



Environment and Health NGOsⁱ comments on the Community strategy on mercury

Brussels, 30 November 2005

It is well known that mercury has no respect for national or regional boundaries, travelling long distances through the atmosphere, and contaminating both the European and global food supplies at levels posing a significant risk to human health, wildlife and the environment. It is therefore clear that, since present measures are not adequate to sufficiently reduce the contamination from mercury, further actions must be undertaken.

The EU Extended Impact Assessment states that anywhere from 3 to 15 million people in Europe have mercury levels around the recommended limit and a percentage have levels ten times as high, at which there are clear neurodevelopmental effects. Although the EU assessment does not calculate the costs of such contamination, a similar US study¹ estimates that between 300,000-600,000 babies born each year suffer from intelligence loss due directly to methyl mercury exposure, which costs an estimated 8.7 billion dollars a year in lost earnings to the economy.

Attention should be drawn to the importance of the proposed EU mercury export ban.

A strong and clear EU position is absolutely necessary to confirm the global actions presented in this Community Strategy, which must send a clear message to the world community that mercury emissions, supply and demand should be reduced to a minimum, as rapidly as possible, and in the interim, measures be put in place to protect the health of those populations most specifically at risk such as children and women of childbearing age.

The NGOs opinion on the different aspects of the EU mercury strategy as well as additional relevant issues is summarized below and further details are given in annex.

- 1.a **The proposed ban on the exports of EU metallic mercury and mercury compounds should be implemented as soon as possible, preferably by 2008², but certainly not later than 2011.**
- b. **A prohibition on the export of mercury-containing products, which are or soon will be subject to use and marketing restrictions within the EU, should be considered.**
- c. **The EU should consider prohibiting imports of mercury and mercury compounds so that it can effectively manage its mercury supply and demand**
- d. **A trade tracking system to be in place, to record all imports and exports of mercury between the Member States and between the EU and other countries where the trade is no restricted.**
2. **Temporary storage of decommissioned mercury from the chlor-alkali industry should be pursued as soon as possible, in storage areas which are secure sites, continuously monitored and located where intervention can take place immediately if necessary,**
- 3.a. **As a minimum action, Emission Limit Values (ELVs) for mercury from coal combustion and other relevant activities under the IPPC Directive, other existing legislation or a separate legislative instrument, should be introduced and the Commission should take action as soon as possible.**

¹ Mount Sinai study: Public health and economic consequences of Methyl Mercury Toxicity to the Developing Brain, February 28, 2005
<http://ehp.niehs.nih.gov/members/2005/7743/7743.pdf>

² as originally proposed in earlier Commission drafts but also by the Luxembourg Presidency
<http://register.consilium.eu.int/pdf/en/05/st07/st07986.en05.pdf>

- b. **Mercury emissions from crematoria should be further investigated for eventual control at the EU level.**
- c. **It is absolutely necessary that the Commission proceeds as soon as possible with their obligations under the Water Framework Directive to propose adequate emission controls and quality standards to phase out discharges, emissions and losses of mercury and its compounds into the aquatic environment.**
- 4.a **Restrictions should be put in place on the marketing and use of mercury in all measuring and control equipment for consumer and professional use (especially in households, healthcare facilities and schools), only allowing exemptions where adequate alternatives are not yet available.**
 - b. **A restriction of the use of mercury in dental amalgams should be evaluated and pursued.**
- 5.a. **It is necessary that separate collection and treatment measures for all mercury containing products already circulating in society are introduced, and the Commission should take relevant action as soon as possible.**
 - b. **In view of restricting the use of mercury in vaccines within the EU when appropriate and safe alternatives exist, an expert assessment should be carried out.**
- 6. **It is important that the EU supports and promotes International Action and the Commission should take necessary initiatives as soon as possible.**
- 7. **To ensure a high level of public health protection and reduce the current levels of health damage in the European population, the following measures should be prioritized: reduction of people's exposure to methylmercury through campaigns on potential health effects, development of stricter fish consumption guidelines, and mandatory reporting of national biomonitoring programs on vulnerable groups.**

In conclusion, we wish to reiterate our appreciation for this European Commission initiative. A strong EU position is recognition of the EU responsibility for its share of the problems. Furthermore, ensuring an EU mercury export ban is a pragmatic realisation that there is little point in reducing mercury demand simply within the EU, only to export the unwanted mercury to the developing world where it will be used under far less stringent controls, released, and ultimately be transported back into the EU atmosphere and wind-up in the fish EU citizens consume.

