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Details:

(FORM UPDATED: 08/11/2010)

**WISCONSIN STATE LEGISLATURE ...  
PUBLIC HEARING - COMMITTEE RECORDS**

**2009-10**

(session year)

**Assembly**

(Assembly, Senate or Joint)

**Committee on ... Natural Resources  
(AC-NR)**

**COMMITTEE NOTICES ...**

- Committee Reports ... **CR**
- Executive Sessions ... **ES**
- Public Hearings ... **PH**
- Record of Comm. Proceedings ... **RCP**

**INFORMATION COLLECTED BY COMMITTEE FOR AND AGAINST PROPOSAL**

- Appointments ... **Appt**
- Clearinghouse Rules ... **CRule**
- Hearing Records ... bills and resolutions  
(**ab** = Assembly Bill)                      (**ar** = Assembly Resolution)                      (**ajr** = Assembly Joint Resolution)  
(**sb** = Senate Bill)                              (**sr** = Senate Resolution)                              (**sjr** = Senate Joint Resolution)
- Miscellaneous ... **Misc**

\* Contents organized for archiving by: Mike Barman (LRB) (Sept/2010)

## Assembly

### Record of Committee Proceedings

#### **Committee on Natural Resources**

##### **Assembly Bill 299**

Relating to: products containing mercury and granting rule-making authority.

By Representatives Danou, Benedict, Pope-Roberts, Pocan, A. Ott, Dexter, Parisi, Milroy, Bernard Schaber, Sinicki, Richards, Mason, Black, Berceau, Hebl, Hilgenberg, Hintz, Hixson, Pasch, Roys, Smith, Spanbauer, Steinbrink and Molepske Jr.; cosponsored by Senators Jauch, Cogs, Cowles, Lassa, Lehman, Miller, Risser, Robson, Sullivan, Taylor and Wirch.

June 02, 2009            Referred to Committee on Natural Resources.

July 29, 2009            **PUBLIC HEARING HELD**

Present:    (12)    Representatives Black, Danou, Molepske Jr.,  
Steinbrink, Hraychuck, Hebl, Mason, Milroy, J. Ott,  
LeMahieu, Mursau and Nerison.  
Absent:     (3)     Representatives Clark, Gunderson and Huebsch.

##### Appearances For

- Rep. Chris Danou, Trempealeau — 91st Assembly District
- Sen. Bob Jauch, Poplar — 25th Senate District
- Rachel Currans-Sweehan, Madison — Dept. of Health Services
- Lynda Knobeloch, Madison — Dept. of Health Services
- Henry Nehls-Lowe, Madison — Dept. of Health Services
- John Reindl, Madison — Council on Recycling
- Amber Meyer Smith, Madison — Clean Wisconsin
- Don Hammes, Middleton — Wisconsin Wildlife Federation
- Erin Uram, Madison — Sierra Club
- Julie Baldwin, Madison — MEG Wastewater
- Suzanne Bangert, Madison — DNR
- Zach Shawano, Crandon — Forest County Potawatomi  
Community
- Bill McClenahan, Crandon — Forest County Potawatomi  
Community

##### Appearances Against

- None.

Appearances for Information Only

- None.

Registrations For

- Jennifer Giegerich, Madison — WLCV
- Sen. Tim Carpenter, Milwaukee — 3rd Senate District
- Sabrina Gentile, Madison — Wisconsin Council on Children and Families
- Keeley Moll, Madison — Wisconsin Dept. of Agriculture, Trade, and Consumer Protection
- Randy Case, Madison — DNR
- A.J. Wilson, Madison — We Energies
- Lori Grant, Madison — River Alliance of Wisconsin
- Ralph Erickson, Stoughton — Madison Metropolitan Sewage District
- Rhonda Riedner, Brooklyn — Madison Metropolitan Sewage District

Registrations Against

- None.

Registrations for Information Only

- Scott Manley, Madison — Wisconsin Manufacturers and Commerce

September 2, 2009

**EXECUTIVE SESSION HELD**

Present: (14) Representatives Black, Danou, Molepske Jr., Hraychuck, Hebl, Mason, Milroy, Clark, J. Ott, Gunderson, Huebsch, LeMahieu, Mursau and Nerison.  
Absent: (1) Representative Steinbrink.

Assembly amendment LRBa0635 introduction by unanimous consent of committee.

Moved by Representative Danou, seconded by Representative Black that **Assembly Substitute Amendment 1** be recommended for adoption.

Ayes: (14) Representatives Black, Danou, Molepske Jr.,  
Hraychuck, Hebl, Mason, Milroy, Clark, J. Ott,  
Gunderson, Huebsch, LeMahieu, Mursau and  
Nerison.  
Noes: (0) None.  
Absent: (1) Representative Steinbrink.

ASSEMBLY SUBSTITUTE AMENDMENT 1 ADOPTION  
RECOMMENDED, Ayes 14, Noes 0

Moved by Representative Danou, seconded by Representative Black that  
**Assembly Amendment 1 to Assembly Substitute Amendment 1**  
(LRBa0635) be recommended for adoption.

Ayes: (14) Representatives Black, Danou, Molepske Jr.,  
Hraychuck, Hebl, Mason, Milroy, Clark, J. Ott,  
Gunderson, Huebsch, LeMahieu, Mursau and  
Nerison.  
Noes: (0) None.  
Absent: (1) Representative Steinbrink.

ASSEMBLY AMENDMENT 1 TO ASSEMBLY SUBSTITUTE  
AMENDMENT 1 ADOPTION RECOMMENDED, Ayes 14, Noes 0

Moved by Representative Danou, seconded by Representative Black that  
**Assembly Bill 299** be recommended for passage.

Ayes: (14) Representatives Black, Danou, Molepske Jr.,  
Hraychuck, Hebl, Mason, Milroy, Clark, J. Ott,  
Gunderson, Huebsch, LeMahieu, Mursau and  
Nerison.  
Noes: (0) None.  
Absent: (1) Representative Steinbrink.

PASSAGE AS AMENDED RECOMMENDED, Ayes 14, Noes 0

John Maycroft  
Committee Clerk



2009?

CALL

~~NO CALL~~

DATE 7/1 TIME 4pm INITIALS jrm

NAME Sarah Barry in Jauch's office

ADDRESS \_\_\_\_\_

CITY, ST, ZIP \_\_\_\_\_

TELEPHONE NUMBER 6-3510

REGARDING (BE SPECIFIC)

Jauch has subamendment to AB299 Mercury Products  
changing location in statutes  
7/29 hearing OK



# Mercury Policy Project

1420 North St., Montpelier, VT 05602 ~ [www.mercurypolicy.org](http://www.mercurypolicy.org) ~ 802.223.9000

## MEMORANDUM

To: Wisconsin State Legislators

From: Michael Bender, Director, Mercury Policy Project

Subject: 2009 Assembly Bill 299/Senate Bill 200

Date: July 28, 2009

For over the past decade, the Mercury Policy Project has worked to promote policies to eliminate mercury uses, reduce the export and trade in mercury, and reduce mercury exposures at the local, national, and international levels. We strive to work harmoniously with other groups and individuals who have similar goals and interests.

