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## **THE HANDLING OF SMALL NUMBERS OF BROKEN FLUORESCENT LAMPS**

Health Effects: No adverse effects are expected from occasional exposure to broken lamps.

Mercury: EPA's website contains the following information:

“Breaking one fever thermometer is unlikely to threaten the health of the consumer. Proper cleanup of spilled mercury and adequate ventilation can minimize the risks even further.” <http://www.epa.gov/glnpo/bnsdocs/hg/thermfaq.html>  
Since the average four-foot fluorescent lamp manufactured in 2001 contains 8 milligrams, or about 100 times less mercury than is contained in a typical 700-milligram fever thermometer, and a typical compact fluorescent lamp may contain even less mercury, lamp breakage would appear to cause virtually no risk of harm. However, the legal requirements for disposal may be quite different.

Phosphor: A five-year study of phosphor by the Industrial Hygiene Foundation of the Mellon Institute found no significant adverse effects, either by ingestion, inhalation, skin contact, or eye implant. Also, there have been no significant adverse effects on humans by any of these routes during the many years of its manufacture or use. The phosphor is somewhat similar to the inert calcium phosphate-fluorides that occur in nature. Phosphor is not phosphorous. Heavy metals were removed from phosphor fifteen years ago or more. At the end of lamp life mercury is attached to these phosphors.

Universal Waste Rule Requirements: Under the EPA universal waste rule, a lamp that does not pass the TCLP test and is broken must be cleaned up and placed in a container. The container must be closed, structurally sound, compatible with lamps, and lacking any evidence of spillage. This advice is applicable to any mercury-containing lamp. In some States, Universal Waste status is lost when lamps are broken and must be handled as a full hazardous waste. It is important to check with your local, state, or federal office for the latest update in regulatory status or go to [www.lamprecycle.org](http://www.lamprecycle.org).

Recommended Broken Lamp Handling Practices: If lamps are broken, ventilate area where breakage occurred. Take usual precautions for collection of broken glass. Do not use a standard vacuum cleaner. Place materials in closed container to avoid generating dust.