The value of a strong EU commitment to addressing mercury problems on the global stage cannot be underestimated. This is a straightforward opportunity to reduce health risks to millions of EU citizens, and many more globally, that we cannot afford to miss.

¹Environmental NGOS include

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 **Ban Mercury Working Group**, www.ban.org/Ban-Hg-Wg/, is an international coalition of 28 public interest non-governmental organisations from around the world formed initially in 2002 by 2 US based NGOs, the Basel Action Network (www.ban.org) and the Mercury Policy Project (www.Mercurypolicy.org). working to end pollution from the toxic metal -- Mercury.

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. Member groups and organisations represent health, environment, women, health professionals and others. The group has a diverse membership of 41 member groups (6 international organisations, 11 European networks and 24 national/local organizations) including non-governmental organisations, professional bodies representative of doctors, nurses and other healthcare workers, academic institutions and other not-for-profit organisations.

Health Care Without Harm Europe (HCWH), www.noharm.org, is an international coalition of hospitals and health care systems, medical and nursing professionals, community groups, health-affected constituencies, labour unions, environmental and religious organisations. HCWH is dedicated to transforming the health care industry worldwide, without compromising patient safety or care, so that it is ecologically sustainable and no longer a source of harm to public health and the environment.

And with the support of NGOs from the USA (Natural Resources Defence Council), India (Toxics Link), China (Global Village of Beijing), Brazil (Association for Combats against the POPS).

Annex

Detailed Environment and Health NGOs¹ comments on the Community strategy on mercury

- 1. The proposed ban on the exports of EU metallic mercury and mercury compounds should be implemented as soon as possible, preferably by 2008³, but certainly not later than 2011, and the Commission should take the necessary action to achieve this as soon as possible**

The EU is the world's largest mercury exporter, and most of this mercury goes to the developing world where it is often haphazardly used and released, contaminating workers and their families, local communities and global food supplies; government trade documents clearly show this⁴. From 2001 to 2003, EU countries exported more than 3,000 tonnes of mercury – some 30% of global consumption⁵ – to non-OECD countries. EU leadership in dealing with global mercury problems is therefore an economic and moral imperative. Strong EU leadership will not only encourage other countries to reduce mercury consumption; it will also encourage global trade agreements, which are clearly needed to significantly reduce the role of mercury as a global pollutant in the international economy. An EU export ban, coupled with other international actions as specified in the EU strategy document will significantly reduce the disproportionate impacts of mercury contamination in the developing world caused by abundant mercury supplies, inadequate resources to adopt or enforce existing regulations and, with few exceptions, little or no incentive to upgrade outdated technologies.

This prohibition on mercury exports will contribute to decreasing demand for mercury as it encourages a price increase. For low-technology uses such as small-scale gold mining, higher prices have been demonstrated to encourage direct reductions in mercury uses and releases, without adverse economic impacts.⁶ The GEF/UNDP/UNIDO Global Mercury Project, which has worked with small-scale gold miners for many years, has strongly advocated an EU export ban as an effective way to reducing mercury demand (and mercury releases) in small-scale gold mining⁷.

