

Green Appliance Mandates Make Consumers See Red

By H. Sterling Burnett

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The Federal Government is considering new energy efficiency mandates for icemakers. Before starting down this path it should carefully examine the differences between the rosy promises and the real results from other household appliance efficiency standards that it has imposed.

The 2007 Energy Independence and Security Act effectively banned the sale of incandescent light bulbs, starting with 100-watt bulbs in 2012 and progressing to a ban on 40-watt bulbs in 2014. The alternative for most households will be compact fluorescent lights (CFLs).

CFLs contain potentially toxic mercury. Thus, there are health and environmental concerns regarding their proper disposal. Shattered CFLs in landfills and municipal dumps have the potential to leach mercury into the soil, and over time this mercury could seep into the groundwater or nearby streams and rivers. For this reason, a number of states and localities have outlawed placing used CFLs in the trash for normal pickup – rather consumers must take their used CFLs to authorized hazardous waste disposal sites.

The EPA recommends recycling CFLs. However, curbside recycling is not available everywhere and often doesn't include CFLs. Recycling facilities that accept CFLs are not common, even within major metropolitan areas, much less in rural areas where household waste is often disposed of by on-site incineration or in trenches— both of which will release mercury into the atmosphere. The result is that most of the mercury in CFL's winds up in landfills where the mercury is released into the environment.

Perhaps even more important is the danger of broken CFLs in the home. The EPA has provided detailed guidelines to avoid unsafe indoor mercury levels when a CFL breaks – yet the guidelines make it sound like a home becomes a hazardous waste site in need of professional remedial action until the clean-up is complete. The EPA's instructions include:

- Have people and pets leave the room.
- Air out the room for 5-10 minutes by opening a window or door to the outdoor environment (In the winter in Fargo? In the summer in Dallas? Yeah, right!).
- Shut off the central forced air heating/air-conditioning system, if you have one.
- Place cleanup materials in a sealable container.
- Promptly place all bulb debris and cleanup materials outdoors in a trash container or protected area until materials can be disposed of properly. Avoid leaving any bulb fragments or cleanup materials indoors.
- If practical, continue to air out the room where the bulb was broken and leave the heating/air conditioning system shut off for several hours.

More recently, CFL bulbs have exploded spontaneously while in use, sometimes causing fires. In 2010, New York fire investigators concluded that a CFL bulb that exploded caused a home fire. In early 2011 Tennessee officials concluded that a malfunctioning CFL started a fire that killed a man in a rehabilitation center.

While a CFL bulb can cost six to 10 times as much as an incandescent they use less electricity to produce the same amount of light. For example, a 13-watt CFL produces the same amount of light as a 60-watt incandescent bulb. Under ideal conditions, a CFL bulb could save \$40 in electricity and replacement costs over its four-and-a-half year life, compared to an incandescent bulb. However, because laboratory conditions rarely match typical use, consumer rarely save that much. Consider:

- CFLs must be left on for at least 15 minutes at a time and used continuously for several hours a day to achieve their full energy savings.
- CFLs can take up to three minutes to reach full brightness when turned on initially providing as little as 50 percent of their rated output.
- CFLs used for only a few minutes at a time, such as in closets and bathrooms, burn out as fast as incandescent bulbs.

The savings from federally mandated energy efficiency standards for household appliances, such as washing machines, are often overstated. The Cato Institute found that U.S. energy efficiency standards will cost consumers up to \$56 billion through 2050, excluding the government's costs.

Energy-saving washing machines, for example, can initially cost twice as much as the machines they replace, but it is argued that they pay for themselves with lower utility bills. These "green" washers use up to 70 percent less water, but optimal results require a specially formulated detergent, which can be more expensive. Traditional detergent creates too many suds, making the clothes more difficult to rinse. The washer senses the suds and increases the amount of water used to finish rinsing the clothes, offsetting the water saved.

Even under the best conditions, the benefits are drastically overstated. According to Forbes, it could take an average of nine years to recover through energy savings the high price of an energy-efficient washing machine. Because the average lifespan of a machine is 12 years, by the time the consumer realizes savings, it is nearly time to buy a replacement.

The federal government has gradually reduced the amount of water per toilet flush since the 1992 Energy Water and Conservation Act, replacing the traditional 3.5 gallon per flush (gpf) toilets with 1.6 gpf toilets.

Consumers noticed problems immediately. Low-flow toilets often became stopped up or required multiple flushes, meaning water savings literally went down the drain. Consumers were so unhappy with their new "efficient" toilets that a thriving black market in high-volume toilets emerged.

San Francisco jumped on the low-flow band wagon with the result that sludge backed up the sewage system due to a lack of water flow. The stench became so bad in popular tourist areas

that the city spent more than \$100 million to solve the problem. The city recently announced that it is spending an additional \$14 million on highly concentrated bleach to treat the stench and disinfect the water before it is dumped into San Francisco Bay. Ironically, the bleach is toxic and could harm the bay.

The government that took away our light bulbs and our well-functioning high flow toilets now wants us to use icemakers that use less energy to freeze water. I fear the result will be higher prices for freezers that often don't make fully solid ice – you may find water running out of your freezer or food spoiling.

The government should stop dictating to consumers what products they buy and how much energy they use – The feds can't get their own fiscal house in order, and they should certainly stay out of telling us how to run ours.

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