

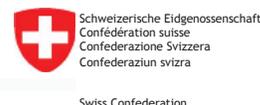


Heavy Metals Side Event Bulletin

A Summary Report of the Side Event on Heavy Metals

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HEALTH AND ENVIRONMENTAL CONCERNS ASSOCIATED WITH HEAVY METALS: GLOBAL NEED FOR FURTHER ACTION?

On 23 September 2006, the Swiss Confederation held an event entitled, "Health and environmental concerns associated with heavy metals: global need for further action?." The event took place in the context of the fifth session of the Intergovernmental Forum on Chemical Safety (IFCS Forum V), which is being held from 25-29 September 2006, in Budapest, Hungary. The event was attended by over 200 participants, representing numerous governments, agencies, intergovernmental organizations and non-governmental organizations.

In the morning and afternoon, participants heard case study presentations. Participants were divided into three working groups (one for lead, one for mercury, and one for cadmium) for lunchtime discussions. In the afternoon, rapporteurs from the working groups presented results on the lunchtime discussions. This was followed by further discussion among all participants.

The results of the event will be forwarded to IFCS Forum V for its consideration under agenda item 8, "Heavy Metals - need for further global action?"

HEAVY METALS EVENT HIGHLIGHTS

Georg Karlaganis, Switzerland, opened the meeting and indicated that the event aimed at developing a better understanding and common approach to deal with the challenges presented by the use of mercury, lead and cadmium. He underscored that Switzerland was hosting the event in response to developing countries' desire to include heavy metals on the agenda. Judy Stober, IFCS Executive Secretary, outlined the structure of the event.

CASE STUDIES

Ravi Agarwal, Toxics Link, India, outlined the global demand and supply trends for lead, cadmium and mercury, and emission and releases from products or processes containing or using such metals. He noted that in the past decade the use of these heavy metals has been significantly reduced in developed countries, while it has rapidly increased in developing countries. Agarwal said that sectors such as coal-based power generation, urban transportation and waste disposal are contributing to the new releases.

Kristof Kozak, Ministry of Environment of Hungary, outlined Hungarian legislation regarding restrictions of mercury use in products. He highlighted Hungary's lighting industry compliance with mercury regulations on compact and straight fluorescent lamps, and progressive replacing of high intensity discharge lamps containing up to 300mg of mercury per lamp. Kozak underscored alternative technologies to mercury thermometers, and explained the advantages and disadvantages of using mercury-based sphygmomanometers in hospitals.

Jules de Kom, Ministry of Public Health, Suriname, highlighted artisanal gold mining as the main source of mercury emissions in Suriname. He said the primary exposures to mercury are occupational and environmental, with children and pregnant women being the most vulnerable. De Kom noted the need for: further government control over artisanal mining; regional and international collaboration; integration of social and mercury issues; financial resources and capacity building to implement solutions; and the compilation of relevant information.

Answering questions from participants, de Kom noted that mercury-free gold mining techniques are more expensive, highlighted controls imposed on the large-scale mining companies, and elaborated on miners' registration.

Ethelyn Nieto, Department of Health, Philippines, outlined the results of case study on health and environment risk assessment carried out on a community near an abandoned mercury mine in the Philippines. Nieto said the study concluded that children and women in exposed areas are disadvantaged health wise in comparison with unexposed people, and recommended responses such as remediation, continued monitoring, and provision of safe potable drinking water to the affected communities.

Bjørn Erikson, International Confederation of Free Trade Unions, presented a number of occupational exposures and solutions for lead, mercury, cadmium and asbestos. He noted that all substances and their emissions cause several problems regarding environment, occupation and public health that should be addressed in a holistic manner. Erikson underscored the existence of a common ground for environmentalists and trade unionists to work with hazardous chemicals.

Abiola Olanipekun, Ministry of Environment, Nigeria, said that rises in industrial activities and urbanization in Africa have resulted in large increases in the amount of heavy metals in the environment. Alo Babajide, University of Lagos, stressed high concentrations of heavy metals in Nigeria, highlighted lack of data on rural areas, and called for a Programme of Action on Heavy Metals in the Environment in Africa that could identify sources, quantify discharges, and formulate workable pollution control measures.

