# ENVIRONMENTAL





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WMD-HW-7 2009

# Waste Mercury-Containing Lamps: Management Requirements for Handlers and Transporters

Fluorescent, compact fluorescent, and high intensity discharge (HID) lamps contain a small quantity of mercury that may pose a hazard to human health or the environment when improperly managed. Due to this concern, the Department of Environmental Services has adopted Env-Hw 1101-1114, the Universal Waste Rule. This rule regulates the management of universal waste lamps so as to promote recycling, pollution prevention and safe handling methods.

# Why is mercury an environmental concern?

Mercury is a heavy metal that can accumulate in living tissue and cause adverse health effects. A small amount of mercury is an essential component in fluorescent, compact florescent and HID lamps, but when a lamp is broken or disposed of in a solid waste landfill or incinerator, the mercury can contaminate air, soil, surface water and groundwater. In New Hampshire, mercury has been detected in freshwater fish and a statewide fish consumption advisory has been issued by the N.H. Department of Health and Human Services. For more information on mercury in New Hampshire's environment, see DES's *New Hampshire Mercury Reduction Strategy*, published October 1998.

#### Are there other contaminants in lamps we should be concerned about?

HID lamps also contain small quantities of lead. Incandescent lamps may contain lead and cadmium.

## Is fluorescent lighting still a good environmental and economic choice?

Yes. The use of energy-efficient lighting reduces electricity needed from power plants, which then reduces harmful emissions of mercury, carbon dioxide and nitrogen oxide. Also, when less energy is demanded, electric utilities need less generating capacity, resulting in more savings for customers.

#### Requirements for Managing Universal Waste Lamps

Universal waste lamps generated by businesses, industry, and institutions may not be disposed of as a solid waste. It is illegal to dispose of any universal waste lamp as a solid waste since January 1, 2008. In fact, any product that contains intentionally-added mercury is also banned from disposal in a solid waste landfill, incinerator, or transfer station.

Generators of waste are responsible for determining whether their wastes are hazardous and, if so, managing them in accordance with the requirements of the New Hampshire Hazardous Waste Rules. These requirements may include use of a uniform hazardous waste manifest, New Hampshire registered hazardous waste transporter, and delivery to an authorized hazardous waste facility.

Alternatively, universal waste lamps may be handled under Env-Hw 1100 Universal Waste Ruie, which went into effect October 13, 2001. DES believes that recycling is the preferred option for managing universal waste lamps and that the Universal Waste Rule will promote the recycling and proper management of universal waste lamps.

### **Universal Waste**

"Universal wastes" are wastes that meet the definition of hazardous waste in the New Hampshire Hazardous Waste Rules, but which, during accumulation and transport, pose a relatively low risk compared to other hazardous wastes. Wastes that the DES has determined meet universal waste criteria include waste lamps, mercury-containing lamps and devices, cathode ray tubes (CRTs), certain types of batteries, and recalled or suspended hazardous waste pesticides regulated under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA).