



Briefing

Limitations on Marketing & Use of Mercury-Containing Measurement and Control Equipment

Prague & Brussels, 5 September 2006

In view of the upcoming meeting of the Council Working Group on Harmonisation Techniques (Hazardous substances and preparations) on 7th September, health and environment NGOs* would like to take the opportunity to inform you about our key demands.

The health and environment NGOs applaud the proposal to extend the Commission's restrictions to the sale of new mercury-containing fever thermometers for both private and healthcare use as well as other such devices for public use. But another important category of mercury containing instruments - **sphygmomanometers** (blood pressure measurement devices) **in healthcare**, has to be included in order to achieve the envisaged health and environmental objectives. If the Commission had not avoided conducting a proper risk analysis of mercury-free sphygmomanometers, the reasons for restricting mercury sphygmomanometers also for professional/healthcare use would be indisputable.

Mercury-containing sphygmomanometers (not including the specific sub-group of strain gauges) should not be permitted for either public or healthcare uses, as many suitable alternatives exist.

Justification:

- Sphygmomanometers are used widely in hospitals, in private medical practices, etc. Of all mercury instrumentation used in health care, sphygmomanometers represent the largest mass of mercury per device (approximately 100 g/unit).
- Their widespread use collectively makes them one of the largest mercury reservoirs in health care.
- Mercury-free sphygmomanometers can greatly reduce the risk of mercury exposure to patients, staff, and leakage into the environment. Mercury-free sphygmomanometers, when properly calibrated, are as accurate if not more so than the older mercury models.
- Mercury-free sphygmomanometers do not cause problems in clinical diagnosis and monitoring, including for arrhythmias, preeclampsia and in accelerated (malign) hypertension.[†] In Sweden, Denmark, Austria and the Netherlands, only positive experiences have been reported from the use of the mercury-free devices.
- There are many mercury-free sphygmomanometers on the European market from major medical equipment suppliers, (9 brands identified to date), and many of them satisfy the criteria of professional organisations such as the British Hypertension Society, the European Hypertension Society, and the Association for the Advancement of Medical Instrumentation.

Furthermore, the proposed ban on the sale of new manometers, barometers and non-fever thermometers to the general public should be extended. **All other measuring and control equipment for both consumer and professional use** (especially private households, healthcare facilities and schools) for which safer alternatives already exist, should be banned, with time-limited exceptions in the absence of such alternatives. The Commission asserts in the Mercury Strategy that professional use of mercury instruments pose less of a danger because of the proper disposal procedures and hazardous waste regulations governing such use. However, this is an incorrect assumption.

Manometers, barometers, and other thermometers, AND any other measuring and control equipment NOT intended for sale to the general public should be banned, with a transition period of 3 years prior to entry into force. Exemptions should be accorded for a limited time, on a case-by-case basis, if manufacturers can prove that despite efforts to develop safer alternatives, these are still not available.

Justification:

- Alternatives are available and Scandinavian countries readily use them. Specifically with medical equipment, no risks were observed to patients from the use of mercury-free alternatives.
- All devices which use mercury pose a risk to human health and the environment during use, through breakage and after disposal, because they can release mercury into the environment.
- Substituting mercury in these product categories is the only effective way of addressing inevitable release of mercury.
- For both consumer and professional uses, many of these devices have already been extensively analysed; non-mercury alternatives are commercially available; and costs are comparable.
- Experience from a new EU member state (Czech Republic) shows that mercury-containing measuring devices in hospitals are neither properly segregated for disposal, nor is the mercury recycled. In the best case scenario, these devices are disposed of in medical waste containers which are then incinerated. The incineration filters containing mercury-laden ash are then placed in hazardous waste landfills, or used as road filling, or discharged in closed mines. These disposal methods do not ensure that mercury stays out of the environment.

Finally, a restriction against new mercury barometers being placed in the European market is necessary.

New barometers containing mercury, irrespective of their size, should not be put in the market.

Justification:

- Barometers use large quantities of mercury (around 1000 g. compared to around 1 g. for a fever thermometer). Any time a barometer breaks, it poses an enormous risk of contamination and severe health effects.
- Clean up costs following breakage can be significant.
- The maintenance of existing barometers for historical collection, museums and heritage purposes is understandable, but manufacturing new barometers following traditional designs which contain mercury is irresponsible. Carefully controlled and licensed manufacturing of these kinds of instruments does not guarantee that these instruments pose no danger during the entire lifetime of the instrument, particularly through breakage.

* **Health Care Without Harm Europe (HCWH)**, www.noharm.org, is an international coalition of environmental health groups and health care professionals whose goal is to make health care ecologically sustainable and no longer a source of harm to public health, without compromising patient safety or care.

European Public Health Alliance Environment Network (EEN), <http://www.env-health.org/> is an international non-governmental organisation advocating environmental protection as a means to improving health and well-being. The Network has a diverse membership of over 50 groups including non-governmental organisations, professional bodies representative of doctors, nurses and other healthcare workers, academic institutions, womens', environmental health and environment groups and other not-for-profit organisations.

The **European Environmental Bureau (EEB)**, www.eeb.org, is a federation of more than 140 environmental citizens' organisations based in all EU Member States and most Accession Countries, as well as in a few neighbouring countries. These organisations range from local and national, to European and international. The aim of the EEB is to protect and improve the environment of Europe and to enable the citizens of Europe to play their part in achieving that goal.

The **Zero Mercury Working group**, www.zeromercury.org, is an international coalition of more than 40 public interest non-governmental organizations from around the world formed initially in 2004 by the European Environmental Bureau and the Mercury Policy Project/Ban Mercury Working Group. The aim of the group is to reach "Zero" emissions, demand and supply of mercury, from all sources we can control, towards eliminating mercury in the environment at EU level and globally."

† KEMI – Swedish Chemical Inspectorate (2005b) Mercury-free blood pressure measurement equipment – Experiences in the Swedish healthcare sector. Sundbyberg. November 2005, p. 4.