Opponents of an export ban argue that new production of mercury might be triggered to fill in any gap in market demand. Besides ignoring a range of EU initiatives proposed to help curb mercury demand, this argument lacks merit since it ignores the limited ability, for both technical and political reasons, of the few remaining mercury-producing countries to expand their output⁸. Moreover, any argument against the export ban ignores the political pressure to decrease production, which has already affected Spain, and will affect other producing countries once the EU formally endorses the export ban. Indeed, the pressure has already begun, since shortly following the release of the EU Strategy on Mercury, the UNEP Governing Council adopted a resolution in February 2005 calling upon governments and others to curb the primary production of mercury and the introduction into commerce of excess mercury supplies. This same resolution also requests UNEP staff to prepare a report on the global trade in mercury so that further options addressing this trade can be considered at the 2007 Governing Council meeting. Consistent with these UNEP Governing Council resolutions and the proposed EU export ban, we urge EU countries to initiate bilateral discussions on this issue with Algeria and Kyrgyzstan, two countries with active primary mercury mines, as soon as possible.

³ as originally proposed in earlier Commission drafts but also by the Luxembourg Presidency <http://register.consilium.eu.int/pdf/en/05/st07/st07986.en05.pdf>

⁴ See UN statistics at <http://unstats.un.org/unsd/comtrade/> and Eurostat statistics at <http://europa.eu.int/comm/eurostat/> "external trade."

⁵ COM (2005) 20 final - Extended Impact Assessment, on the Community Strategy on Mercury.

⁶ Veiga MM, Maxson PA, Hylander L, "Origin of mercury in artisanal gold mining." Paper accepted 12 August 2004 for publication in 2005 in the *Journal of Cleaner Production* (Elsevier).

⁷ COM (2005) 20 final - Extended Impact Assessment, on the Community Strategy on Mercury, pg. 26

⁸ COM (2005) 20 final - Extended Impact Assessment, on the Community Strategy on Mercury, pg. 25-26 and <http://www.mem-algeria.org>.

In addition to a ban on metallic liquid mercury, the proposed export ban must also apply to mercury compounds, including mercuric chloride and mercuric oxide at a minimum. This is important for several reasons. First, since a principal purpose of the export ban is to discourage global mercury trading in mercury and thus mercury use, it makes little sense to enable EU export of mercury compounds which are the feedstock for some of the largest global mercury uses. With such a loophole, EU traders would simply produce mercury compounds for export. Thus the EU export ban would have little or no effect on global mercury trade or consumption.

For example, mercuric oxide would be exported and used to make mercuric oxide batteries in China and elsewhere in the developing world, according to the EU's own trade study.⁹ The mercury in these batteries could then return to the EU, in many cases violating EU laws, as well as contribute unnecessarily to the global pollution problem. Similarly, mercuric chloride is used as a catalyst in the manufacture of vinyl chloride monomer in Russia and China, and perhaps elsewhere as well.¹⁰ Global aggregate demand for these two compound uses alone may have exceeded 1,300 tonnes in 2000. While demand for these two compounds may now be somewhat reduced, there remains a ready market for substantial EU exports if they are allowed.

Secondly, even assuming there is no market for the mercury compounds themselves, allowing exports of mercury compounds could create a huge loophole for escaping the reach of the export ban applicable to the liquid metal. Our information indicates that the conversion of the liquid metal to a mercury compound, and then converted back to elemental mercury after leaving the EU, would cost about \$200/flask. At the current market price of \$800/flask or higher, an unscrupulous trader could take advantage of the "mercury compound loophole", convert the mercury to a compound for export, arrange for the conversion back outside of the EU, and still make money (Not long ago, the price of mercury was only \$200/flask.) Therefore, for the EU export ban to be effective, the proposed export ban must apply to mercury compounds as well.

Furthermore with respect to the scope of the export ban, the Commission needs to propose and the Parliament and Council **approve an expansion of the current (or consider a separate instrument for a) prohibition on the export of mercury-containing soaps (Regulation EC 304/2003), to other mercury products, which are or soon will be subject to use and marketing restrictions within the EU.** The fundamental basis for the export ban on mercury (and its compounds) is the recognition that mercury is a global pollutant, and that the EU must be cognizant of the global impacts caused by encouraging mercury uses, particularly in the developing world. The export of mercury products that can no longer be sold in the EU raises similar concerns, particularly since cost-effective mercury-free alternatives are available for virtually all mercury-containing products.