Maria Doa, US Environmental Protection Agency, outlined the Global Partnerships for Mercury Reduction, including Argentina, Brazil, Burkina Faso, Canada, Mexico, Senegal, and the Philippines. She stressed the partnership's ability to provide effective actions and tangible reductions of mercury use and emissions. Doa summarized the ongoing partnerships that include initiatives on chlor-alkali factories, coal combustion utilities, and artisanal and small-scale gold mining. She said the partnership on international mercury and transport research aims at further understanding the dynamics of the global cycle of mercury, and at target efforts for reducing mercury's health and environmental effects better. Following his speech, Doa answered participants questions, noting: a focus on short-term immediate reductions; the importance of a coordinated global approach achieved through partnerships; and the US involvement with South Africa to start product and release inventories.

The *Heavy Metals Side Event Bulletin* is a publication of the International Institute for Sustainable Development (IISD) <info@iisd.ca>, publishers of the *Earth Negotiations Bulletin* © <enb@iisd.org>. This issue was written and edited by Karen Alvarenga, Ph.D. and Miquel Muñoz. The Digital Editor is Anders Gonçalves da Silva. The Editor is Chris Spence <chris@iisd.org>. The Director of IISD Reporting Services is Langston James "Kimo" Goree VI <kimo@iisd.org>. Funding for coverage of this meeting has been provided by the Swiss Confederation. IISD can be contacted at 161 Portage Avenue East, 6th Floor, Winnipeg, Manitoba R3B 0Y4, Canada; tel: +1-204-958-7700; fax: +1-204-958-7710. The opinions expressed in the *Bulletin* are those of the authors and do not necessarily reflect the views of IISD. Excerpts from the *Bulletin* may be used in other publications with appropriate academic citation. Electronic versions of the *Bulletin* are sent to e-mail distribution lists (HTML and PDF format) and can be found on the IISD RS Linkages WWW-server at <<http://www.iisd.ca/>>. For information on the *Bulletin*, including requests to provide reporting services, contact the Director of IISD Reporting Services at <kimo@iisd.org>, +1-646-536-7556 or 212 East 47th St. #21F, New York, NY 10017, USA.



John Atherton, International Council on Mining and Metals (ICMM), said that heavy metals is a “meaningless name” without a sound basis, noting ICMM’s preferred terminology of “metals of international concern.” He highlighted privatization trends in the mining industry, and said that for ICCM financial assurance for mine closure and reclamation is an industry responsibility. He stressed that environmental problems require technical solutions that are also culturally relevant, as well as an integrated approach that includes all stakeholders.

Desiree Narvaez, UNEP, commented on UNEP’s Mercury Programme and its lead and cadmium activities. She underscored that mercury is persistent and cycles globally, stressing that significant numbers of humans and wildlife are at risk worldwide, mainly due to consumption of contaminated fish. Narvaez highlighted UNEP’s role in implementing mercury partnerships and UNEP’s toolkit for mercury inventory development. Following a question, Narvaez said determining an acceptable threshold for mercury is a very complex task.

Jenny Pronczuk, World Health Organization (WHO), described WHO’s programmes and activities on mercury, lead and cadmium. She noted a growing body of evidence linking these (and other) metals to adverse health effects, developmental problems and aging processes. She highlighted increased concern about the special susceptibility of the fetus and small children to lead, mercury and cadmium. Pronczuk said WHO activities related to lead, mercury and cadmium resulted in a network of experts and a remarkable wealth of knowledge and experience.

Pablo Huidobro, United Nations Industrial Development Organization (UNIDO), underscored the Global Environment Facility-funded Global Mercury Project. He compared artisanal gold mining production of 600-800 tonnes per year with global gold production of around 3,000 tonnes per year, and stressed that artisanal gold mining is currently the second largest anthropogenic emitter of mercury. Huidobro noted the importance of educating artisanal miners and its difficulties.

Brinda Wachs, UN Economic Commission for Europe, outlined the Protocol on Heavy Metals to the Convention on Long Range Transboundary Air Pollution. She explained that the Protocol aims at controlling anthropogenic heavy metals emissions that are likely to have significant adverse effects on human health or the environment, including cadmium, lead and mercury.

