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## REPORT

on Community strategy concerning mercury  
(2005/2050(INI))

Committee on the Environment, Public Health and Food Safety

Rapporteur: Marios Matsakis

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## MOTION FOR A EUROPEAN PARLIAMENT RESOLUTION

### on Community strategy concerning mercury (2005/2050(INI))

*The European Parliament,*

- having regard to the communication from the Commission to the Council and the European Parliament on the Community Strategy concerning mercury (COM(2005)0020),
  - having regard to PARCOM Decision 90/3 on Reducing Atmospheric Emissions from Existing Chlor-Alkali Plants,
  - having regard to Rule 45 of its Rules of Procedure,
  - having regard to the report of the Committee on the Environment, Public Health and Food Safety (A6-0044/2006),
- A. whereas mercury and its compounds are highly toxic to humans living in different ecosystems and to plant and animal wildlife,
- B. whereas mercury is persistent and can change in the environment into methylmercury, the most toxic form, which readily passes both the placental barrier and the blood-brain barrier and may cause damage to the developing brain,
- C. whereas mercury that is correctly stored and isolated, presenting no potential risk as there is no evaporation, should nevertheless be stored on secure sites that are continuously monitored and where intervention can take place quickly if necessary,
- D. whereas mercury contamination is a widespread, persistent and diffuse problem, transported across international boundaries far from its sources, contaminating both the European and global food supplies; whereas the Community Strategy on mercury proposed by the Commission is an important contribution to tackling this global threat, but further binding measures need to be taken at international and EU level in order to protect human health and the environment,
- E. whereas the Commission stated in its Extended Impact Assessment that the magnitude of the adverse health impacts from mercury is unknown, so more information on health costs are needed; whereas, however, further studies should not lead to delays in the Community Strategy,
- F. whereas mercury and its compounds are listed as a priority hazardous substance under Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy<sup>1</sup>(the Water Framework Directive); whereas the Commission was required, under Article 16(8) of that Directive as amended, to make a proposal for the cessation or phasing-out of discharges, emissions and losses of priority hazardous substances by December 2003, but has still not

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<sup>1</sup> OJ L 327, 22.12.2000, p. 1. Directive as last amended by Decision No 2455/2001 (OJ L 331, 15.12.2001, p. 1).

made such a proposal,

- G. whereas the EU is the world's largest mercury exporter, and whereas an EU export ban would make a significant contribution to curbing trade and diminishing global supplies of mercury,
- H. whereas 12 000 tonnes of mercury in the EU mercury-cell chlor-alkali industry - the biggest holding of mercury in the EU - is destined for decommissioning over the next 15 years pursuant to PARCOM Decision 90/3; whereas the EU needs to act urgently to phase out the exports of this surplus mercury in order to avoid environmental damage in third countries, in particular because EU mercury exports encourage the continued and highly polluting use of mercury in gold mining, and whereas all of this surplus mercury needs to be stored safely in the EU to avoid further environmental damage,
- I. whereas mercury has been mined in Almadén, Spain, for centuries, and whereas the closure of these mines has to be accompanied by economic and social restructuring measures for the area concerned,
- J. whereas it is urgent to establish a place where safe storage of surplus mercury from all over Europe could be secured,
- K. whereas the main source of mercury release is coal burning, and whereas emissions from large combustion plants are regulated through Community legislation (Council Directive 96/61/EC of 24 September 1996 on integrated pollution prevention and control<sup>1</sup> (the IPPC Directive) and Directive 2001/80/EC of the European Parliament and of the Council of 23 October 2001 on the limitation of emissions of certain pollutants into the air from large combustion plants<sup>2</sup>),
- L. whereas mercury in dental amalgam represents the second largest stock of mercury in society; whereas the largest source of mercury exposure for most people in developed countries is inhalation of mercury vapour from dental amalgam; whereas emissions from crematoria will be a significant source of mercury pollution for many years to come, unless abatement techniques that can considerably reduce these emissions are put into place very soon,
- M. whereas substituting mercury in measuring and control equipment for consumer and professional use is an effective way of addressing inevitable emissions from their use and disposal,
- N. whereas mercury contamination from household waste is an increasing problem, and whereas compulsory separate collection and treatment schemes for all mercury-containing products circulating in society need to be put in place,
- O. whereas exposure to methylmercury mostly occurs via diet, and whereas it collects and gets concentrated especially in the aquatic food chain, making sensitive population groups and populations with a high intake of fish and seafood particularly vulnerable,

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<sup>1</sup> OJ L 257, 10.10.1996, p. 26.