Today, we are writing in support of Assembly Bill 299/Senate Bill 200. This legislation is an important step forward because switches, relays and measuring devices containing mercury can still be sold in Wisconsin today. However, mercury-free alternatives which perform the same functions are cost effective and readily available now across the Country.

Mercury is highly toxic, causing damage to the nervous system at even low levels of exposure. It is concentrated throughout the food chain – especially in fish – and collects in humans and wildlife, and is particularly harmful to the unborn and small children.

Upon enactment, Assembly Bill 299/Senate Bill 200 will establish a schedule for phasing out the continuing use of unnecessary mercury-containing products in the state. Over 10 states across the Nation have already adopted similar legislation.

Passage of additional laws like Assembly Bill 299/Senate Bill 200 can be expected to have an impact above and beyond simply adding these states and the population within them to the existing states with policies in place. Proposed state bills, taken together, can have the same effect as national legislation when enacted, when a certain “tipping point” is reached and thereby eliminate the largest mercury uses in products within the United States (U.S.).

The elimination of the U.S. market for these mercury products will have a ripple effect extending around the globe. Multi-national manufacturers produce the same products the world over, and thus must design products to meet the standards for all regions of the world.

Together, measuring and electronic devices account for as much as 700 tons of global mercury demand, and represent low hanging fruit in achieving global mercury demand reductions since non-mercury alternatives are readily available. Achieving the tipping point in the U.S., when coupled with laws in effect and under development in Europe, Japan and elsewhere, should result in a 15-20 percent reduction in global mercury use over the next five years.



# Mercury:

A threat to the health of our children  
and our natural resources



## A threat to our health

EPA scientists now estimate that 1 in 6 women of childbearing age have levels of mercury in their blood that are unsafe for a developing fetus. **A potent neuro-toxin, mercury impacts the brain and nervous system resulting in memory loss, speech difficulties, troubles with vision, and cardiovascular problems.** The effects are so harmful that women of childbearing age are advised to limit the number and kinds of fish they eat from Wisconsin waters.



"Our store relies on Wisconsin's clean lakes, rivers and streams and the thousands of tourists who come to visit them every year.

Protecting Wisconsin waters from mercury pollution protects our economy and our way of life."

— Mitch Mode  
owner of Mel's Trading Post, the Northwoods' largest sporting goods store founded in Rhinelander in 1946.

## A threat to our environment

Mercury poses an invisible but persistent threat to Wisconsin waters, causing fish consumption advisories because of unsafe levels of mercury.

**The Wisconsin Department of Health Services and the Department of Natural Resources currently lists every inland body of water in Wisconsin under a fish consumption advisory as a result of mercury contamination.** Many waterways, especially in prime tourist areas in Northern Wisconsin have stringent guidelines for fish consumption, which suggest limitations on the number of recommended meals of fish a person should have to limit their risk potential from mercury. Restrictions are even more stringent for women of childbearing age and children under the age of 15. Walleye, considered one of the best fish to eat from Wisconsin waterways, contain particularly high levels of mercury.

The fishing industry in Wisconsin is a powerful economic driver. The DNR estimates that **it brings \$2.3 billion of revenue to the state and directly employs more than 25,000 individuals.**

Reducing  
Mercury  
Pollution

# Reducing Mercury Pollution

## What Can be Done?

There are still some household and industrial products being manufactured with mercury outside of Wisconsin and overseas that are sold or used in Wisconsin. When these products are not properly recycled, that toxic mercury gets deposited into the environment and pollutes our lakes, rivers and streams and creates fish consumption advisories. It is estimated that 6600 pounds of mercury still enter Wisconsin waterways each year from improper disposal of products. Fortunately, there are non-mercury alternatives for most of these products, as documented by a number of recent studies and European initiatives.

**Clean Wisconsin is supporting 2009 Senate Bill 200 and Assembly Bill 299 to restrict the sale of non-essential mercury products in households and industrial products.** Over 10 states across the United States, including Wisconsin's neighboring states, have already adopted similar laws that will contribute to ultimately ending production of unnecessary mercury products use nationwide.

There are many groups that support this bill because they know it's important for children's health and the future of sport-fishing: Wisconsin Council on Children & Families • Mercury Free Wisconsin • Wisconsin Wildlife Federation • Wisconsin Association of Lakes • Forest County Potawatomi Community • Wisconsin League of Women Voters • River Alliance of Wisconsin • Wisconsin League of Conservation Voters • Sierra Club - John Muir Chapter • WE Energies • Municipal Environmental Group - Wastewater Division • Wisconsin Department of Natural Resources • Wisconsin Department of Health Services • Associated Recyclers of Wisconsin • Physicians for Social Responsibility.

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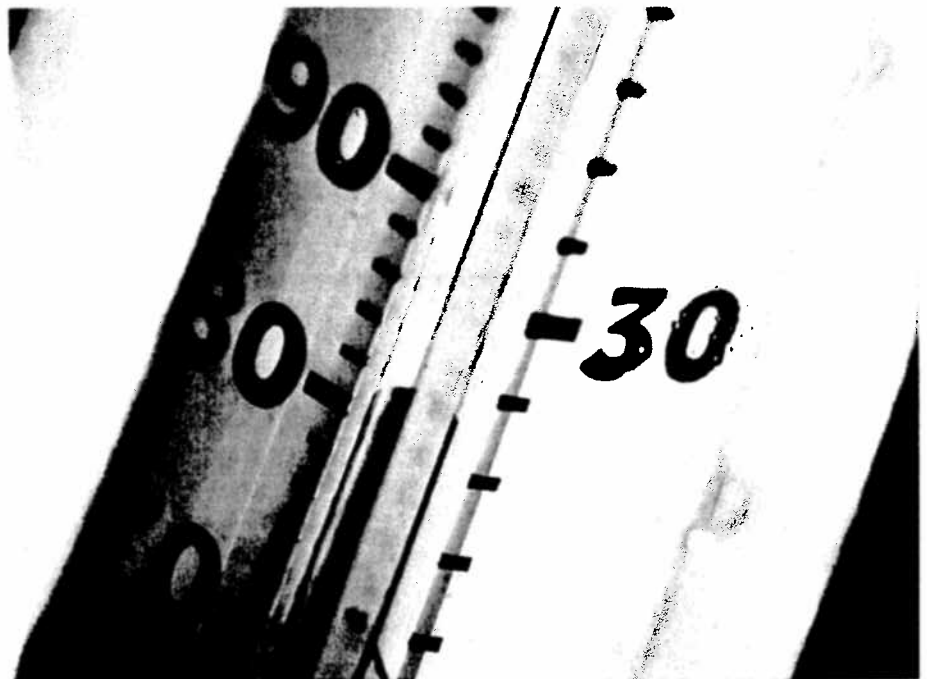