WORKING GROUPS

Over the lunch period, delegates met in three working groups to address seven questions/issues: 1) sources of exposure; 2) air and water transport; 3) trade related dispersal; 4) other international dimensions that make it difficult for an actor to act alone; 5) management strategies; 6) the major stakeholders; and 7) the value/need for international cooperation/coordination to address the challenge. Following the lunch period, rapporteurs for each working group reported back to plenary.

CADMIUM WORKING GROUP: Jamidy Katima, University of Dar es Salaam, acted as rapporteur for this group. Regarding sources of exposure, he identified zinc mines, tobacco smoking, batteries, phosphate fertilizers, solar cells, combustion of fossil fuels, and incense. On transport, he drew attention to group discussions on the knowledge gap, rivers and ocean currents, and cetaceans. On trade, he highlighted fertilizers, contaminated food, toys, and medicines. Regarding the international dimensions of the issue, he noted double standards on import/export rules, international labeling, and international trade rules. On management strategies, he referenced substitution, information sharing, risk communication, a priority substance list, and how to manage already existing cadmium problems. On international cooperation, he reported on calls from some participants for a framework convention on heavy metals, while noting that others had said that long range transport is unclear, making binding instrument inappropriate.

LEAD WORKING GROUP: On the issue of sources, rapporteur Christian Farrar-Hockley, EPHA Environmental Network, underscored, *inter alia*: gasoline, toys, combustion

process, waste management, boat building, batteries, and paint. Regarding trade related dispersal, he identified automobiles, electronics, batteries, toys, and watercraft and marine fuels. On international considerations, he noted the existence of non-uniform standards causing non-trade restrictions, and non-implementation of WTO and other international agreements. Regarding management strategies, he emphasized discussions on promoting the use of unleaded gasoline in all sectors, developing international inventories of contaminated sites, assessing health impact and related costs, developing national policies on chemical safety, and carrying out research and development activities for environmentally-friendly technology. Children and women of child bearing age were identified as the most vulnerable stakeholders.

MERCURY WORKING GROUP: Rapporteur Henrik Eriksen, Ministry of the Environment, Norway explained that the group had identified various sources, including food (particularly fish), abandoned mines, contaminated sites, artisanal gold mining, dental amalgam, and thermometers and other medical devices. On the international dimension, he noted discussions on the difficulty of outlawing imports, transfer of outdated equipment, and the low price of mercury. On management strategies, he noted educational programmes on fish consumption and gold mining. Regarding international co-operation and co-ordination, he highlighted discussions on partnerships and existing instruments, and the need for tracking trade. He reported different opinions on the need for a separate, legally-binding instrument on mercury. Some advocated to pursue existing options, including the Rotterdam Convention, SAICM, UNEP and partnerships.

DISCUSSION: Participants highlighted a number of issues for consideration, including the need for: elaborating international regulation for promoting public health and reducing the use of such metals; including household waste as heavy metals sources and regulating its management and disposal; promoting good practices globally; and recognizing the impact of heavy metal disposal products from developed countries in the developing world.

CLOSING SESSION

Franz Perrez, Switzerland, summarized the event’s presentations, noting efforts on heavy metals by international institutions and multiple national, regional and local actors. Perrez underscored the serious risk imposed by heavy metals to human health and the environment, the specific challenges for developing countries and countries with economies in transition, the fact that unilateral action may not suffice and the global need for further action. He said the first step to further the heavy metals process is to inform IFCS of this event’s discussions and to motivate IFCS participants to consider the issue.

In the ensuing discussion, Nigeria, Norway and Denmark supported the need for global action on heavy metals. The US, supported by Canada, said that no recommendations on global action can be made based on this brief event. The US said intercontinental transport of cadmium is negligible in terms of deposition and stressed national sources for action on lead. UNIDO suggested global action on gold. The Mercury Policy Projects noted that 98-99% of lead deposition in the Arctic is anthropogenic. The US said this event’s discussions are no substitute for discussions taking place under UNEP, nor should prejudice any decision by the UNEP Governing Council in February.

Norway and European Environmental Bureau supported establishing binding commitments for sustainable continuation of action regarding mercury. Japan noted that SAICM could cover the issue of life-cycle of chemicals. Peru stressed children’s exposure to lead. Iran suggested including nickel and arsenic to the heavy metals’ list.

Georg Karlaganis, Switzerland, read the meeting’s report, asked for more contributions via e-mail, and closed the event at 6:42 pm.