Support S.34:

An EPR Recycling Program for Mercury Lamps

Understanding the Full Lifecycle of Lamps

The benefits of fluorescent bulbs are tremendous. These lamps provide excellent light while using much less energy than incandescent bulbs. According to Efficiency Vermont, Energy Star compact fluorescent bulbs (CFLs) use 66-75% less energy than incandescent bulbs and can last 6 to 10 times longer.[1]

However, it is equally important to understand the full lifecycle of the lamps and the impacts that their improper disposal can have on the environment. Fluorescent bulbs contain mercury, a known neurotoxin that can build up in our bodies and the environment. Mercury used in lamps accounts for roughly 5% of worldwide mercury use and is expected to dramatically increase as inefficient incandescent bulbs are phased out.[2]

Mercury used in lamps accounts for roughly 5% of worldwide mercury use

-VT Advisory Committee on Mercury Pollution

Quick Facts

- **The amount of mercury contained in a lamp can range anywhere from 2 to 50 milligrams***
- **Older methods for injecting mercury into lamps can lose up to one half of the mercury in the process***
- **The European Union and California have passed laws limiting the amount of mercury contained in lamps**
- **Current collection programs do not require manufacturers to share in the costs of collecting and recycling spent lamps**

Source: Advisory Committee on Mercury Pollution. 2010 Annual Report to the Governor, General Assembly, and Citizens of the State of Vermont, January 2010.*

Recycling Mercury Bulbs

Increased demand for energy efficient lighting makes the need for an effective recycling infrastructure apparent. Collecting and properly disposing of mercury, a hazardous waste, is an expensive endeavor. Currently, the costs of recycling mercury-containing lamps fall squarely on the shoulders of the State, Efficiency Vermont, municipalities and ultimately on the tax payers.

State of Vermont Fluorescent Lamp Recycling Program – Vermonters can drop off spent fluorescent bulbs at participating hardware stores including ACE, True Value, and Do It Best. This program was originally funded by the Vermont Department of Environmental Conservation (DEC) and is currently financed by Efficiency Vermont. Unfortunately, designated funding for the program is scheduled to expire at the end of this year. Without an identified funding source, a successful and necessary recycling program for a dangerous hazardous waste could come to a halt.

Efficiency Vermont - Efficiency Vermont also offers a separate program that provides free recycling for Vermont residents at select locations throughout the state. However, this program only accepts compact fluorescent bulbs.

Solid Waste Districts - Vermonters can dispose of mercury-containing lamps at their local solid waste district's hazardous household waste (HHW) collection sites. However, many HHW facilities are not open year round. In addition, recycling mercury is expensive and places a financial strain on municipalities that are already struggling to do more with less.

Moving Vermont Forward

Vermont is a true leader when it comes to reducing mercury use and exposure. S.34 takes that commitment to the next level by:

1) **Establishing mercury content standards for lamps** – The European Union (EU) has already established limits for the amount of mercury used in lamps. Additionally, California has broken ground by passing legislation modeled after the EU standard. As of January 2010, any lamp manufactured or sold into California must comply with the EU directive. S.34 would ensure that Vermont establishes mercury content standards for lamps that are consistent with the standards in California.

2) **Requiring manufacturers to share in the costs of recycling spent bulbs** - Vermont's current collection programs place the financial burdens squarely on the shoulders of the Vermont DEC, Efficiency Vermont, solid waste districts, and ultimately the tax payers. Instead, Vermont should require manufacturers to also share in the responsibility of properly disposing of mercury-containing lamps. By financing the cost of recycling their products, manufacturers will have a powerful incentive to design their lamps to last longer and to exclude the toxic materials, including mercury, that make recycling so difficult and expensive.

Extended Producer Responsibility in Vermont

Extended producer responsibility (EPR) recycling programs hold manufacturers accountable for what happens to their products at the end of their useful life.

While conventional recycling programs are important, they do not address issues related to the rapid use of resources and the inclusion of hazardous materials. Understanding this, states are dramatically rethinking their approach to recycling by looking to producers.

The EPR approach taken in S.34 is consistent with other recycling programs in Vermont. This includes programs for beverage containers, mercury thermostats, and electronic waste.

Similar Programs in Other States

Vermont would not be the first state to pass an EPR recycling program for mercury-containing bulbs. Both Maine and Washington have already passed laws establishing manufacturer responsibility recycling programs for mercury lamps. And Massachusetts requires lamp manufacturers to educate the public about the need to recycle lamps. If specific lamp recycling targets are not met, lamp manufacturers are required to provide up to $1 million per year to the Mass Department of Environmental Protection for grants to municipalities and regional authorities to facilitate meeting the recycling rates.

[1] Efficiency Vermont. Available at: http://www.newbulbintown.com/about/

[2] Advisory Committee on Mercury Pollution. 2009 Annual Report to the Governor, General Assembly, and Citizens of the State of Vermont, January 2008.