photo by Axel Buhrmann





Contact: Sen. Bob Jauch  
608-266-3510

**Senator Jauch Testimony: Assembly Bill 299**

*July 29, 2009*

Consideration of this legislation coincides perfectly with this morning's testimony regarding Wisconsin groundwater. As Chairperson Black stressed so clearly this morning it is essential that Wisconsin continue to take steps to protect our natural resources.

We have known the dangers of mercury pollution for over 25 years and there is urgency for us to take the proper steps to reduce mercury pollution that threatens our natural resources and endangers human health. The DNR mercury rule was a major step in improving Wisconsin air quality and will dramatically reduce mercury deposition into Wisconsin's lakes. This legislation offers another important step to restrict the availability of certain non-essential products containing mercury and add to the overall reduction of mercury in our air, land and waterways.

As a result of this Legislation Wisconsin is poised to join a national coordinated effort to continue the significant nationwide decline in the sale of mercury used in everyday in products and devices. This effort is nearing a tipping point and Wisconsin could be the state that leads manufacturers to find it more cost effective to make only mercury-free devices. Ten states, including Minnesota, Illinois and Michigan, have already taken action to limit the sale of these harmful products.

It is past time we joined the effort. This legislation was introduced two years ago, unanimously endorsed by the Senate Committee on Natural Resources and approved by the Senate on a 30-3 vote. There is no reason for us to sit idly by when we know as much as we do about the dangers of mercury especially when there are practical and achievable alternatives to reduce the introduction of this dangerous neurotoxin into our environment.

This bill regulates the sale of non-essential household products containing mercury. It phases out the retail sale of several products that have mercury added to them during the manufacturing process including switches, relays, and measuring devices such as thermostats and thermometers and manometers. The legislation identifies these products because safer, economical viable alternatives are available to consumers.

The bill also prohibits schools from knowingly purchasing or using mercury containing products. The bill is designed to encourage manufacturers to find safe alternatives to mercury for use in their products. The products identified in the bill all have economically viable alternatives to mercury and manufacturers are given the option of seeking an exemption for the ban if no reasonable alternative exists.

The bill also prohibits schools from knowingly purchasing or using mercury containing products. The bill is designed to encourage manufacturers to find safe alternatives to mercury for use in their products. The products identified in the bill all have economically viable alternatives to mercury and manufacturers are given the option of seeking an exemption for the ban if no reasonable alternative exists

Wisconsin manufacturers are not currently producing products that contain mercury, but these products can still be sold in Wisconsin. This bill will make the ban on sale permanent instead of volunteer as it is now. This regulation is the right thing to do—it is easy and inexpensive and will prevent a tremendous amount of mercury from entering the environment.

Throughout this morning's testimony speakers emphasized the enactment of Wisconsin Groundwater Legislation as first steps in the effort to enact more comprehensive policies to protect Wisconsin water resources. Likewise this Legislation is an initial and essential start to limit the sale of products as we work to consider more comprehensive legislation in the future.

I would love to be able to propose more comprehensive legislation to encourage recycling and restriction of these dangerous products into to our waste stream. However, as desirable as it is to required recycling and other related policies, our state is not equipped to broadly enact such requirements, particularly in rural parts of the state. Our neighboring states of Illinois, Minnesota and Michigan which now have more comprehensive legislation took an incremental approach starting with this legislation to ban the sale of mercury products.

I have requested a draft of legislation that would require manufacturers of fluorescent light bulbs, known as CFLs, to enact a recycling program for these products. Clearly patterned after the Electronic Waste bill proposed by Senator Miller, this effort would take us to the next step of encouraging recycling of these and other products containing mercury. I am willing to work with the Chair and other members to advance these initiatives but we should not delay any further this legislation as an important step in the direction of reducing mercury contamination throughout Wisconsin.

It is my understanding that a couple of committee members have raised questions as to the necessity of this legislation. The Wisconsin Department of Natural Resources estimates that up to 6,600 pounds of mercury is released into the environment in Wisconsin from discarded products each year. Through this legislation we won't eliminate every pound but make no mistake each ounce that we reduce does reduce the risk to public health.

I am circulating an article from the Turtle Lake Times in Barron County that demonstrates the dangers of even a small mercury spill and highlights the importance of reducing even the smallest amounts of mercury that can jeopardize our public health.

Allow me to share with you a mercury sample that contains approximately the amount of mercury in the spill referred to in the article. If it were to break the entire hearing room would be contaminated, members would have to vacate the premises and the health and if not properly ventilated and cleaned the health of visitors to this room could be jeopardized.

These items are being thrown into our landfills and threaten our air quality and groundwater. Let us at least prohibit the sale of these items and work together on future legislation to improve the recycling of these dangerous products.

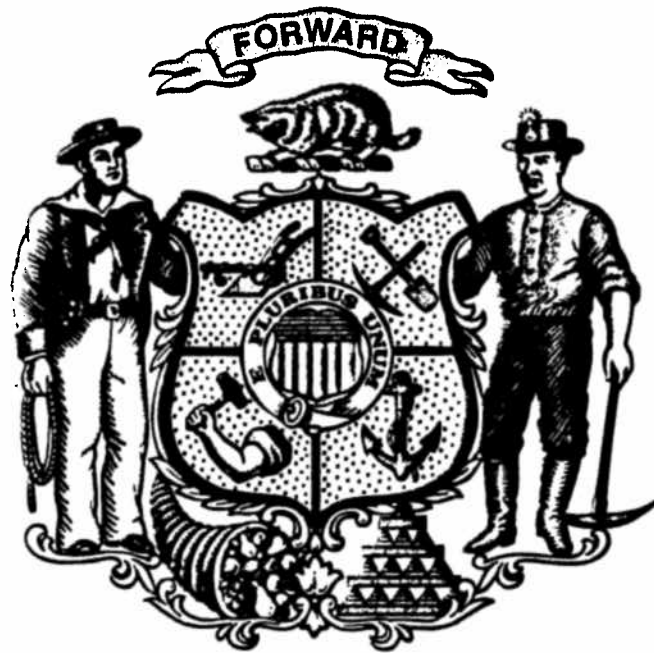
I respect the opinion and efforts of those who would like to do more. However, I would like to remind the committee that our recycling regulations have linked the recycling requirement along with resources to enable statewide recycling programs that work. Enactment of tough regulation without effective statewide programs might make us feel better but won't result in actually removing these products from our waste stream.

