

Zero Mercury Campaign Uses Mercury Monitoring Device to Promote Grassroots Actions, Strong Global Treaty

Elena Lymberidi-Settimo, Project Coordinator – European Environment Bureau & Michael Bender, Director – Mercury Policy Project



The Lumex machine being used during INC sessions as part of the 'Say ...aaaHg!' initiative to measure mercury levels coming mainly from dental amalgams.

The European Environmental Bureau (EEB), in collaboration with the Mercury Policy Project (MPP), started the Zero Mercury Campaign in 2004 to virtually eliminate emissions of mercury from all human activities at the European Union (EU) level and globally. Since then, EEB and MPP launched and co-lead the Zero Mercury Working Group (ZMWG), an international NGO coalition comprised of more than 90 nongovernmental organizations (NGOs) from over 45 countries around the world.

In Europe, EEB provided input into the development and implementation of the EU Mercury Strategy adopted in January 2005. The EU Mercury Strategy includes: restrictions on the sale of mercury measuring devices; an EU

mercury export ban; new rules on safe storage; and, measures to reduce mercury emissions, supply and demand; and consumer awareness programs to protect against exposure to mercury. However, it fails to comprehensively address mercury emissions caused by the chlorine industry – one of the largest users of mercury in the EU, with over 35 plants still in operation that emit an estimated five tons of mercury emissions annually.

In response, EEB has been applying pressure for concrete EU legislation to regulate the sector through the support of national advocacy campaigns in countries such as France, the Czech Republic, Italy, Spain and Germany - where there is a heavy presence of mercury cell chlor-alkali plants (MCCAPs). A key component of the campaigns has involved measurement of mercury emissions outside of MCCAPs in each of the respective countries using a Lumex, a portable measuring and monitoring instrument.

In many cases, the results obtained by the Lumex have been significant and have provided NGOs with the information to raise awareness in their region and country about exposure risks to mercury. This, in turn, has been used to pressure government and industry to close down polluting plants. Most notable, mercury levels recorded outside the Arkema plant in Jarrie, France resulted in the French Ministry of Environment announcing that the plant would convert to a mercury free process by 2013.

In Spain, measurements taken at two plants - Ercros in Flix and Elnosa in Lourizan - encouraged the Spanish Ministry of Environment to request a Public Prosecutor to open a legal file against the companies for non-compliance. And after NGO pressure in the Czech Republic, mercury phase-out dates for two chlor-alkali plants – Spolchemie in Usti nad Labem and Spolana Neratovice near Prague - were set for 2012¹ and 2014 respectively, instead of the initial industry request for 2020.

¹ The company has requested to postpone this date now to 2015.

At the global level, the ZMWG is providing input into the United Nations Environment Programme's (UNEP) Intergovernmental Negotiating Committee (INC) sessions toward the development of a legally binding treaty on mercury. The ZMWG used the Lumex during the first two INC sessions as part of its 'Say ...aaaHg!' initiative to measure mercury levels in the breath of delegates coming mainly from dental amalgams. After an initial measurement, gum was given to each participant to chew for a few seconds and then a second measurement was taken. The second measurement was usually much higher than the first indicating that mercury was further released after chewing. Over 150 delegates had their breath tested over the course of the INC sessions.

Subsequently, our NGO colleague, Ban Toxics! has achieved several victories in the Philippines using the Lumex to measure mercury in the air near gold mines, landfills, coal ash dumps, hospitals, schools and other locations. They released a detailed report based on their findings in February 2011 - *Chasing Mercury: Measuring mercury levels in the air across the Philippines*.

Data collected by Ban Toxics! has provided the factual basis for several significant developments. This has included the Chairman of the Senate Environment Committee calling for immediate solutions to mercury use in Artisanal and Small Scale Gold Mining, and the Catholic Educators Association calling on its 2,000 member schools to stop using mercury. The findings are having value long after the Lumex has left the Philippines, as Ban Toxics! is now conducting regional outreach to convince provincial and village officials to adopt legislation against mercury use. It is their intention to continue similar work utilizing the Lumex in Lebanon (and Arab Region) and the Ivory Coast (and West African Region) in the coming months.

The Lumex has been an asset not only to the Zero Mercury Campaign's efforts to provoke countries in the EU to regulate the chlor-alkali sector, but has also been invaluable for the Campaign's work to phase out MCCAP's globally as the UNEP negotiations currently underway are expected to lead to the adoption of a legally binding instrument on mercury in 2013.

The Garfield Foundation provided a grant to EEB in 2009 to purchase its own Lumex instrument and continue its work in collaboration with European NGOs and developing countries to monitor and collect mercury emissions data around MCCAPs and other contaminated sites. To learn more about the Zero Mercury Campaign, visit: www.zeromercury.org.