



VOLUNTARY LEAD INDUSTRY INITIATIVES ON HEALTH AND ENVIRONMENT

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L O N D O N



For many years, lead has been a focus of concerns, real or perceived about its impact on human health and the environment. Lead and its compounds do possess toxicological and ecotoxicological properties which can result in harm if exposures become too high. Industry has worked to increasingly stringent standards concerning its operations and products, and has prided itself on its management of environmental and health controls.

Until relatively recently, industry's responses to society's concerns about lead, and to legislative proposals to reduce emissions or restrict uses, were generally reactive and defensive: In recent years, however, there has been a distinct change in the lead industry's attitude to health and environmental issues. Instead of remaining permanently defensive, a more proactive attitude has emerged which has resulted in a number of initiatives designed to promote good practice and establish a sound scientific basis to the identification and management of risks. Two of these initiatives are described below: the creation and continuing support of the International Lead Management Center, and the pursuit of a Voluntary Risk Assessment for Lead.

INTERNATIONAL LEAD MANAGEMENT CENTER

The International Lead Management Center (ILMC) was created in 1996 in response to international concerns that risks attributable to lead exposure were not being adequately addressed in all countries, and especially in developing countries. The concerns had arisen within the Organization for Economic Cooperation and Development (OECD), where proposals had been formulated for the adoption of a Council Act on lead risk reduction, which would have been legally binding on all OECD member countries. The Act would have been designed to restrict many applications of lead and to impose standards on emissions, occupational exposure, etc.

Some OECD countries, however, felt that an Act would be overly prescriptive and would fail to address the needs of developing countries (not members of OECD) where real risks could be readily identified. An alternative proposal was therefore developed for a

Ministerial Declaration which would indicate individual countries' commitment to lead risk reduction, leaving them free to address problems in their own way without the need for internationally-binding rules. It would also require industry to take an active role in transferring its risk management expertise to countries where help was urgently required. The OECD Ministerial Declaration was adopted in February 1996 upon receipt of industry's commitment to undertake a voluntary action programme on lead risk management.

Industry therefore created the International Lead Management Center as a not-for-profit organization located at the offices of the International Lead Zinc Research Organization in North Carolina. Funded entirely by the lead producing industry, ILMC has conducted a wide range of Pilot Program activities designed to improve occupational health, promote sound industry practice and reduce lead occupational and population exposures.. The effectiveness of the Pilot Programs has been greatly enhanced by forging partnerships with lead user sectors, universities and appropriate national/regional environmental authorities. In order to promote lead risk reduction in more countries, ILMC also works with a number of intergovernmental organizations including the United Nations Environment Programme (UNEP), the United Nations Conference on Trade and Development (UNCTAD) and the Secretariat to the Basel Convention (SBC).

Pilot Programs have been conducted in response to requests from national governments. Whilst each project has addressed specific local or national problems, each program has produced outcomes that have contributed to the development of generic risk reduction procedures and methodologies that are now featured in the extensive "Toolbox" series. To date Pilot Programs have been successfully implemented in the Philippines, the Russian Federation, Peru and Mexico. More recently, the ILMC has been working with the SBC on battery recycling in Central America and the Caribbean and with UNCTAD on capacity building in the ASEAN region.

For more information log onto - www.ilmc.org.

VOLUNTARY RISK ASSESSMENT FOR LEAD

Within the European Union, a Regulation exists (No. 93/793 on the evaluation and control of the risks of existing substances) under which chemicals should be prioritised and then assessed for their potential to present risks to human health and the environment. The procedures for the risk assessment are laid down in minute detail. However, by the year 2000 lead had not been prioritised within the process and so the lead industry decided to conduct a voluntary risk assessment. This decision was taken partly because of the industry's belief that a detailed risk assessment would provide a sound basis for decision-making, for standard setting and for product controls, and partly because of anticipated changes to EU policy on chemicals which were likely to make industry responsible for assessing the safety of its processes and products.

Since voluntary risk assessments had no established framework within which to work, it was decided to follow the procedures laid down in the existing substances Regulation. However, unlike assessments conducted under the Regulation, industry would be responsible for the assessment rather than an EU member state, and it was recognised that credibility could become an issue – how could the national and EU authorities be assured of the independence and objectivity of the work and hence be prepared to accept the results at the end of the process? After lengthy discussions a protocol was established which gave the authorities the assurance they required. This involved the appointment of independent consultants to conduct the assessment, panels of independent scientific experts to advise on and review the work, and the involvement of one member state (the Netherlands) to monitor the whole process and act as a sort of “referee”. Provided the member states could be convinced of the credibility of the assessment, it was envisaged that the results could be adopted and endorsed by them as an “official” risk assessment.

The risk assessment commenced at the beginning of 2002 with a projected budget of over US\$ 2.5 million, funded exclusively by industry. Lead metal, lead oxides and nine lead stabilizers are being addressed, representing an estimated 98% of all lead uses. In addition to the lead producing industry, all major end-use sectors are supporting the work by contributing funding and/or the required data to characterise the risks associated with their operating plants and their products.

The range of risk end-points that must be investigated is extensive. On the health side, occupational exposure is one focus, whilst another is the possibility of risks to the general population from products either in use or on ultimate disposal. On the environmental side, industrial and diffuse emissions are investigated, with a view to identifying any risks they present to animals or organisms living in water (both fresh and marine), sediments and soils. If risks are identified in any of these compartments, it will be industry's responsibility to propose suitable risk management measures. The entire project is on schedule for completion by the end of 2004.

The very fact that risk assessment for lead has been undertaken voluntarily and without coercion has been a major demonstration of the industry's desire to demonstrate responsibility and stewardship of its products, and has had a noticeable effect on the authorities' attitudes towards and relationship with the lead industry. Ideas are even now being formulated for taking this improved relationship further forward through the use of the results in a pilot trialing of the proposed new EU chemicals policy – a project which, if it comes to fruition, could help the European Commission and the member states to assess the workability and effectiveness of its new policy.