Currently, the Clean Sweep program has facilitated the collection of 945,000 pounds of waste in 2008 alone including medications, paint and pesticides, as well as automotive waste and electronics. While this is an effective program to reduce hazardous materials from our landfills it lacks adequate funding and our rural residents are particularly disadvantaged because permanent drop off sites are not available. I am concerned that the recent budget reduction will impair the success of this program particularly in rural areas and I am eager to work with my colleagues to find more stable resources to match more significant policies to promote recycling and protect our environment.

This Legislation adds to the wonderful record of environmental stewardship exhibited by this Legislature. It takes us the next important step in reducing mercury from our shelves and our landfills. It takes us one more step toward improving the health of our citizens and protecting the land we love.

### Additional Information on AB 299

- The substitute amendment moves the bill language to the section of statute governing DNR. It was previously in the chapter of statutes governing DATCP. The initial draft of the bill gave DATCP exemption authority, but it was determined that DNR should have this authority. This substitute moves the bill language to statutes governing DNR, a move agreed to by both DATCP and DNR.
- AB 299 bans the sale of the following products to which mercury has been added during formulation and manufacture:
  - Fever thermometers
  - Manometers (instruments for measuring pressure)
  - Thermostats
  - Instruments and measuring devices
  - Switches and relays
  - Household items such as toys, clothing and cosmetics
- This bill does not include fluorescent light bulbs also known as CFLs.
- Fever thermometers containing mercury may be sold only upon prescription and must contain instructions for use and disposal and cleanup if the thermometer breaks.
- Manufacturers of manometers that contain mercury of the type in milking machines must notify wholesalers and retailers of the prohibition and provide instructions for disposal of remaining inventory.
- Manufacturers of certain mercury-added products may seek an exemption from the prohibitions and DNR is responsible for making such determinations
- Public, private and charter schools are prohibited from knowingly purchasing or using a mercury-containing compound or an instrument or measuring device containing mercury.
  - Starting January 1, 2012, schools may not knowingly store free-flowing elemental mercury, mercury-containing compounds, and instruments or measuring devices containing mercury.
  - *Exceptions*
    - The purchase is required under federal law
    - The only mercury-added component is a button cell battery
    - No reasonably acceptable mercury-free alternative exists and then the lowest mercury containing device may be used





Testimony on Assembly Bill 299: Products Containing Mercury  
by the Wisconsin Department of Natural Resources  
*before the*  
Assembly Committee on Natural Resources  
July 29, 2009

Thank you for the opportunity to testify today in support of Assembly Bill 299 relating to products containing mercury. My name is Suzanne Bangert. I am the Deputy Administrator of the Air and Waste Division at the Wisconsin Department of Natural Resources.

The department supports all methods of reducing the release of mercury to Wisconsin's environment: air emission controls for mercury releases to the atmosphere, treatment and pollution prevention for mercury releases to wastewaters, mercury product substitution and recycling for mercury-containing products. We have estimated that releases to air, water and land resulting from the use of products with mercury exceed the mercury releases from coal-fired power plants in this state. AB 299 will reduce the use of mercury-containing products without imposing an undue burden on individuals or businesses that may have used these products in the past.

I'd like to highlight some of the reasons we believe this bill is good for Wisconsin.

1. Mercury is an important environmental pollutant in Wisconsin. The Departments of Natural Resources and Health Services have issued a statewide fish consumption advisory to protect the public's health because of mercury contamination levels in fish tissue. This has an economic and cultural impact on Wisconsin because of our history and reputation as an outdoor recreational state.
2. Most of the elemental liquid mercury in Wisconsin is contained in mercury products that can break and release mercury to our environment or impact individuals directly. Further, almost all mercury-containing products in current use now have equally effective non-mercury product substitutes available at essentially the same cost. The mercury-

containing products identified in AB 299 have non-mercury substitute products that are already widely used. Under exceptional circumstances, if a suitable alternative does not exist for a product, AB 299 wisely provides a waiver mechanism for the continuing use of the mercury product. AB 299 is not expected to have any significant economic impact on the industry or individuals of Wisconsin.

3. Nationally, up to 15 states have adopted some legislation eliminating or limiting the use of mercury in products. The surrounding states of Minnesota, Illinois, and Michigan have all adopted substantial mercury product legislation while Wisconsin has not. AB 299 proposes similar legislation already adopted by our neighboring states. For consistency, AB 299 also encourages Wisconsin to participate in a multistate regional clearinghouse to assist in carrying out this legislation.

We commend the sponsors of Assembly Bill 299. The department supports this bill and we offer our services in working out the details of final legislation and program implementation.





State of Wisconsin  
Department of Health Services

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Jim Doyle, Governor  
Karen E. Timberlake, Secretary

Committee on Natural Resources  
Wednesday, July 29, 2009  
1:00 PM  
417 North (GAR Hall)

Rachel Currans-Sheehan  
Legislative Liaison, Department of Health Services

Chairman Black and members of the Committee on Natural Resources. Thank you for the opportunity to testify today on AB 299 which addresses an important public health concern for Wisconsin. My name is Rachel Currans-Sheehan. I am the Legislative Liaison for the Wisconsin Department of Health Services. Joining me from the Department is Henry Nehls-Lowe, an epidemiologist, and Dr. Lynda Knobeloch, a senior toxicologist, and they will be available to address technical questions. We are here to provide support for Assembly Bill 299.

Each year our department provides assistance to hundreds of Wisconsin families and workers who call to get clean up instructions or health information following an accidental mercury spill. Many of these calls involve mercury from broken thermometers, thermostats and other items that has been spilled in homes or offices and poses a hazard to occupants. People are intrigued by the physical properties of metallic mercury and playing with it can easily spread a spill. The worst spills are associated with large amounts of mercury that was collected from smaller sources.