<sup>2</sup> OJ L 309, 27.11.2001, p. 1.

- P. whereas exposure to mercury of sensitive population groups (infants, children, pregnant women and women of childbearing age) needs to be minimised; whereas the effectiveness of such minimisation needs to be effectively monitored; whereas the population as a whole, and in particular sensitive groups, need to be informed and educated about, and alerted to, the potential risks of foodstuffs that are contaminated with mercury and its compounds,
- Q. whereas furthermore the relevance to health of such sources of mercury as amalgam, vaccines containing mercury and disinfectants must be independently investigated,
- R. whereas the EU should work towards global actions to substantially reduce mercury supply and demand , and to control all trade in it; whereas the EU should take legally binding action at Community level in order to provide vital credibility for action at international level,
- S. whereas, when reviewing the strategy in 2010, measurements in soil, air and water must have been made, must be publicly available, and must be taken into consideration,
- T. whereas the uptake of mercury depends to some extent on the bioaccessibility occurring in different ecosystems at local level,
1. Welcomes the Commission communication on a 'Community Strategy concerning Mercury' and emphasises the overall approach taken with the objectives to reduce and eventually phase out emissions, supply and demand of mercury at European level as well as to manage the surpluses of mercury and to protect against exposure;
  2. Stresses, in this context, the importance of the EU continuing its efforts at international level, such as through the European Neighbourhood and Partnership Instrument, with a view to reducing substantially emissions and uses of mercury on a global scale, given that alternatives exist, while at the same time phasing out primary production and preventing surpluses re-entering the market;
  3. Underlines the need for the Community Strategy to be followed by specific measures and legislative acts as soon as practicably possible;
  4. Underlines, considering the above, the significance of the Commission's pro-active proposal to phase out the export of metallic mercury and its compounds from the Community and asks the Commission to ensure that an EU mercury export ban is in place as soon as practicably possible and at the latest by 2010;
  5. Calls on the Commission to propose before March 2008 measures to track imports and exports of mercury and its compounds within the Member States as well as to and from the Community, to be in place before the export ban;
  6. Calls on the Commission to consider an extension of the current prohibition on the export of mercury-containing soaps, provided for in Regulation (EC) No 304/2003 of the European Parliament and of the Council of 28 January 2003 concerning the export and import of dangerous chemicals<sup>1</sup>, to other mercury products, which are, or soon will be,

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<sup>1</sup> OJ L 63, 6.3 2003, p. 1.

subject to use and marketing restrictions within the EU;

7. Asks the Commission to come forward with proposals for legally binding measures to ensure that all mercury coming from the chlor-alkali industry is not put back into circulation, is safely stored, in secure sites, continuously monitored and located where active intervention can take place immediately if necessary;
8. Asks the Commission, in addition to the above, to ensure that the following elements are included in the relevant instrument regarding the storage of surplus metallic mercury: minimum safety standards, regular and transparent reporting, advance planning and projections, penalties and sanctions;
9. Calls on the Commission to raise public awareness, by holding information campaigns, as regards the health risks, the risks of exposure, and the environmental problems that mercury can cause;
10. Underlines, furthermore, the importance of applying the polluter-pays principle, in particular as far as storage of surplus mercury is concerned; stresses that the industry sectors responsible for the production of mercury should contribute to the financing of the safe storage of surplus mercury.;
11. Calls on the Commission to ensure at the same time that no European primary mercury enters the European and/or global market;
12. Underlines that the main source of emissions of mercury is the burning of coal, and asks the Commission to introduce under the IPPC Directive or in a separate legislative instrument, as soon as possible, and at the very least, emission limit values for mercury from all relevant activities, and in particular from both large and small-scale coal combustion processes;
13. Calls on the Commission to ensure in the short term strict implementation of the IPPC Directive, bearing in mind that the mercury-cell process in the chlor-alkali industry is not identified as a Best Available Technique;
14. Calls on the Commission to take necessary measures and propose, in the short term, national mass emission limits as well as local air quality limits for mercury under relevant existing or separate legislative instruments;
15. Calls on the Commission to take action to implement PARCOM Decision 90/3 so as to phase out the use of mercury-cell chlor-alkali plants as soon as practicable, with the objective that they should be phased out completely by 2010;
16. Asks the Commission to take further measures, in the short term, to control mercury emissions from crematoria, given that this is an increasing and worrisome source of emissions;
17. Supports the Commission's proposal to ask the Medical Devices Expert Group to consider any potential hazards in the use of mercury in dental amalgam and urges the Commission at the same time to take measures ensuring that the Community

