

QUICKSILVER CAUCUS ... QUICKSILVER CAUCUS ... QUICKSILVER CAUCUS... QUICKSILVER CAUCUS ... QUICKSILVER CAUCUS QUICKSILVER CAUCUS ... QUICKSILVER CAUCUS ...

The Association of State Drinking Water Administrators;
The Association of State and Interstate Water Pollution Control Administrators;
The Association of State and Territorial Solid Waste Management Officials; The Environmental Council of the States;
The National Association of Clean Air Agencies; The National Pollution Prevention Roundtable

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January 9, 2007

Mr. Daniel A. Reifsnyder
Deputy Assistant Secretary of State for Environment
OES/E
U.S. Department of State
Washington, DC 20520

Dear Mr. Reifsnyder:

On behalf of the states belonging to the Quicksilver Caucus, I would like to thank you for the opportunity to provide input on mercury-related issues at the December 14, 2006 meeting in Washington, D.C. as you prepare for the February 2007 United Nations Environment Programme (UNEP) Governing Council meeting. The purpose of this letter is to provide additional state comments and background information on mercury issues.

Background

To address widespread concern about mercury pollution among members of the Environmental Council of the States (ECOS), in May 2001 a coalition of state environmental association leaders and state agencies came together to form the Quicksilver Caucus (QSC). The QSC members work collaboratively to develop approaches for reducing human-derived sources of mercury in the environment and QSC members include the Environmental Council of the States (ECOS), the Association of State and Territorial Solid Waste Management Officials (ASTSWMO), the National Association of Clean Air Agencies (NACAA, formerly STAPPA/ALAPCO), the Association of State and Interstate Water Pollution Control Administrators (ASIWPCA), the Association of State Drinking Water Administrators (ASDWA), and the National Pollution Prevention Roundtable (NPPR).

Most states in the United States (U.S.) issue consumption advisories to their citizens to limit the amount and type of fish consumed due to contamination by mercury. In 2004, fish consumption advisories were in effect in 44 states for 2,436 water bodies, totaling over 13 million lake acres and 767,000 river miles. Twenty-one states have statewide fish consumption advisories due to mercury. Advisories for saltwater fish, such as shark and swordfish, are also in place. Children are most at risk as the developing brain of the fetus and the newborn are particularly sensitive to damage from mercury.

Based on data from the United States Centers for Disease Control and the United States Environmental Protection Agency (U.S. EPA), more than 400,000 newborns are exposed to

unsafe levels of mercury in the U.S. every year. Mercury is also toxic to the immune system, cardiovascular system and kidneys and may increase heart attack risk in adults. Levels in loons are high enough to impair reproduction; potentially lethal levels have been found in otters; and elevated levels have even been found in non-fish eating songbirds in the northeast U.S. Many states are concerned that current federal and international efforts will not achieve the mercury emissions reductions needed to restore our lakes and ponds and to achieve water quality objectives established under the Clean Water Act.

To address concerns about mercury, ECOS has adopted numerous resolutions in the past ten years and QSC members have worked with tribal groups and the U.S. EPA at the federal level and at the state level to establish and strengthen programs to ameliorate its impacts (copies of ECOS resolutions are attached). However, given the long-range atmospheric transport of mercury emissions, global mercury pollution sources contribute very significantly to mercury contamination of the states' lakes, ponds, stream and rivers. The states and federal government cannot solve the mercury problem by acting alone.

The importance of mercury pollution to the states is evidenced by the results of a recent QSC survey, which revealed that nearly all states have established their own mercury programs: Sixteen states are implementing their own comprehensive mercury reduction strategies which typically exceed federal requirements; another six are developing such programs; 36 are addressing mercury products; 46 are implementing outreach efforts; and, 43 are conducting mercury monitoring. In addition, many tribes have established mercury programs.

The QSC is appreciative of the opportunity to provide input now and in the past. While we are supportive of international efforts to date and believe that considerable progress has been made, we believe that efforts should be strengthened and expanded especially in the following areas: partnerships; international reduction agreements/objectives, mercury markets and management; coal source controls; and resources. Given this context we respectfully offer the following comments.

Partnerships

The partnership approach initiated in 2005 provided a creative and reasonable mechanism to further advance global efforts to address mercury pollution and its impacts. We appreciate the U.S. EPA's leadership role in many of the partnership areas and it is clear that the work in this area has been productive. The QSC continues to support this approach and looks forward to continuing to assist with its implementation. For example, state environmental agency staff has assisted UNEP and the U.S. EPA in international capacity building efforts and are currently working with U.S. EPA to formalize the development of a "State Resource Network" that will utilize state experts to support current and future partnership areas. To enhance the partnership approach, we recommend that concrete partnership goals, effectiveness measures, and future steps be identified. In addition, we recommend expanding the partnerships to include international trade, use reduction and management of wastes, and surpluses. We also support necessary funding and human resources to further this type of mechanism by the U.S. and UNEP.

International Reduction Agreements/Objectives

The actions of the past two years to raise awareness of mercury issues and initiate partnerships to address key areas are a commendable start. Given the sharp reductions in worldwide releases

that are needed to be protective of human health and the environment in the U.S. and worldwide, additional measures are needed. In the long term, we believe that international agreements are needed to ensure that mercury issues are adequately addressed. These agreements should establish use and release reduction goals, timelines and objectives, committing nations to act to meet such goals.

With respect to a use reduction goal as discussed at the December 14, 2006 meeting, we believe that the 50 percent and 70 percent targets discussed (by 2012 and 2017 respectively from current levels) are achievable in the U.S. We believe that having goals is productive and that the U.S. is on its way to meeting these goals. As discussed below, use reduction is interrelated with several other issues.