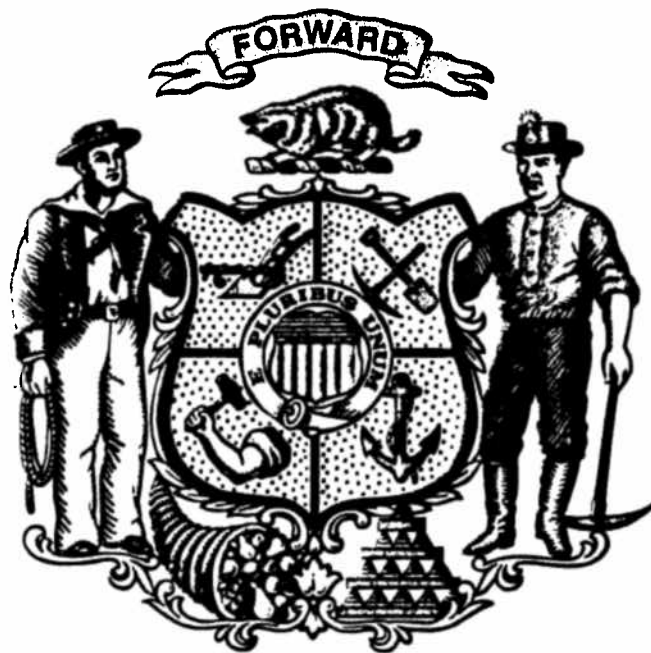
On the other end, several recent calls have involved the breakage of compact fluorescent light bulbs which contain a small amount of mercury in a powdered form. If not addressed and under certain circumstances, the small amount of mercury from these light bulbs can pose a health concern. Our department and local public health agencies provide guidance to businesses and homeowners to ensure an appropriate response and clean up to these spills. Agencies also have mercury vapor monitoring equipment that is vital for ensuring a safe clean up.

Cleaning up mercury spills is important to protect the public from harmful vapors. Recently, a west-central Wisconsin homeowner had a number of unrelated medical symptoms, but it was not until high mercury levels were discovered in her blood

and urine that the attending physician requested DHS to investigate. DHS found high mercury vapors inside of house that exceeded levels known to be harmful. The U.S. Environmental Protection Agency was called in by DNR and recovered 1 tablespoon of mercury from the house, which appeared to be from a mercury flame sensor in the furnace. EPA spent \$45,000 to clean up the house and ensure it was safe for residents. This bill would reduce the frequency and costs of cleaning up of such incidents by banning the sale of many common mercury-containing products.

When metallic mercury is spilled, it quickly evaporates and can contaminate indoor air. Inhaling mercury vapors can cause a variety of symptoms such as memory problems, mental confusion, loss of coordination, and sleep disturbances. Replacement of mercury-containing products with safer alternatives is an important step toward meeting the Department's 2010 public health goal of reducing exposure to toxic substances.

We believe that Assembly Bill 299 will protect the health of Wisconsin residents by banning the sale of many products that are known to contain mercury. We applaud Representative Danou, Senator Jauch and the many other co-sponsors for their efforts in the drafting of this legislation and strongly support its adoption.





## John Muir Chapter

Sierra Club - John Muir Chapter  
222 South Hamilton Street, Suite 1, Madison, Wisconsin 53703-3201  
Telephone: (608) 256-0565 Fax: (608) 256-4562  
<http://wisconsin.sierraclub.org>

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RE: Testimony on AB 299 – Mercury Products Sales

DATE: July 29, 2009

Good afternoon, my name is Eric Uram. I currently serve as the Conservation Chair for the Sierra Club - John Muir Chapter representing our 15,000 Wisconsin members on issues affecting the conservation of Wisconsin resources. I worked previously as Sierra Club staff for 10 years on their Mercury Campaign and remain the Sierra Club and Sierra Club Canada's International Liaison on Heavy Metals Policy representing our 1.3 million members at national and international policy meetings with USEPA, Congress, UNEP and the EU on their approaches to addressing mercury and its inherent global and domestic problems.

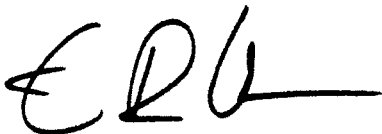
Wisconsin has been considered a leader in addressing mercury issues, but a need exists to close the back door on sales of potential sources of mercury. AB 299 will effectively end the potential for selling obsolete mercury-containing products in stores and businesses in the state. All of the products contained in the bill have cost-effective, commercially-available, safe alternatives to their mercury-containing counter-parts.

While most domestic large-scale retailers have been able to effectively understand their responsibility in sales and installation of these newer mercury-free products, smaller operations have not. It is an interesting and telling example that I relate to you here, that only a few years back, when I entered a small co-operative pharmacy and health food outlet in Madison, I found mercury fever thermometers for sale on their shelves. It was solely due to the fact that there wasn't a prohibition on the sale of these items that they were stocked there. While one would hope that awareness has been raised to the levels necessary that the retailer and consumer would have all the facts and make the proper choices, we cannot assume that this is the case and the legislature must act responsibly to end all sales and the potential for improper disposal of these mercury-containing items.

Wisconsin will need to act further. For other mercury-containing products and uses, we are finding that lower-cost and less-toxic alternatives are either readily available or in development. For those products and processes where alternatives are not readily available, we need sound management to prevent mercury from being released into the Wisconsin environment and threatening the health of residents and visitors to our state. By reducing to amounts added to the existing problems, we will see reductions in mercury in Wisconsin's lakes and the fish that swim in them. I encourage you, as legislators, to continue to your efforts at addressing sources of mercury in thoughtful solutions like those contained in AB 299.

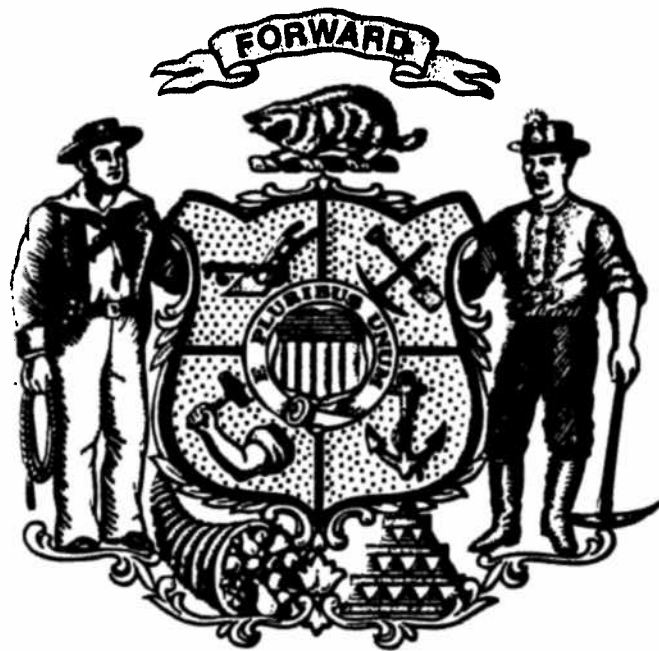
We now know that preventing mercury use is the wisest option -- breakage, spillage and other polluting losses from purposeful uses are 100% preventable through substitution. Many other states around the country have already addressed this problem through legislation, and Wisconsin would bring the total population in the United States affected by restrictions on sales of the mercury-containing products to almost 50% of all the residents in the USA. Wisconsin will not be a leader in this effort, but we can regain our potential to once again lead on mercury issues, and I encourage you, as leaders and legislators, to put Wisconsin back at its appropriate status on this issue by passing AB 299 and getting to work on further efforts to address other preventable sources of mercury affecting our Wisconsin water, fish and health.