requirements regarding treatment of dental waste are properly applied;

18. Asks the Commission to restrict the marketing and use of mercury in all measuring and control equipment for both consumer and professional uses (especially in households, healthcare facilities, schools and scientific and research institutions), but allowing for some exemptions only where adequate alternatives are not yet available. Such exemptions should also apply to the rare cases of maintenance of museum collections and industrial heritage;
19. Asks the Commission to take measures, in the short term, to ensure that all products (not only electrical and electronic) containing mercury and currently circulating in society are collected separately and safely treated;
20. Calls upon the Commission to address the use of mercury in the manufacture of vaccines, as also mentioned in the Council conclusions of 24 June 2005, and to evaluate this with a view to achieving a restriction of such use and a total ban, when appropriate and safe alternatives exist, and to support research into viable options for the future delivery of thiomersal-free multi-dose vaccines in developing countries;
21. Calls upon the Commission to ensure that priority is given and appropriate funds are allocated for mercury research via the 7th RTD Framework Programme and other appropriate funding mechanisms;
22. Calls upon the Commission to ensure that all remaining uses of mercury, not covered by the presented strategy, shall be subject to substitution by safe alternatives where feasible, under the proposed REACH Regulation, once it is adopted;
23. Underlines the importance of pursuing measures against exposure and improving understanding, and acknowledges the importance of public awareness, communication and education, mainly concerning the health risks from exposure to mercury; stresses the need for access to environmental information in line with the Aarhus Convention;
24. Calls upon the Commission to investigate options for making the reporting of Member States' mercury dietary intake data for vulnerable groups to the European Food Safety Authority (EFSA) mandatory, and to request the Scientific Committee on Health and Environmental Risks to carry out a mercury risk assessment for vulnerable groups;
25. Calls on the Commission, in the same context, to assign priority to financing communication with vulnerable population groups concerning the damaging impact of mercury and to share good practices;
26. Calls upon the Commission to conduct an overall Health Impact Assessment to investigate the health costs from mercury contamination, including the reduced intellectual capacity of European children arising from mercury exposure;
27. Calls upon the Commission to fulfil, as soon as possible, its obligation under the Water Framework Directive which required it to propose, already by December 2003, adequate emission controls and quality standards to phase out discharges, emissions and losses of mercury and its compounds into the aquatic environment;