While goals to reduce the use of mercury are needed, we would like to emphasize the importance of establishing international release reduction targets, especially air emission reductions. Mercury's ability to circulate in the atmosphere once emitted allows it to cause damage far away from its emission source. Most human-caused releases to the air (approximately 75%) do not stem from mercury use in products and processes but rather are the unintended result of combustion of coal and the refining of metal ores and other mineral resources. Addressing the international impacts of mercury will require reductions in air releases from sources worldwide.

International Mercury Markets and Management

Mercury has become a surplus element in the developed world as uses decline, recycling increases and government and commercial stocks are no longer needed. These surpluses in the developed world can easily find their way to the developing world where uses can lead to significant environmental release. At a minimum, mechanisms are needed to better track the international trade of mercury, how it is being used, and the recovery and disposal of mercury. In addition, policies and techniques for long-term storage of elemental mercury supplies that exceed those for necessary uses should be developed. We recommend that the U.S. consider adding this as an explicit area of focus in future UNEP Mercury Program activities.

Six of the eight mercury issue areas discussed at the December 14, 2006 meeting are closely related to each other and cannot be addressed in isolation. These are the issue areas related to intentional use of mercury, and mercury as product, item of trade, and/or waste and include:

- Mercury use reduction goals
- Mercury export ban
- Storage of elemental mercury
- Chlor-alkali and vinyl chloride monomer (VCM) production
- Ban on primary mercury mining
- Small-scale gold mining

In recent years, governments have been increasingly addressing these issues on national, regional and global levels as evidenced by the establishment of the UNEP Mercury Program. Many governments are taking measures to reduce mercury use, demand and releases, through, for example, enhanced recovery and recycling of mercury-added products. Many of these efforts increase the supply of elemental mercury, which if unchecked, will flow to areas where demand has not decreased and contributes to non-essential mercury uses and subsequent releases. In addition to efforts to reduce demand, governments must address supply questions by means such as controlling flow to uncontrolled demand sectors and by providing a long-term storage option for excess mercury in lieu of supplying uncontrolled demand sectors.

Through these activities, governments are active participants in the global mercury market and it is incumbent on governments and UNEP to address all aspects of the mercury market. This includes mining, use, recycling, waste management, transport and trade. This should also include trade controls and long-term management of mercury that is no longer needed as a result of concerted government action to reduce demand and release. Supply and demand must be addressed together in order to ensure a transition to a non-mercury economy in a manner that does not place a disproportionate (market, social, environmental) cost or benefit on any party.

To illustrate the interconnections:

- As use is eliminated in product manufacturing and releases from chlor-alkali/VCM manufacture are minimized, demand decreases.
- As use is eliminated in chlor-alkali manufacture, secondary supply increases.
- As end-of-life products are removed from service and mercury is captured to prevent release to the environment, secondary supply increases.
- As mining operations are regulated to prevent release of mercury, byproduct supply increases.
- As various efforts increase secondary and byproduct supply, primary mining is not needed (regardless of price or cost of production) and continuation of primary mining contributes to oversupply.
- As supply increases in countries that are phasing out use and controlling release and therefore have low demand, that supply must either go into storage or flow out of that country to regions and uses where demand (and release) are not the subject of control and reduction.

In the face of concerted efforts to phase out mercury use and release, some governments and private sectors have a supply of excess elemental mercury that may be placed back into trade, e.g., supplying uses that are non-essential. A storage option is needed for byproduct and secondary mercury. In addition, these actions result in supplies that are not needed within national borders. Governments should consider options such as export restrictions and bans so that these supplies do not flow to uncontrolled demand (and release) sectors in other countries.

Coal Combustion Source Controls

Currently about 60 percent of human-caused releases of mercury to the air come from coal-fired power plants. This mercury is transported in the atmosphere with both local and global impacts. Projected increases in the use of coal to generate electricity around the world and the resulting potential for more mercury to be released from these uses greatly concern us. As many of these increases are planned in the near term, we encourage the U.S. Government to explore all means possible, including technical assistance, incentives and requirements to reduce mercury emissions from this sector.

Elements of this coal strategy should include international commitments to require the adoption of effective state of the art mercury-control technologies on coal-fired power plants built in the future. In addition, an international program to evaluate existing coal-fired utility plants to identify cost-effective mercury emission reduction strategies should be initiated. The goals of this program should be to establish pollution reduction targets and timeframes, focusing on those units where the most significant emission reductions can be achieved most cost effectively. Recent technological advancements are making the capture of mercury from coal plants an increasingly affordable opportunity that will only become more cost-effective as the equipment becomes more widely produced and employed.

Resource Allocations

The QSC appreciates the U.S. government's substantial support of the UNEP Mercury Program to date. As you know, the success of global mercury pollution reduction initiatives relies on adequate financing and technical support. We urge the U.S. to continue, as well as expand, its support and advocacy for long-term commitments to address the aforementioned mercury issues by supporting these efforts with sufficient resources to ensure timely and effective implementation of the needed programs.

State Representative on US Delegation

Finally, we appreciate the opportunity to nominate a representative from one of the state environmental agencies to be part of the U.S. delegation to the UNEP Governing Council meeting next month, and we will be forwarding the name and contact information for this individual under separate cover.

Thank you again for inviting input from state environmental agencies on this important matter.

Sincerely,



Arleen O'Donnell

Acting Commissioner, Massachusetts Department of Environmental Protection
Chair, Quicksilver Caucus

cc: Martin Dieu, U.S. EPA, Office of International Relations