In addition, to better protect the EU environment and health as well as the EU market, **a potential import ban of metallic mercury as well as mercury compounds should further be investigated¹¹.**

Complementary to an export/[import] ban, the proposed legislation must recognize the unique concerns about mercury trade, For example, it will not be effective unless it includes **tracking and reporting to authorities on imports and other cross-border trades of mercury and mercury compounds into and within the EU.** This is the only way to ensure that mercury imports and other transactions are well documented, transparent to the public, and that all developments can

⁹ P. Maxson, Mercury Flows in Europe and the World: The Impact of Decommissioned Chlor-Alkali Plants, prepared for the European Commission, February 2004, pp. 48-49.

¹⁰ Treger, Inventory of Mercury Releases from the Russian Federation – Chemical Industry (Draft Working Paper), prepared for the Arctic Council Action Plan to Eliminate Pollution of the Arctic, pp. 36-39.

¹¹ With respect to the purely legal question of confronting trade obstacles, we note the very recent promulgation of Council Regulation No. 1236/2005, restricting the trade of products used for torture and other inhuman punishment. We note specifically the import prohibition of equipment that can only be used for capital punishment, torture, or other similar purposes in Article 4 of this regulation. This import prohibition suggests the EU can undertake very targeted import prohibitions where it is necessary to implement important EU policies.

be readily assessed by Commission staff and other stakeholders as to their magnitude and impact. Further, this may also help ensure that mercury importers and traders are playing on a "level playing field," with all taking similar responsibility for their commercial actions with regard to mercury.

As part of our overall recommendation, we envision a tracking system where, prior to importation, mercury import data must be provided by mercury traders to the EU member state competent authority, and that such data include the identity of the exporting company and nation, the identity of the importing company and location, the quantity of mercury or mercury compounds involved, the purposes for which the imported mercury will be used, etc. We further envision EU member states providing this information to the Commission annually so that the Commission may regularly summarize the data for the EU as a whole, and publish the information in a publicly accessible manner.

Furthermore, such measures on trade tracking of mercury and mercury compounds to/from and within the EU should not await the export ban date, but should take effect as soon as practically possible. Finally, until the export ban on mercury takes effect, the trade tracking should cover exports from the EU as well.

We note this legislation could build upon the system of customs declarations that is currently used for imports and exports of elemental mercury to and from the Community, but this system should be reviewed to ensure that it effectively tracks mercury flows. In order to ensure proper implementation of the mercury trade ban, a similar system needs to track elemental mercury movements between the Member states, since at present this is frequently overseen only by the transportation companies, who are supposed to (but sometimes do not) submit to their governments periodic reports of their activities.

With respect to mercury compounds, the tariff codes currently used for chemical substances, are typically quite broad, and they often do not explicitly indicate the transport of mercury compounds such as mercuric oxide/chloride. Considering that the flows of such substances must be known for adequate control, the current tariff code system will also need to be briefly reviewed and where appropriate, upgraded.

2. Temporary storage of decommissioned mercury from the chlor-alkali industry should be pursued and the Commission should take relevant action as soon as possible, in storage areas which are secure sites, continuously monitored and located where intervention can take place immediately if necessary.

As an integral part of the EU strategy to simultaneously address global supply of and demand for mercury, temporary storage of decommissioned mercury from the chlor-alkali industry should be investigated immediately and implemented in the near future. The need for such storage is not disputed by the industry association Euro Chlor, which has already begun to study the options available. It has been reasonably determined that the estimated 12,000 tonnes of mercury in the EU mercury-cell chlor-alkali plants destined for decommissioning over the next 15 years will not be needed to meet shrinking global demand.¹² Storage of this surplus mercury (and over time, mercury from other sources such as recycled products) is entirely consistent with the recent decision by the United States Department of Defense to store rather than sell its own 4,400 tonnes of excess mercury.¹³

Furthermore, the pursuit of temporary storage must incorporate the ultimate intention of permanent retirement. Otherwise this measure will only delay the use, releases and impacts of the