28. Welcomes the Commission's proposal to investigate further specific dietary intakes of different types of fish and seafood among vulnerable subpopulations, and considers it as one of the most pressing actions to ensure that exposure of vulnerable subpopulations is reduced to below internationally accepted standards for safe levels of methylmercury;
29. Calls upon the Commission to ensure that a programme of testing for methylmercury levels and the cofactors which influence the absorption and/or impact of mercury in fish throughout Europe, including testing of large predatory fish, is introduced as soon as possible, with a view to consumption recommendations being issued by EFSA for fish with high levels of mercury, with particular emphasis on guidelines for vulnerable population groups; considers that such a programme should take into account the special risks linked to the fact that certain ecosystems transform mercury more readily into bioavailable methylmercury than others;
30. Calls upon the Commission, in the same context, to ensure that mercury especially in vulnerable populations is included in the biomonitoring programme originally foreseen in the European Environment and Health Action Plan 2004-2010 (COM(2004)0416), as called for by Parliament in its resolution thereon of 23 February 2005<sup>1</sup>;
31. Welcomes the Council's conclusion recognising the environmental and social problems arising from the closure of the long established mercury mines in Almadén, Spain, as a consequence of the Community strategy concerning mercury; recommends that adequate compensation measures be undertaken and duly funded by the Commission in order to allow the area affected by the closure of mercury mines to achieve viable economic and social alternatives; underlines that consideration should be given to the possibility of using Almadén for the safe storage of the existing metallic mercury stocks or metallic mercury sub-produced by industry all over Europe but never its waste, thus making use of the infrastructures, local manpower and technological expertise existing there;
32. Supports measures to ensure rehabilitation and monitoring of the contaminated sites, including closed mines, industrial sites or storage sites for waste from both, respecting the polluter-pays principle;
33. Welcomes all actions proposed by the Commission at international level and stresses the importance of the Commission and the Member States supporting and promoting international action, with a view to reaching an agreement on the implementation of a global legislative instrument on mercury;
34. Supports strongly initiatives to make mercury subject to the PIC-procedure of the Rotterdam and/or Basel Convention, in order to increase transparency in mercury trade;
35. Underlines, further, the importance of the EU cooperating with the main mining countries, Algeria and Kyrgyzstan, with a view to phasing out the primary mercury entering the world market, by supporting relevant actions;
36. Stresses the importance of the EU taking the initiative and organising bilateral meetings with other regions, such as the G77 and China, in order better to prepare the negotiations scheduled to take place during the upcoming UNEP Governing Council in 2007;



37. Asks the Commission to explore the possibility of providing technical assistance and know-how to affected developing countries and countries with economies in transition to eventually phase out uses and releases of mercury and mercury compounds;
38. Stresses that, in addition, the use of amalgam in Second- and Third-World countries must be reduced;
39. Asks the Commission, considering the above, to request Member States to report on all of their activities and projects on mercury involving developing countries, with a view to determining where the needs are for more efficient use of EU funds;
40. Calls on the Commission to ensure restriction in the use of mercury in gold mining, by promoting at the same time non-mercury-using viable techniques, and furthermore to come forward with a proposal for a positive labelling scheme for gold that has been mined without the use of mercury, also covering gold processed inside and outside the European Union;
41. Considers it extremely important, in determining the composition of the group of experts, to ensure a balance between dentists, toxicologists and experts on environmental medicine;
42. Instructs its President to forward this resolution to the Council and the Commission.

## EXPLANATORY STATEMENT

### Introduction

Mercury is a [heavy metal](#), sometimes known as quicksilver, which occurs naturally in the environment in different chemical forms. Mercury is the only metal that in its pure form is a liquid and at room temperature it slowly forms a vapour. Natural events (e.g. volcanic activity, weathering of rocks) and human activities (e.g. mining, burning fuel) can cause mercury release into the environment. Mercury placed on the world market has been obtained mainly from [cinnabar](#) mines located in Spain, China, Kyrgyzstan and Algeria. It can also be recycled from industrial processes.

Mercury deposits at Almadén in Spain account for the largest quantity of liquid mercury metal produced in the world. Its total production from historical times is approximately 250,000 metric tons, which is approximately one third of the entire quantity produced worldwide. Mercury has been mined at Almadén for more than 2,000 years and is the nucleus of social economic activity in that region.

Mercury and its compounds are highly toxic to humans, ecosystems and wildlife. It is a global, diffuse and persistent pollutant. Mercury can change into the environment into methylmercury, its most toxic form, which readily passes both the placental barrier and the blood-brain barrier with the risk of causing damage to the nervous system, and thus making it particularly harmful to foetal development.

Mercury is a global threat. It crosses national or regional boundaries, travelling long distances through the atmosphere, contaminating European and global food supplies at levels posing a significant risk to human health.

The European Union is the world's largest mercury exporter, having been responsible for some 30% of global consumption in 2001-2003. EU leadership in dealing with global mercury problems is therefore clearly an economic, political and moral imperative. Community action as well as international commitment is necessary for the protection of human health and the environment. The Community Strategy concerning Mercury with its integral approach is therefore an important contribution in tackling this global threat.

