

## Mercury Reduction Programs

### Description:

The City of Superior has been developing projects to eliminate, replace and recycle mercury products or items since 1997. We have targeted the most likely places to have these items such as schools, medical facilities, dental offices and large industries. And of course, most households probably have a mercury fever thermometer. (Or had until we got going!)

### Background:

Mercury is a natural occurring element that has proven very toxic to the environment and to all animals that eat fish. Its harmful effects on human health are well documented, and eliminating it in all products and removing it from our homes and work places is essential.

#### *Schools*

Teaching our students is an excellent way to get the message about mercury out to the general public. A mercury PowerPoint presentation was developed and has been given to over 80 schools in Northern Wisconsin. We go out around fishing opener and explain about mercury, fish advisories, had how to choose fish with less mercury content.



#### *Thermometers:*



Many households in Superior had several mercury thermometers and some had old thermostats or even jars of elemental mercury. To encourage these homeowners to participate in our mercury reduction programs, we gave them a new digital thermometer for any mercury item they turned in.

Several groups, (boy scouts, school classes, church groups, banks, city facilities) held thermometer exchanges across Northern Wisconsin. Almost 8,000 mercury items were exchanged in the past 5 years. Every hospital in our area participated by agreeing to become mercury free and by sponsoring an exchange for their employees.

#### *Switches:*

Mercury switches were used for years for convenience lighting in automobiles (lights that go on when you lift the hood or trunk lid). When cars are scrapped, the switches could end up in a landfill or in our wastewater. New cars no longer have mercury switches but millions of older cars do. The City of Superior and the National Clean Car Campaign partnered with local Superior auto dealers to switch out all mercury convenience switches in the hood and trunks of cars sold off their lots. All five new car dealers in Superior are participating in the program. Before any car leaves their lot, during dealer prep, the mercury switches are taken out and replaced with a non-mercury switch provided by the City.

### *Amalgam:*

Dental amalgam, the material in “silver” tooth fillings, contains approximately 50 per cent mercury. During installation and removal of mercury fillings, small bits of amalgam can be released to the waste stream. Mercury cannot economically be removed at the treatment plant, so making sure it does not reach the waste stream (sewers) and ultimately the environment is imperative. The City of Superior developed a Best Management Program Workshop for handling dental amalgam and other hazardous waste in dental offices. Fourteen of the seventeen area dental offices participated, resulting in nine of the offices installing an amalgam separator. Separators effectively remove up to 99% of the mercury from their wastewater.

### *Fluorescent Bulbs:*

Using fluorescent bulbs and HID lamps is smart, but they have a small amount of mercury in them and need to be recycled. The City partnered with Superior Water Light & Power, Murphy Oil USA of Superior and three local Hardware Hank Stores to make recycling these bulbs simple. Residents of Douglas County need only to bring these bulbs to the nearest Hardware Hank Store, fill out a coupon and receive free recycling for most common bulbs. This program has already recycled over 7,000 bulbs and has been extended through 2005.



### **Results:**

These programs have removed over 350 pounds of elemental mercury from our community, but the most important thing is the education and awareness that has been brought into the everyday lives of our area youth, homeowners and businesses.

### **Contacts:**

To learn more about these or other mercury reduction programs visit our website at [www.ci.superior.wi.us](http://www.ci.superior.wi.us) or contact:

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