmes such as IPCS. A library on lead hazards can also be accessed via UNEP Chemicals. The WHO recommended exposure limits are influential in guiding national authorities as well as other international institutions standard setting bodies such as ILO and the World Bank, as well as companies and industry organisations.

<http://www.who.int/peh/burden/9241546107/leadtoc.htm>

http://www.euro.who.int/document/aqi/6_7lead.pdf

<http://www.cdc.gov/niosh/ipcsneng/neng0052.html>

2. OECD

The concern among member countries led to a re-examination of lead risk reduction options already in the 1980s. The option of a Council Decision was debated in the 1990s. At that stage the lead industry proposed to undertake a voluntary risk reduction programme as an alternative to government action – see ILMC below. There has been no recent move by OECD to revert to the idea of a Council Decision, but the debate on lead as an environmental contaminant is not yet over.

http://www.oecd.org/document/59/0,2340,en_2649_3437_5_2403515_1_1_1_1,00.html

<http://www.lead.org.au/lanv7n4/L74-23.html>

3. ILMC

The International Lead Management Center was launched to undertake a voluntary programme of lead risk reduction. After reviewing and making recommendations about various minor uses of lead (in terms of volume) the ILMC concentrated on a major technical assistance programme to improve operation of lead-battery collection and recycling facilities in a number of countries such as Mexico, Russia, the Philippines. The programme came to an end in 2003.

www.ilmc.org

4. UNEP

UNEP has been linked with lead risk reduction initiatives for a number of years. Initially through its membership of IPCS, then on several individual initiatives on lead in gasoline. In 1996 UNEP published a Technical Guide on environmental management aspects of lead battery recycling (in French only) and a first trainers manual (in English only). The UNEP programme on Environmental

Technology Assessment (EnTA) produced an extensive manual on assessment of battery recycling technologies, and ran several workshops also in cooperation with ILMC and UNCTAD. UNEP's Governing Council, in decision 22/4(III), mandated a lead management programme which is being implemented by UNEP Chemicals This programme deals with all lead substances, particularly from the point of view of possible government action. Lead can also be dealt with under the UNEP/SETAC Life-cycle Initiative, especially from the point of view of developing a management model that links various key players at high-risk points along the life-chain of certain products (such as batteries in this case).

<http://www.uneptie.org/>

<http://www.chem.unep.ch/>

<http://www.uneptie.org/pc/sustain/lcinitiative/home.htm>

<http://www.uneptie.org/pc/pc/tools/enta.htm>

5. BASEL CONVENTION

The Secretariat of the Basel Convention has included lead waste as an important subject. It has produced a technical guideline and is now launching capacity building programmes through some of its regional centres. Under the Convention trade with developing countries in lead waste including batteries is severely restricted, although this part of the Convention has not been formally passed into force. Nevertheless a number of countries have responded by regulating such trade including variously both export and import operations.

<http://www.basel.int/>

6. UNCTAD

UNCTAD has been concerned about the trade aspects of secondary resources based on waste materials, including lead batteries, and has been supporting workshops and discussions to contribute to a resolution of this issue.

<http://www.unctad.org>

7. EU

The "Lead-free" legislation, Directive 2002/95/EC is more accurately defined as "the restriction of the use of certain hazardous substances in electrical and electronic equipment", will come into force on 1st July 2006. While there are exemptions, the directive restricts (not prohibits) the use of certain substances such as lead used within the manufacture of electrical and electronic equipment (EEE) that are 'put on the market' after this date.

The European Union (EU) has been formulating legislation on batteries since the 1980s and specific measures were introduced in the early 1990s. In particular, Directive 91/157/EEC focused on the restriction and labeling of batteries containing heavy metals.

Amendments to the Basel Convention have had an impact in the EU in terms of lead acid battery recycling. In the past, many of these batteries have been exported to countries such as Indonesia, due to the lower disposal costs there rather than any environmental management advantages. While these countries may be equipped to recycle lead waste, this takes place in an informal and unstructured industry, often in small poorly designed facilities that are subject to lower standards than in Europe.

http://europa.eu.int/comm/environment/index_en.htm

8. LEAD DEVELOPMENT ASSOCIATION

The Lead Development Association International (LDAI) is dedicated to encouraging the responsible use of lead and its compounds. LDAI represents companies and associations which are concerned with the safe production, use and disposal of lead and lead products. It also acts as a trade association for those involved in the lead industry, representing its members at European and International levels.

<http://www.ldaint.org/default.htm>

9. ICMM

The 2002 meeting of the Global Mining Initiative endorsed « integrated materials management » as one of the current priorities for the mining and metals sector. This has been incorporated in the work priorities of ICMM, although this organisation does not generally undertake metal-specific programmes. ICMM has agreed to co-chair the 2004 meeting in London.

<http://www.icmm.com>

SUMMARY

There is a large number of initiatives in the area of lead management, most focussing on control of lead products and materials of various types, including phase-out of certain substances such as paint, TEL, and glazes. Standards for lead exposure and environmental pollution are in force in many countries, guided by international limit values developed by WHO. Initiatives to limit trade have been taken by the Basel Convention. Industry has taken some initiatives to offer technical assistance in selected areas, but less on voluntary sector initiatives to discontinue use or certain operational practices.