### I. Export Ban and safe storage

The Commission plans the phasing out of mercury exports from the Community, with the introduction of an export ban by 2011. However, this ban should be introduced as soon as possible, and by 2010 at the latest. Coupled with international action as proposed by the UNEP Governing Council resolution adopted in February 2005 and the GEF/UNDP/UNIDO Global Mercury Project, pressure is building with actions geared at reducing the global demand for mercury.

It is estimated that the EU chlor-alkali industry will have some 12.000 tonnes of mercury destined for decommissioning over the next 15 years. This surplus of mercury must be safely stored in secure sites, continuously monitored and located where intervention can take place immediately if necessary.

## **II. Emission limit values**

The main source of emissions from mercury is the burning of coal. Implementation of existing instruments such as directive 2001/80/EC to reduce sulphur dioxide will bring some reductions to mercury emissions. However, particularly elemental mercury (with a lifetime in the atmosphere of up to one year), which can travel globally, will still be released in the environment contributing to the global pollution. Therefore, emission limit values for mercury from large combustion plants and other related activities should be introduced as soon as possible in IPPC directive 96/61/EC, and/or in a separate legislative document. Considering that various control options already exist, such as abatement techniques, use of low-mercury coal, coal cleaning or switching to a cleaner fuel. Furthermore, as is mentioned in the Strategy, international action under the Protocol on Heavy Metals under the Long-Range Transboundary Air Pollution Convention (LRTAP) should also be taken into consideration.

Emissions from small-scale combustion facilities are presently not regulated under Community law; emission limit values for such installations should also be set through a Community instrument, since the cumulative effect of mercury emissions from these installations contributes substantially to the overall level of emissions.

Furthermore, mercury emissions from crematoria are an increasing source of pollution, and should be controlled at EU level. Legislation is already in place in Denmark, the Netherlands, Germany and the UK, and should be harmonised before more Member States adopt their own legislation. The relevant OSPAR recommendation covers only 12 out of the 25 Member States and no sanctions are foreseen in case of no implementation.

## **III. Ban of Mercury in measuring and control equipment**

The only effective way of addressing inevitable mercury emissions from use and disposal of measuring and control equipment is by substituting mercury in these product categories. Examples of restricting the use of hazardous chemicals in products already exist in the EU legislation e.g. directives 76/769, 2002/95. Consequently, the marketing and use of mercury in all measuring and control equipment for consumer and professional uses (especially in household, healthcare facilities and schools) should be restricted, allowing for some exemptions where adequate alternatives are not yet available. Derogations should be limited in time, to provide incentives for research and development in order to encourage a shift to alternative substances and techniques by the industry concerned. Several Member States such as Sweden, Denmark and the Netherlands have experience of successfully implementing such restrictions.

## **IV. Collect and treat Mercury Waste**

Separate, safe collection and treatment measures must be put in place for those products containing mercury already circulating in society. Much of the mercury containing waste comes from households and might be released in a non-controlled way in the environment. The Commission should propose measures under the Strategy aiming at dealing with this

problem. In the same way, Community requirements on treatment of waste from dental amalgam must be properly applied.

## **V. Protect against and inform about risks of Mercury**

Given that mercury has bioaccumulative and biomagnifications properties and given the dangers associated with mercury exposure to brain development, it is essential that vulnerable groups of the population (children, pregnant women and women of childbearing age) are well informed and alerted of the possible risks of some fish consumption. As recommended by EFSA, exposure to mercury of these vulnerable groups of the population need to be monitored, and recommendations on dietary intake of fish and seafood need to be set. Such monitoring should be part of the environment and health monitoring system and the biomonitoring programme, originally envisaged under the Environment and Health Action Plan 2004-2010.