Thank-you again for the opportunity to testify on this important legislation.

A handwritten signature in black ink, appearing to read 'ERU', with a long horizontal line extending to the right.

Eric Uram  
Conservation Chair, Sierra Club- John Muir Chapter





**Testimony of the Council on Recycling  
on Mercury Products Legislation, AB 299  
Assembly Committee on Natural Resources  
July 29, 2009**

My name is John Reindl. I am the chair of the Council on Recycling, and am representing them in this testimony. As you know, the Council was created by the Legislature as an advisory body to the Legislature, Governor, State agencies and others on recycling-related issues. Members are appointed by the Governor to correspond to the Governor's term of office and represent industry, local government and citizens.

My personal background is that I have worked in the solid waste and recycling field for over 35 years, and have been involved with mercury-containing products as a county recycling manager since at least the middle of 2000 until my retirement last year. My specialties were on fever thermometers (for which my county banned their sale in approximately 2001), fluorescents, for which my county required retailers to take back from customers for recycling beginning in 2002, thermostats, for which I was involved in a national project, dental mercury, for which we surveyed the dental offices in the county, work on mercury flow models for products at both the state and national levels, a six year project of recording legislation on mercury in products for all 50 states, and, finally, mercury emissions from crematoria.

Mercury in products has been a high priority topic for the Council since 2003, which learned that annual emissions to the environment in Wisconsin were 2½ times those from the state's coal-burning power plants. Recommendations were approved by the Council in May 2006 and sent to the Legislature, the Governor and state agencies. A copy of these recommendations is attached.

Later, the Governor also appointed a Task Force on Waste Materials Recovery and Disposal, and the Council had two representatives as members, including myself. This Task Force also made several recommendations on mercury containing products in their final report from December 2007, and those recommendations have been extracted and are also attached.

Fortunately, much has already been done in Wisconsin on mercury in products. The state has already banned mercury in toys, and limited its use in packaging and batteries. Thanks to bans on the sale of fever thermometers adopted in Dane County along with other states, we have not found any evidence of mercury fever thermometers being sold in the state. Stores in Dane County selling fluorescent lamps are required to offer to take them back for recycling due to the mercury in them and Focus on Energy has set up a program where they pay for the recycling of these programs throughout the state. Mercury-containing automotive hood and trunk switches are no longer manufactured and DNR has set up programs with auto salvagers to collect and recycle these switches. DNR has also worked with the dentists and wastewater treatment plants to reduce mercury flow to the sewer systems from dental offices and local municipalities and DNR have worked with hospitals, schools and others to reduce their use of mercury and provide for proper disposal. Several years ago, legislators from both parties asked the Department of Commerce to prohibit the use of mercury thermostats in new construction, and mercury thermostats have since then largely gone out of production.

However, much still needs to be done, and the Council is pleased that the Legislature is taking up the issue of mercury in products. However, the Council believes that the current proposal needs to be significantly strengthened. We ask that the Committee amend this legislation to incorporate several of the recommendations of both the Council and the Governor's Task Force, specifically the ban on the disposal of mercury-containing products into the waste stream and the institution of mercury take-back programs for thermostats and lamps that contain mercury. For thermostats, we also recommend that the state enact a prohibition on HVAC contractors from leaving mercury-containing thermostats at households. It should be noted that the ban on the disposal of mercury-containing devices in the solid waste stream affects only households, since non-households are already prohibited from the disposal of toxic materials in their solid waste.

Thermostats pose an example of why the bill, as written, is not sufficient. While thermostats were formerly a major source of mercury in products, Honeywell, the largest manufacturer, stopped production two years ago, and GE, another of the largest producers, stopped production last year, according to a July 23, 2009 email note from the

Thermostat Recycling Corporation (TRC), a non-profit organization funded by the thermostat industry to take back and recycle mercury thermostats.

As welcome as these cessations of production have been, the disposal of mercury thermostats will continue for many years in the future, since they have such long lives, in some cases, of over 50 years. Attached are flow charts on mercury in thermostats from a national model that show the minor impact that a halt on sales has for the present and near future. In the first chart – which is part of the published model – mercury consumption in thermostats was forecast for the 2005-2010 time frame to be about 8,400 kilograms (or, about 8.4 metric tons) a year. Emissions to the environment were forecast to be about 12,943 kilograms a year, with the bulk – 11,521 kilograms, or 89% of the total – going to the land.

If the model is now changed to assume that the sale of mercury thermostats is halted – either due to market forces or bans – the environmental emissions stay roughly the same at 12,876 kilograms a year. There is only a 67 kilogram reduction; approximately 0.5% of the total mercury discharged to the environment. Again, by far the largest quantity is disposed of to the land.

We can see from this example that the ban on the sale of thermostats would not be particularly useful in the near term – even if they were still being sold – but that instead, the focus must be on preventing the mercury from existing thermostats from being discarded to the land. This must be a long-term, continuing effort, as thermostats can have a useful life of over 50 years. The one in my house is 52 years old, and some friends who live not too far from me have a 3-bedroom house that had 8 mercury thermostats, and some are 45 years old.

The recommendations of the Council on thermostats – bans on disposal, and requirements for the recycling of old thermostats by the HVAC industry – focus on this need to divert thermostats from being disposed of to the land. These recommendations also build upon the infrastructure available from the thermostat industry, with funding for the Thermostat Recycling Corporation financed by approximately 30 firms, including the major manufacturers of thermostats.

The Council also would like to point out that its recommendations focused only on the largest sources of mercury in products and that further work will need to focus on other products that contain mercury, and it urges the Legislature to direct attention to other products as well. We hope that this bill is only a first step of a comprehensive approach to reducing mercury emissions to the environment.

The Council stands willing and able to assist the Legislature and state agencies on mercury-containing products.

Recommendations for State Action on Mercury Containing Products  
Council on Recycling  
May 23, 2006

Issue to be addressed

The major issue is to reduce the release of mercury from products to the environment, due to their contamination of food (especially fish) and the subsequent harm to human health. A second issue is to reduce or prevent the potential interaction of children with mercury-containing products.