¹² Environmental and Health NGOs comments to the European Commission regarding proposed legislation to prohibit mercury exports and Appendix A by P. Maxson 3/10/2005
http://www.zeromercury.org/EU_developments/051003%E&H%20NGO%20Comments%20on%20EU%20Mercury%20Export%20ban-Storage.pdf

¹³ Defense Logistics Agency, Record of Decision for the Mercury Management Environmental Impact Statement
<http://www.dla.mil/RODMMEIS.asp>, <http://www.dla.mil/Signed%20ROD%20for%20MMEIS.pdf>

surplus mercury, not prevent it. Storage areas must be secure sites, continuously monitored and located where intervention can take place immediately in the event of leakage or otherwise necessary. We anticipate that the location and the number of the storage facilities in Europe, including whether the mercury will be stored on existing sites (e.g. storage areas of a chlor-alkali plant) or in new certified storage facilities, will be resolved in the near term.

- 3. As a minimum action, Emission Limit Values (ELVs) for mercury from coal combustion and other relevant activities under the IPPC Directive, other existing legislation or a separate legislative instrument, should be introduced and the Commission should take action as soon as possible.**

Mercury emissions from coal-fired power plants are particularly important because they are the largest source of combustion-related emissions. Implementation of existing instruments such as directive 2001/80/EC to reduce sulphur dioxide will bring some reductions to mercury emissions. However, elemental mercury in particular (with a lifetime in the atmosphere of up to one year), which can travel globally, will still be released to the environment, thereby contributing to the global pollution.

In addition to the ELVs, we also recommend that consideration be given to the fact that there is no direct relation between rates of emission (as represented by ELVs) and the mass of emissions (total amount emitted). Thus, while coal-fired plants would be subject to controls on their rates of emissions under ELVs, increased coal-fired production in the face of increased gas prices and concerns about the security of gas supplies (as is currently happening) could still lead to an increasing mass of emissions. ELVs also take no direct account of the concentration of coal-fired activity in any particular area -- increased economic activity could comply with the ELVs but still lead to pollution hotspots. As a result, national mass emission limits as well as local air quality limits for mercury should be set.

Limits to emissions of mercury from small-scale coal combustion facilities should also be set, since the cumulative effect of mercury emissions from these installations contributes substantially to the overall level of emissions.¹⁴

Furthermore, mercury emissions from crematoria should be further investigated for eventual control at the EU level. Legislation is already in place in Denmark, the Netherlands, Germany and the UK, and should be compared and evaluated as part of this investigation. The relevant OSPAR recommendation covers only 12 of the 25 Member states and no sanctions are foreseen in cases of non-implementation.

In addition, it is absolutely necessary that the Commission proceeds as soon as possible with their obligations under the Water Framework Directive to propose adequate emission controls and quality standards to phase out discharges, emissions and losses of mercury and its compounds into the aquatic environment.

- 4. Restrictions should be put in place on the marketing and use of mercury in all measuring and control equipment for consumer and professional use (especially in households, healthcare facilities and schools), only allowing exemptions where adequate alternatives are not yet available. To achieve this, the Commission should take bring forth proposals as soon as possible.**

Substituting mercury in these product categories is the only effective way of addressing inevitable emissions from their use and haphazard disposal. Mandatory measures are essential to offer the greatest protection, and have been widely used to address the marketing and use of hazardous chemicals in products (e.g. 76/769, 2002/95). A general ban with limited exemptions should be pursued, reflecting the request of many Member States for such an approach. Sweden, Denmark

¹⁴ COM (2005) 20 final - Extended Impact Assessment, on the Community Strategy on Mercury.

and The Netherlands have all reported on their own experiences implementing such restrictions, demonstrating that viable, price-competitive and less hazardous alternatives are available for nearly all of these applications. A general ban will also serve to better identify the uses of mercury, even in highly specialized applications, and assist in triggering further research and development for its replacement with adequate alternatives.