## **VI. Vaccines**

Mercury is contained in vaccines in the form of thimerosal, also known as thiomersal, containing approximately 50% ethylmercury by weight, and it is used as a preservative, to prevent the growth of microbes. While at this point there is still significant controversy over whether or not thimerosal in vaccines causes adverse 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. Some measures have already been taken in different Member states: In August 2004 in the UK the Department of Health and Social Security announced that it would no longer use thimerosal in infant vaccines; in Denmark, the National Central Laboratory of the Danish Health System has not used thimerosal in vaccines for children since 1992. The situation, regarding the case of mercury in vaccines, in other Member States is not clear.

## **VII. Support and promote international action**

The European Union and the Member States need to intensify its international efforts and strive for global measures to control mercury emissions, demand and supply globally. Given the transboundary nature of mercury contamination, efforts have to be undertaken with a view to agreeing on an international legislative instrument on mercury. Co-operation should be strengthened in the way of financial and technical assistance with the two main mercury mining countries Algeria and Kyrgyzstan, in order to encourage phasing out of primary mercury production. Bilateral contacts should be intensified in preparation for the UNEP Governing Council in 2007, with countries such as China, India, Russia and the G77, which are all increasingly dependent on solid fuels for coal-fired power plants.

## **Conclusions/ Recommendations**

Mercury is toxic to humans, ecosystems and wildlife and it constitutes a transboundary global threat. The problem of mercury contamination is complex and measures need to be taken on several fronts in order to diminish the associated health and environment risks significantly. The Commission Strategy concerning mercury is a welcome step in the right direction. The

actions proposed in the strategy need to be followed by legislative measures in the following areas:

- emission limit values for relevant activities
- abatement technique to be compulsory for crematoria
- an export ban of mercury by 2010
- safe storage of surplus mercury
- control and treatment of waste from dental amalgam
- restrict the use of mercury in dental amalgams
- a ban on mercury use in control and measuring equipment where safe alternatives exist.

## PROCEDURE

<b>Title</b>	Community strategy concerning mercury	
<b>Procedure number</b>	2005/2050(INI)	
<b>Basis in Rules of Procedure</b>	Rule 45	
<b>Committee responsible</b> Date authorisation announced in plenary	ENVI 12.5.2005	
<b>Committee asked for opinion</b> Date announced in plenary	ITRE 12.5.2005	
<b>Not delivering opinion</b> Date of decision	ITRE 14.7.2005	
<b>Enhanced cooperation</b> Date announced in plenary	No	
<b>Rapporteur</b> Date appointed	Marios Matsakis 24.5.2005	
<b>Discussed in committee</b>	21.11.2005	24.1.2006
<b>Date adopted</b>	22.2.2006	
<b>Result of final vote</b>	for:	50
	against:	1
	abstentions:	0
<b>Members present for the final vote</b>	Adamos Adamou, Georgs Andrejevs, Liam Aylward, Irena Belohorská, Johannes Blokland, John Bowis, Hiltrud Breyer, Martin Callanan, Dorette Corbey, Avril Doyle, Jillian Evans, Anne Ferreira, Karl-Heinz Florenz, Matthias Groote, Françoise Grossetête, Satu Hassi, Gyula Hegyi, Mary Honeyball, Marie Anne Isler Béguin, Christa Klač, Eija-Riitta Korhola, Holger Krahmer, Urszula Krupa, Aldis Kušķis, Marie-Noëlle Lienemann, Marios Matsakis, Roberto Musacchio, Riitta Myller, Péter Olajos, Miroslav Ouzký, Vittorio Prodi, Frédérique Ries, Karin Scheele, Carl Schlyter, Horst Schnellhardt, Richard Seeber, Kathy Sinnott, Jonas Sjöstedt, María Sornosa Martínez, Antonios Trakatellis, Evangelia Tzampazi, Thomas Ulmer, Anja Weisgerber, Anders Wijkman	
<b>Substitutes present for the final vote</b>	María del Pilar Ayuso González, Philip Bushill-Matthews, Bairbre de Brún, Milan Gaľa, Erna Hennicot-Schoepges, Miroslav Mikolášik, Renate Sommer	
<b>Substitutes under Rule 178(2) present for the final vote</b>	Miguel Angel Martínez Martínez	
<b>Date tabled – A6</b>	27.2.2006	A6-0044/2006