Guiding principle

Because mercury is contained in many products and it is not believed to be feasible to put the focus on all of these products initially, the focus will be on those products that either contain the most mercury or are the easiest to impact.

In addition to specific products, attention is also to be paid to minimizing the disposal of mercury-containing products in solid waste and wastewater treatment facilities.

Priority Materials

According to the DNR mercury flow model that was presented to the Council by Randy Case of DNR at our November, 2003 meeting at the Schlitz Audubon Center, 3,007 kilograms of mercury were estimated to have been released to the environment in 2000 in Wisconsin from the six largest product groups, an amount that exceeded the discharge of mercury to the air from all the coal-burning plants in the state. The largest contributions of mercury to the environment in Wisconsin in 2000 were:

Thermostats	657 kilograms a year
Dental office scrap to landfills	392 “
Thermometers	267 “
Fluorescent lamps	263 “
Dental office scrap to wastewater	252 “
Auto switches	109 “

For some of these products – such as thermometers and auto switches – it is believed that the discharges to the environment have decreased significantly from the estimate for 2000 due to elimination of the use of mercury in new products, beginning several years ago.

In addition, there are existing programs for the management of mercury for a number of the above materials.

For thermostats, the thermostat industry has developed the Thermostat Recycling Corporation collection and recycling program, which is targeted mainly at heating, ventilating and air conditioning wholesalers and contractors. Wisconsin has typically ranked in the top three of all states in the collection of thermostats recycled through this program, and the numbers in the model reflect this effort, which is estimated to collect less than 5% of the thermostats discarded in the state annually. While the sale of mercury thermostats is declining, the impact of this decline will not be reflected in the model for many years, since thermostats have long lives of 50 years or more.

For the dental offices, the pollution prevention plans under development by those municipal waste water treatment plants that receive more than 1 million gallons a day are expected to include requirements for improved management of mercury from dental offices.

For fluorescent lamps, while some communities either collect these lamps through their Clean Sweep programs or through retailers, on a statewide basis there is not a concerted effort to improve collections. In addition, the sales of fluorescent lamps is believed to be increasing, due to the sales of compact fluorescent lamps. Finally, the use of mercury in automotive HID lamps is adding a new source of mercury to the environment.

For auto switches, the scrap auto industry has established a comprehensive auto switch recycling program in partnership with DNR.

From a product viewpoint, it is thus recommended that the Council focus on thermostats and fluorescent lamps, with strong support for the further implementation of existing programs for mercury from dental offices and auto switches.

### Tools available to the state

The state has several tools available for effecting change, including:

- statutes and regulations restricting legal behavior
- educational programs
- financial incentives or disincentives
- leadership in its own actions
- development and operation of programs to handle the issue

### Recommendations

#### General

Support for the current program for the collection and recycling of dental amalgam through pollution prevention programs operated by the larger wastewater treatment systems

Support for the current program for the collection and recycling of mercury tilt switches from vehicles at vehicle scrap yards

Ban the discard of mercury-containing products with solid waste (similar to Minnesota, California and other states)

Provide monies from the recycling fund to help finance the collection of household products with mercury at municipal Clean Sweep programs

#### Thermostats

Require all HVAC wholesalers and/or contractors to set up collection and recycling programs for discarded mercury thermostats – similar to Maine

Require all wholesalers and retailers of thermostats (regardless of whether they are mercury or not) to set up take-back and recycling programs for their customers

Ban HVAC contractors from leaving replaced mercury thermostats at job sites (similar to Minnesota)

Ban the sale of mercury thermostats – done by several states

Require the inclusion of training on mercury thermostats recycling in union and technical courses for the HVAC industry

Require informational sheets on the proper management of replaced mercury thermostats to be included with all sales of thermostats

Require the Department of Commerce – in conjunction with the DNR – to develop educational and informational materials for the building industry on the proper management of mercury thermostats and to track and report the results of mercury thermostat collection and recycling in the state. This would include information for HVAC, custodial, and property management staff

Require the DOA energy program and Focus on Energy programs to include a thermostat recycling requirement in all of its programs that include thermostat replacement

#### Fluorescent lamps

Require all retailers of fluorescent lamps to set up take-back and recycling programs for fluorescent lamps for their customers

Require that all sales of fluorescent lamps include information that they cannot be disposed of with solid waste

#### Automotive HID Lamps

Require all retailers of automotive HID lamps to set up take-back and recycling programs for these lamps for their customers

#### Schools

Prohibit the use of elemental mercury in both classroom equipment and in nursing stations

Statements Related to Mercury in Products  
Final Report  
Governor's Task Force on Waste Materials Recovery and Disposal  
December, 2006

Executive Summary, page ix

### **Actions Required**

In some instances, action might be dictated by legislation or regulatory action to protect human health and the environment. Examples include landfill bans and limitations on the use of certain raw materials (e.g., mercury).

Recommendations, pages 41-42

#### **B2.2: Establish mandatory product take-back and collection programs in all cases where such programs are cost effective compared to other systems for recycling.**

If voluntary programs do not achieve Wisconsin environmental goals within five (5) years, the Legislature should authorize and require the DNR to implement a mandatory take back or alternative "extended product responsibility" (EPR) program for manufactured products, with the highest priority assigned to those products containing toxic materials, followed by energy and resource-rich products. The priority of establishing programs would be:

- a. Toxic materials-containing products
  - Rechargeable and other batteries (e.g., nickel cadmium, lithium, nickel metal hydride, mercury, silver, and magnesium)
  - Mercury-containing products

#### **B2.3: Prohibit the use and incorporation of toxic materials in electronic and other products.**

- The DNR should promote voluntary codes of practice for manufacturers to reduce or eliminate the use of toxic materials in products. Initial focus should be on mercury, lead, cadmium, hexavalent chromium, polybrominated biphenyls and polychlorinated diphenyl ethers.
- The Legislature should require the DNR to develop and implement required codes of practice for manufacturers where voluntary programs do not achieve state goals within five (5) years.
- The Legislature should ban the use of mercury in products where suitable alternatives exist.
- In all laws and regulations, the Legislature and the DNR should place the burden of proof on manufacturers to show that the social benefits exceed the social costs of using toxic materials in products they sell in Wisconsin.