Existing Directives dealing with mercury containing products should be revised to delete exemptions for mercury uses. For example, the temporary exemption in the RoHS Directive for mercury thermostats is unsupportable and unacceptable, given the wide variety of cost-effective and functionally equivalent or superior mercury-free alternatives. Wherever derogations still apply, these should be for a limited period, to provide incentives for research & development, and encourage industries to shift to alternative substances and techniques. In a similar way, **a restriction of the use of mercury in dental amalgams should be evaluated and pursued, given that viable mercury-free alternatives exist.** For example, in some member states, over 90% of all dental filling placements are with non-mercury fillings¹⁵.

5. It is necessary that separate collection and treatment measures for all mercury containing products already circulating in society are introduced, and the Commission should take relevant action as soon as possible.

Mercury-containing products should be separately collected in order to control more effectively mercury disposal and to gain knowledge on the life cycle of mercury in products where mercury is used. As demand is declining, the need for mercury recuperated from those products/wastes will have to be evaluated, and the mercury will eventually have to be stored in an environmentally safe way, rather than be returned to the marketplace if not needed. Better labeling of products containing mercury will also facilitate separate collection. For example, state laws requiring labeling of mercury lamps in the United States have recently resulted in lamps being labeled nationally by all of the major manufacturers. Similar measures should be considered for the mercury produced as a by-product during other processes, including the production of other metals such as zinc and refining of natural gas. In the same way, dental waste from mercury amalgams needs to be better controlled in light of the significant and ongoing contribution to mercury emissions, mainly to sewage sludge and waste disposal.

In view of restricting the use of mercury in vaccines when appropriate and safe alternatives exist, an expert assessment should be carried out.

Vaccines are not addressed in the EU Mercury Strategy. The Council Conclusions on the Commission's Mercury Strategy highlighted that during further development and implementation of the Strategy it will be essential to reduce residual uses of mercury, such as in dental amalgam and vaccines¹⁶.

Vaccines sometimes contain a mercury preservative called thimerosal and also known as thiomersal. Thimerosal is approximately 50% mercury by weight, in the organic form of ethylmercury. Since the 1930s it has been added to preparations to help prevent the growth of microbes. While there were no toxic effects reported in the first study of thimerosal use in humans, published in 1931, the study was not specifically designed to examine toxicity and was flawed in a number of other ways.¹⁷ As more has become known about the effects of mercury on human health, the use of thimerosal in vaccines has become an issue of increasing concern. Over the years more and more vaccinations have become recommended or required for younger children and infants, which has significantly increased the amount of mercury exposure.

¹⁵ Swedish KEMI Report 4/04, Mercury - Investigation for a general ban, page 32.

Also, an article "Exit amalgam? Use of amalgam in dental practice in Norway 2002" recently published in the Journal of the Norwegian Dental Association (Den norske TannlegeforeningsTidende 2004; 114 no. 6, p 284-286) http://www.tannlegetidende.no/pls/dntt/pa_dtdm.xpnd?vp_seks_id=97290&b_start=1

¹⁶ Council conclusions on the Community strategy concerning mercury, 2670th ENVIRONMENT Council meeting, Luxembourg, 24 June 2005

¹⁷ United States Food and Drug Administration. Thimerosal in Vaccines <http://www.fda.gov/cber/vaccine/thimerosal.htm> accessed 11 August 2005

While at this point there is still significant controversy over whether or not thimerosal in vaccines directly causes health effects in humans, it is important to note that in 1991 the World Health Organization (WHO) concluded that a safe level of mercury exposure below which no adverse effects occur had never been established.¹⁸ The European Agency for the Evaluation of Medicinal Products (EMA) completed an 18-month inquiry into the risks and benefits of using thimerosal in vaccines in June 1999. The EMA concluded that: "Although there is no evidence of harm caused by the level of exposure from vaccines, it would be prudent to promote the general use of vaccines without thimerosal within the shortest possible time-frame."¹⁹ EMA also stated in 1999²⁰ and 2004, that single-dose vaccines without thimerosal or with the lowest possible levels of thimerosal have been and continue to be developed in the EU. Vaccines which still contain thimerosal must be labelled²¹.

