Air quality: arsenic, cadmium, mercury, nickel and polycyclic aromatic hydrocarbons in ambient air

2003/0164(COD) - 28/01/2005

PURPOSE: To present a strategy to reduce mercury levels in the environment.
CONTENT: In December 2002, the Commission presented a report to the Council concerning mercury from the chlor-alkali industry. This considered the fate of 12-15 thousand tonnes of surplus mercury resulting from the sector's conversion away from the mercury cell process. The Council then invited the Commission to present "a coherent strategy with measures to protect human health and the environment from the release of mercury based on a life-cycle approach, taking into account production, use, waste treatment and emissions". The strategy also provided a basis for the EU's input to international debate on mercury at the UNEP Governing Council in February 2005.

This Communication is accompanied by an Extended Impact Assessment(ExIA) looking at the mercury problem and policy options in detail (the subject of a separate summary).

Mercury and its compounds are highly toxic to humans, ecosystems and wildlife. Initially seen as an acute and local problem, mercury pollution is now also understood to be global, diffuse and chronic. High doses can be fatal to humans, but even relatively low doses can have serious adverse neuro-developmental impacts, and have recently been linked with possible harmful effects on the cardiovascular, immune and reproductive systems. Mercury also retards microbiological activity in soil, and is a priority hazardous substance under the Water Framework Directive.

The largest source of mercury exposure for most people in developed countries is inhalation of mercury vapour from dental amalgam. Exposure to methylmercury mostly occurs via diet. Methyl-mercury collects and concentrates especially in the aquatic food chain, making populations with a high intake of fish and seafood particularly vulnerable.

A key aim of the strategy is to reduce mercury levels in the environment and human exposure, especially from methylmercury in fish. But eliminating the problem of methylmercury in fish will probably take decades, as present levels are due to past emissions, and would take time to fall even without further releases. The Community has already taken much action to reduce mercury emissions and uses. This does not mean that no more can be done, but highlights the importance of full implementation of existing measures by Member States, and of making progress at the global level.

The strategy therefore has the following objectives:

• Reducing mercury emissions: the Commission will assess the effects of applying IPPC (Integrated Pollution Prevention and Control) criteria on mercury emissions and consider if further action like Community emission limit values is needed. It will also encourage Member States and industry to

provide more information on mercury releases and prevention and control techniques. A study will be undertaken of options to abate mercury emissions from small-scale coal combustion and the Commission will review Member States' implementation of Community requirements on the treatment of dental amalgam waste.

• Reducing the entry into circulation of mercury in society by cutting supply and demand: as a pro-active contribution to a proposed globally organised effort to phase out primary production of mercury and to stop surpluses re-entering the market, the Commission intends to propose an amendment to Regulation 304 /2003/EC to phase out the export of mercury from the Community by 2011. In the short term, the Commission will ask the Medical Devices Expert Group to consider the use of mercury in dental amalgam, and will seek an opinion from the Scientific Committee on Health and Environmental Risks, with a view to considering whether additional regulatory measures are appropriate. In 2005, the Commission expects to propose an amendment to Directive 76/769/EECto restrict the marketing for consumer use and healthcare of non-electrical or electronic measuring and control equipment containing mercury. It will also further study in the short term the few remaining products and applications in the EU that use small amounts of mercury. In the medium to longer term, any remaining uses may be subject to authorisation and consideration of substitution under the proposed REACH Regulation, once adopted.

• Resolving the long-term fate of mercury surpluses and societal reservoirs (in products still in use or in storage): the Commission will take action to pursue the storage of mercury from the chlor-alkali industry, according to a timetable consistent with the intended phase out of mercury exports by 2011. In the first instance, the Commission will explore the scope for an agreement with the industry. Further study in the short to medium term of the fate of mercury in products already circulating in society will also take place.

• Protecting against mercury exposure: in the short term, the European Food Safety Authority (EFSA) will investigate further specific dietary intakes of different types of fish and seafood among vulnerable subpopulations (e.g. pregnant women, children). The Commission will provide additional information concerning mercury in food as new data become available. National authorities will be encouraged to give advice in the light of local specificities.

• Improving understanding of the mercury problem and its solutions: priorities for mercury research will be addressed in the 7thRTD Framework Programme and other appropriate funding mechanisms.

• Supporting and promoting international action on mercury e.g. input to international fora and activities, and bilateral engagement and projects with third countries, including technology transfer, to address the mercury problem; possible establishment of a specific funding scheme for research and pilot projects to reduce mercury emissions from coal combustion in countries with a high dependency on solid fuels; the promotion of an initiative to make mercury subject to the PIC (Prior Informed Consent) procedure of the Rotterdam Convention; support of work under the Heavy Metals Protocol to the UNECE Convention on Long Range Transboundary Air Pollution; support for the UNEP Global Mercury Programme, e.g. through review of materials and provision of technical knowledge and human and financial resources; support for global efforts contributing to reduced use of mercury in the gold mining sector, e.g. the UNDP/GEF/UNIDO Global Mercury Project; advocate a global phase-out of primary production and encourage other countries to stop surpluses re-entering the market, under an initiative similar to that of the Montreal Protocol on substances that deplete the ozone layer.

The Commission intends to review the mercury strategy as a whole by the end of 2010. This review will also meet the requirement to report under the 4thair quality daughter Directive by this time on the merit of further action on mercury, taking account of measures adopted pursuant to this strategy. The Commission will conduct the review using data from various sources and covering all media, rather than just from an air quality perspective.