

US EPA ARCHIVE DOCUMENT

AN ALTERNATIVE TO GOVERNMENT OWNED LONG TERM SEQUESTRATION AND STORAGE OF MERCURY

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Background

- The jury is in on mercury – it is a dangerous Persistent, Bioaccumulative and Toxic heavy metal and needs to be properly managed.
- Mercury is an element that appears on the periodic table that cannot be destroyed by treatment.
- Mercury is generated from mining worldwide and is extracted as a by product of other ore stratus.

Background

- No current regulations govern the tracking, packaging and control of the disposition and ultimate possession of mercury.
- There is a bill pending in the House (H.R. 1534) introduced by Rep. Tom Allen (MA) and in the Senate (S.906) introduced by Senator Barack Obama (IL) that would ban mercury exports.
- This legislation misses the heart of the real problem – before we focus on Hg's ultimate disposition, we need to address its use.

Background

- We have all heard stories of mercury spills in classrooms, homes and offices that have necessitated large, expensive clean-ups.
- Some of these incidents have resulted in injuries and even death.
- Before we focus on the challenge of worldwide disposition, we need to focus on protecting our infrastructure and citizens.

Mercury Issues and Concerns

Is this an environmental, health & safety or national security concern? It's all of the above.

And no one is talking about the security risks, and the law of unintended consequences, if mercury continues to be sold without controls.

Mercury Issues and Concerns

- There are websites that with recipes for making mercury fulminate using basic high school chemistry.
- No controls exist over who can ultimately possess mercury and as such, private enterprise bears an onerous burden to determine who should or shouldn't possess it.
- We would all be concerned if enriched uranium were freely saleable; why shouldn't we be concerned about the unregulated sale and possession of mercury?

Mercury Issues and Concerns

Private Hg recycling facilities were never designed to become secure repositories for large quantities of Hg.

- There are insurance, security and community relations concerns for private recycling facilities

Private Enterprise's Role

Should private enterprise alone be responsible to secure, protect, insure and ultimately control disposition of mercury?

Private Enterprise's Role

While there are legitimate commercial and industrial uses for mercury, there are no tracking requirements once the Hg is shipped from the recycling facility to monitor where the Hg ultimately ends up.....

- For example, just imagine a small amount of Hg dumped into the public water supply or in a high traffic area such as a large shopping mall or park.
- The results might not be immediately catastrophic, but would cause great infrastructure concern from the public.
- Who would drink the water? Imagine the magnitude of the possible collateral economic damages that could occur.

Potential Solutions

This problem does not have to be addressed with a long-term Government-only solution.....

Precedent has been set by the Energy Policy Act of 1992 which created the US Enrichment Corporation

US Enrichment Corp

- US Enrichment Corp (USEC) was created by the Energy Policy Act of 1992 as a wholly-owned government corporation to take over the Department of Energy's uranium enrichment operation.
- This transfer was intended to enable USEC to operate like a private sector business in preparation for its eventual privatization.
- USEC began operations in July 1993.

US Enrichment Corp., cont'd

- In 1996 the USEC Privatization Act was enacted which provided the mechanics for the privatization and outlining the relationship between USEC and the US Government following privatization
- President Clinton approved the privatization in July 1997.
- Today, USEC is traded on the NYSE and is a global energy company with 2006 revenues of \$1.85 billion.

US Enrichment Corp. Model

This model could be used for the long-term storage and management of the government's and private enterprises' mercury inventory.

US Mercury Corporation could be established to acquire, manage, store and sell mercury in compliance with standards established through Federal Oversight.

US Enrichment Corp. Model

Mercury would be purchased at market price and sold to regulate mercury use.

According to the Environmental Council of the States' October 2003 Study of Mercury storage, consolidated storage of a stockpile double the size of the current federal stockpile (currently about 4,436 metric tons) could be stored in a 55,000 square foot facility.

Mercury can easily be stored in stainless steel flasks, over packed in mercury vapor containing bags and 55-gallon drums.

US Mercury Corp. Model

Policy Objectives:

- To operate as a business enterprise on a profitable and efficient basis.
- To purchase or otherwise take title to the mercury that would otherwise be sold in the market for reuse.
- Could also contract with DOD and DOE to manage current mercury inventories.
- To manage the mercury collected in a manner that ensures that it is not released into the environment.
- To provide a safe, secure location to store prevent unlawful access.
- Reduce the risk of unintended exposure of mercury to individuals.

US Mercury Corp. Model

Policy Objectives, continued:

- To ensure that the mercury collected is not reintroduced into commerce unless it is used for purposes established through federal oversight established by law or rule.
 - For example, federal law or rule could establish that mercury could only be sold to buyers who will only use it for medical, dental, instructional, research or manufacturing purposes and will not place it in solid waste or wastewater disposal systems.

US Enrichment Corp. Model

Policy Objectives, continued:

- To help maintain a reliable and economical domestic source of mercury.
- To protect the public health, national security, safety and the environment.

Key Steps to Establish US Mercury Corp.

- Legislation to:
 - Establish organization.
 - Board of Directors appointed by Director of Environmental Protection Agency, Secretary Transportation and Secretary of Homeland Security
 - Board of Directors includes state representative and mercury industry representative.

Key Steps to Establish US Mercury Corp.

- Legislation to:
 - Require that all domestic mercury be sold to US Mercury Corp. at then market price.
 - Appropriation to fund establishment of organization.
 - Ongoing appropriation to fund mercury acquisitions and operating costs beyond those funded through mercury sales.

Key Steps to Establish US Mercury Corp.

- Legislation to:
 - Release mercury generators from liability for mercury once acquired by US Mercury Corp.
 - Could transfer control of all federal stockpiles to Corporation.
 - Require establishment of standards for storage, management and sale of mercury.

Conclusion: Act Now

Mercury is dangerous if improperly managed, stored and used.

Unregulated mercury sales and use clearly represents a risk to national security, human health and the environment.

A partnership of federal standards and oversight and private management and operation provides a very attractive option that policy makers should consider.

Thank You