While it is relatively easy to replace, reduce, or eliminate thimerosal as preservative in single-dose vaccines, it is unclear to what extent thimerosal-containing vaccines are used in Europe. In August 2004 the UK Department of Health announced it would no longer use thimerosal in infant vaccines²² and in Denmark, the National Central Laboratory of the Danish Health System has not used thimerosal in vaccines for children since 1992.²³ However the situation in other Member States is not well known and should therefore be investigated

Multi-dose vials, used for vaccinations in many developing countries, must be kept refrigerated or contain an antimicrobial preservative, commonly thimerosal, to prevent contamination and subsequent infection or death in recipients.²⁴ The World Health Organization states that at present thimerosal-containing multi-dose vaccines are necessary to meet vaccination demands in developing countries, as refrigeration is unreliable and single-dose vaccines are significantly more expensive.²⁵

It is the Environmental and Health NGOs' opinion that the Commission should undertake a review of vaccines in use to ensure that thimerosal-containing vaccines are not in use in Europe where alternatives are available. An agreement with manufactures should be sought to eliminate the use of thimerosal in vaccines where not necessary. Wherever needed, vaccines should be labelled to declare mercury contents. Furthermore, the EMA should publish a comprehensive list of all vaccines licensed in Europe and their thimerosal content, as the FDA does in the United States. Further, the Commission should issue guidelines calling on the EMA and other health organizations to work with manufacturers to reduce and/or eliminate mercury in vaccines. To that end, priority should be given on research and development of safe, mercury-free, multi-dose vaccines.

6. It is important that the EU supports and promotes International Action and the Commission should take necessary initiatives as soon as possible.

The European Community and the Member States need to send a clear message to the international community that measures should be taken as quickly as possible to control mercury

¹⁸International Programme on chemical Safety Environmental Health Criteria 118 Inorganic Mercury World Health Organization Geneva, 1991 <http://www.inchem.org/documents/ehc/ehc/ehc118.htm> accessed 11 August 2005

¹⁹ European Agency for the Evaluation of Medicinal Products, "EMA Public Statement on Thiomersal Containing Medicinal Products", London, 8 July 1999, Doc. Ref: EMA/20962/99 <http://www.emea.eu.int/pdfs/human/press/pus/2096299EN.pdf> accessed 17 June 2005

²⁰ European Agency for the Evaluation of Medicinal Products, "EMA Public Statement on Thiomersal Containing Medicinal Products", London, 8 July 1999, Doc. Ref: EMA/20962/99 <http://www.emea.eu.int/pdfs/human/press/pus/2096299EN.pdf> accessed 17 June 2005

²¹ European Agency for the Evaluation of Medicinal Products, "EMA Public Statement on Thiomersal in Vaccines for Human Use – Recent Evidence Supports Safety of Thiomersal-Containing Vaccines", London, 24 March 2004, Doc. Ref: EMA/CPMP/Veg/1194/04/Adopted <http://www.emea.eu.int/pdfs/human/press/pus/119404en.pdf> accessed 17 June 2005

²² Manning, B. Lawmakers get mercury out of vaccines Mothering Nov-Dec 2004 http://www.findarticles.com/p/articles/mi_m0838/is_127/ai_n6366770 accessed 17 June 2005

²³ Indikation 14 July 2004 <http://www.dkma.dk/1024/visUKLSArtikel.asp?artikelID=3551>

²⁴ United States Food and Drug Administration. Thimerosal in Vaccines <http://www.fda.gov/cber/vaccine/thimerosal.htm> accessed 11 August 2005

²⁵ World Health Organization, Thiomersal and vaccines: questions and answers http://www.who.int/vaccine_safety/topics/thiomersal/questions/en/ accessed 23 August 2005

emissions, global demand and supply, in order to significantly reduce mercury contamination, starting with activities aimed at curbing primary mining and storing excess mercury from decommissioning chlor-alkali plants. Most of the global mercury demand, encouraged by available mercury supplies, arises from the use of technologies or processes in the developing world that are already illegal or being phased out in the EU and most OECD countries.