Recommendations, page 64

#### **E1. Expand the disposal ban to other domestic and agricultural universal wastes.**

##### **Background**

Wisconsin currently requires regulated businesses to recover several commonly used materials, restricting their disposal because of the potential toxic nature of the products or certain components. Referred to as universal wastes, these include:

- Used lamps
- Used batteries (lead acid, rechargeable)
- Used mercury devices and mercury liquid less than one pound

(note: the above lists have been edited to remove those recommendations dealing with products that do not include mercury)

# Substance Flow Analysis of Mercury Intentionally Used in Products in the United States

Alexis Cain, Sarah Disch, Cliff Twaroski, John Reindl, and C. Randy Case

## Keywords

dental amalgam  
heavy metals  
industrial ecology  
integrated product policy (IPP)  
materials flow analysis (MFA)  
toxic releases

## Summary

Mercury-containing products release mercury (Hg) throughout their lifecycles, frequently in ways that are difficult to measure directly. Therefore, there are considerable uncertainties about the magnitude of mercury releases associated with products, about which products and which release pathways contribute the most to mercury releases, and about the likely impact on mercury releases of various possible interventions in the mercury content of products or in the management of mercury-containing wastes. This article presents an effort to use substance flow analysis to develop improved estimates of the environmental releases caused by mercury-containing products and to provide policy-makers with a better understanding of opportunities for reducing releases of mercury caused by products.

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# THERMOSTATS - US, projected sales

YEAR: 2005 - 2010

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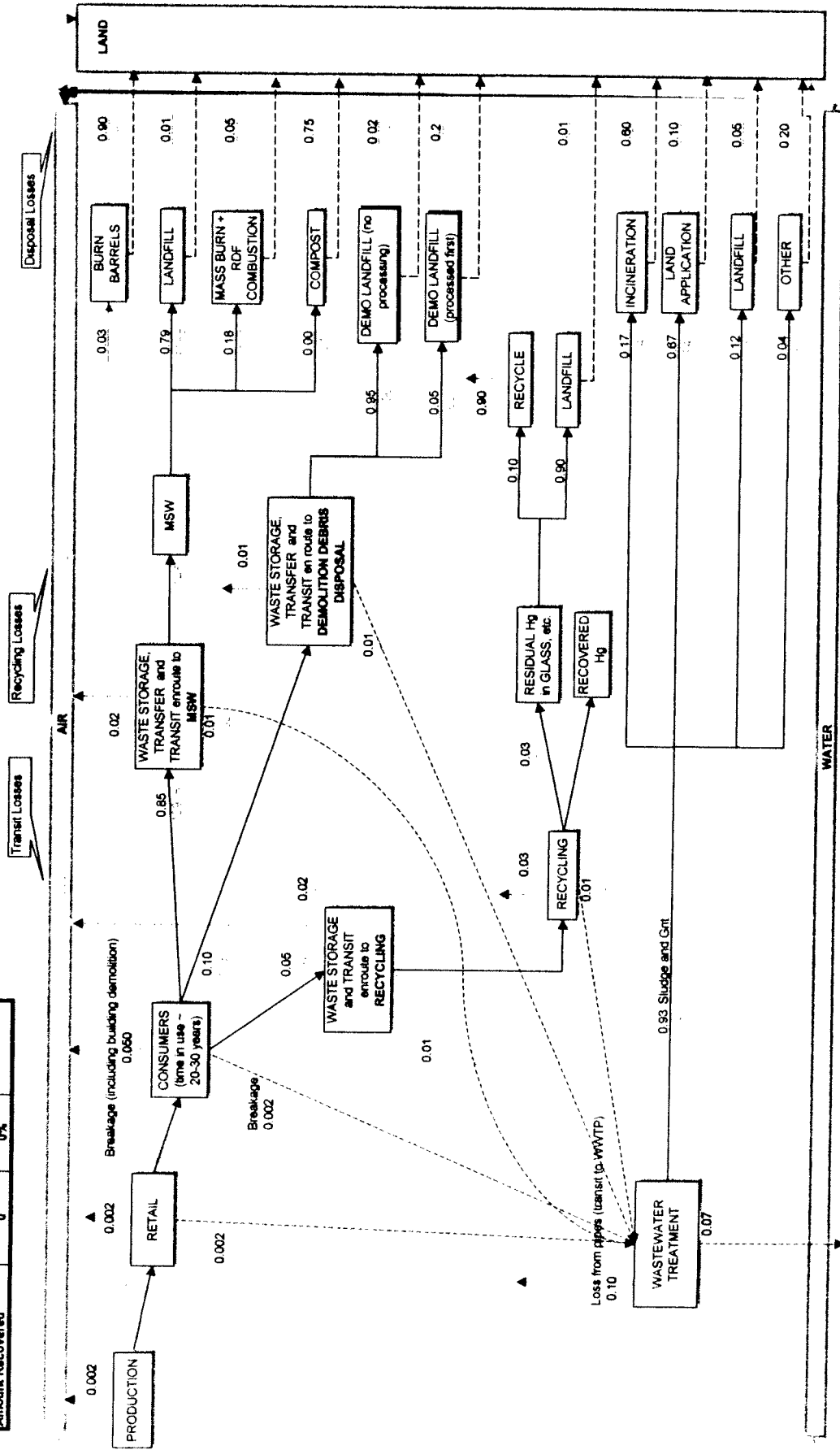
## Mercury Mass Balance

	Mass (kg)	% of Input	% of Output
<b>Total Input</b>	<b>8423.4</b>		
<b>Total Releases</b>	<b>12943</b>	<b>164%</b>	
Atmosphere	1411	17%	11%
Surface Water	11	0%	0%
Land	11521	137%	89%
<b>Amount in Use</b>	<b>Unknown</b>		
<b>Change in Use</b>	<b>-5099</b>	<b>-41%</b>	
<b>Amount Recovered</b>	<b>0</b>	<b>0%</b>	

Amount of Mercury (kg)	Distribution Percent
0.04	0.12
0.12	

Mercury Flow Pathway  
 Release to Air  
 Release to Water  
 Release to Land

1 Distribution Percent is the amount of mercury partitioned to waste streams.  
 2 Release Percent is the amount of mercury partitioned to air, land, and water.



# THERMOSTATS - US, zero sales

Box 19 Summary Page

YEAR: 2005 - 2010

## Mercury Mass Balance

	Mass (kg)	% of Input	% of Output
<b>Total Input</b>	0.0		
<b>Total Releases</b>	12876	#DIV/0!	11%
Atmosphere	1369	#DIV/0!	0%
Surface Water	8	#DIV/0!	89%
Land	11498	#DIV/0!	
<b>Amount in Use</b>	Unknown		
<b>Change in Use</b>	-13466	#DIV/0!	
<b>Amount Recovered</b>	0	#DIV/0!	

### Key

Amount of Mercury (kg)	0.04
Distribution Percent	0.12
Mercury Flow Pathway	
Release to Air	→
Release to Water	→
Release to Land	→

Distribution Percent is the amount of mercury partitioned to waste streams  
 Release Percent is the amount of mercury partitioned to air, land, and water

