



To: John Cockburn  
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Re: Comments to *Improving Lighting Energy Efficiency — A Discussion Paper*

From: Pollution Probe

Date: August 10, 2007

Please accept this submission as Pollution Probe's formal comments to the discussion paper cited above. Our comments will focus on the environmental and health concerns related to the mercury used in compact fluorescent light bulbs (CFLs).

We are pleased with the government of Canada's announcement to set performance standards for lighting that will phase out the use of inefficient light bulbs by 2012, as well as with Natural Resources Canada's goal to have the performance standards defined by the end of 2007. Given the existing technology, the most likely result of phasing out inefficient light bulbs will mean an increase in the residential use of CFLs.

While the increased use of CFLs will mean less energy consumption and therefore less mercury emitted from coal-fired utilities, it will also mean a potential increase in the amount of mercury going into the Canadian waste stream from spent bulbs.

Pollution Probe has been working on mercury issues for more than a decade and has previously identified the need to address mercury that is released to the environment from consumer products, such as CFLs and other mercury-containing lamps.

Mercury is a persistent toxic substance that biomagnifies through food chains. It can cause permanent brain damage, central nervous system disorders, memory loss, heart disease, kidney failure, liver damage, loss of vision, loss of sensation and tremors. Mercury is also a suspected endocrine disruptor, which means it damages the reproductive and hormonal development and growth of fetuses and

infants. Even low-level exposure to mercury has serious health effects that include neurological damage, reproductive system damage, behavioural problems and learning disabilities.

To reduce the amount of mercury entering the environment as a result of CFLs, Pollution Probe recommends that the government of Canada take the following two actions — limit and/or reduce the amount of mercury that is put into CFLs and increase the collection and recycling of mercury-containing lamps.

**Mercury content in CFLs** — There should be a limit to the amount of mercury that is allowed into CFLs that are sold in Canada. There is currently a range in the amount of mercury used in CFLs from 1 mg up to 5 mg per bulb. The government of Canada should encourage the manufacturers of CFLs to decrease the amount of mercury used in the bulbs. This could be accomplished through the proposed Minimum Energy Performance Standard (MEPS), whereby the standard would specify the maximum amount of mercury allowed in CFLs, or potentially through a Canada-wide standard that sets further reduction targets for the amount of mercury used in all mercury-containing lamps. Setting a limit for the amount of mercury used in CFLs, and then requiring labelling of this information along with proper disposal instructions, will also help to address consumer perceptions about the quality and health issues associated with CFLs.

**Recycling and collection** — Canada needs to increase the collection and recycling of all mercury-containing lamps. In 2005, Pollution Probe released a report that showed Canada's recycling rate of mercury-containing lamps is only seven per cent. This is compared to the European Union's 2006 target recovery rate of 80 per cent for mercury-containing lighting products. Germany has already attained this rate of recycling, and other European countries, such as Netherlands, Switzerland and Austria, have recycling rates greater than 50 per cent and are on their way to meeting the target. The United States, through its Universal Waste Rule, has a current recycling rate of 24 per cent and has set a goal to raise this to 80 per cent by 2009. These jurisdictions have increased their recycling rates through legislation and directives, as well as through public education and consumer awareness raising. Canada will need to implement regulations, set targets and focus on educating the public in order to increase our collection and recycling rates.

Thank you for the opportunity to submit comments.

Sincerely,

A handwritten signature in black ink, appearing to read "K. B. Ogilvie". The signature is written in a cursive, flowing style.

Ken Ogilvie  
Executive Director  
Pollution Probe