Furthermore it is necessary that the EU enters into negotiations with the other regions participating at the UNEP Governing Council (UNEP GC), such as the G77 and China, to prepare the ground for a positive outcome at the UNEP GC in 2007, where discussions will take place on the possibility of introducing global mercury reduction strategies, including but not limited to a global legislative instrument on mercury.

Along the same lines, the EU should enter into a dialog with the other major primary mining countries in the world, including Algeria and Kyrgyzstan, with a view to phasing out primary mercury entering the global market. EU supportive measures for and actions with these countries should also be considered.

7. To ensure a high level of public health protection and reduce the current levels of health damage in the European population, the following measures should be prioritized: reduction of people's exposure to methylmercury through campaigns on potential health effects, development of stricter fish consumption guidelines, and mandatory reporting of national biomonitoring programs on vulnerable groups.

The European Food Safety Authority's current guidance on fish consumption to the European population is based on the application of the international JEFCA (Joint FAO/WHO Committee on Food Additives) standards, which are less than half as stringent as the one used in the United States. Moreover, the European Food Safety Authority has stated that it does not have data on the exposure of vulnerable groups, particularly women and children. It is therefore imperative that a three-pronged approach is taken to deal with the current health damage produced by mercury contamination.

First of all, it is essential that sensitive or vulnerable populations exposure levels to methylmercury be effectively monitored and preventive action taken as necessary. It must made be compulsory for EFSA to obtain and widely publicise the relevant data through a programme of testing mercury levels in fish, including species that are staples in European diets, and large predatory fish and relevant member state biomonitoring programmes on methylmercury. The EU should make commitments to funding and resources to support this work. The EU pilot human biomonitoring programme to be launched in 2006 should also prioritise work on methylmercury to contribute to a better picture of actual exposure, particularly in vulnerable groups.

Secondly, the European Community (particularly DGSANCO) and national governments must prioritise and provide resources for awareness-raising campaigns for vulnerable groups, so that they have the information needed to protect themselves and their families through wise dietary choices. New fish advisories should be issued as soon as data collected throughout the EU is analyzed, with an emphasis on precautionary approaches, and guidelines for vulnerable groups established.

Thirdly, given the bioaccumulative and biomagnifying properties of mercury, stricter dietary intake recommendations, particularly for vulnerable populations, must be established and harmonized across Europe. **Most importantly, this dietary intake guidance for methylmercury should take into account the mercury concentrations in the fish, the amount of fish consumed and the weight of the person consuming the fish, similar to the "reference dose" approach used in the United States.**

In addition, the EU should take the lead in promoting a revision of the JEFCA standards to ones that afford similar protection as that of the US EPA.

The EU should also formulate a strong position based on these above 3 measures for the WHO European Environment and Health Committee meeting in Helsinki in December 2005, which will look at ways to reduce children's exposure to heavy metals.

ⁱ Environmental NGOS include

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 **Ban Mercury Working Group**, www.ban.org/Ban-Hg-Wg/, is an international coalition of 28 public interest non-governmental organisations from around the world formed initially in 2002 by 2 US based NGOs, the Basel Action Network (www.ban.org) and the Mercury Policy Project (www.Mercurypolicy.org) working to end pollution from the toxic metal -- Mercury.

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. Member groups and organisations represent health, environment, women, health professionals and others. The group has a diverse membership of 41 member groups (6 international organisations, 11 European networks and 24 national/local organizations) including non-governmental organisations, professional bodies representative of doctors, nurses and other healthcare workers, academic institutions and other not-for-profit organisations.

Health Care Without Harm Europe (HCWH), www.noharm.org, is an international coalition of hospitals and health care systems, medical and nursing professionals, community groups, health-affected constituencies, labour unions, environmental and religious organisations. HCWH is dedicated to transforming the health care industry worldwide, without compromising patient safety or care, so that it is ecologically sustainable and no longer a source of harm to public health and the environment.

And with the support of NGOs from the USA (Natural Resources Defence Council), India (Toxics Link), China (Global Village of Beijing), Brazil (Association for Combats against the POPS).