

# Shedding light on shedding lights

**The Federal Government has announced a scheme that encourages the proper disposal of mercury-containing lamps. Paul Skelton reports on how electricians are in poll position to capitalise on the FluoroCycle program.**

**T**he Australian Government has initiated a scheme to establish partnerships with industry to increase recycling of mercury-containing lamps (MCLs).

The Environment Protection and Heritage Council (EPHC), which is made up of State, Territory, and Federal Government environment ministers, has for some time been investigating the issues associated with the end-of-life management (disposal methods) for compact fluorescent lamps (CFLs) and other MCLs.

In May 2009, the EPHC announced its support for FluoroCycle, a voluntary partnership between government and industry to increase recycling of MCLs.

"The FluoroCycle scheme addresses one of the outstanding issues relating to the use of energy-saving fluorescent lamps, namely how to dispose of them safely at the end of their lifespan," Minister for the Environment, Heritage and the Arts Peter Garrett said at the launch.

"It is now commonly understood that fluorescent lamps contain a small amount of mercury, and while this amounts to no more than a pen tip per lamp, it is important that we look at ways to dispose of it responsibly.

"This new scheme targets this end of the spectrum – the commercial, high-use sector. More than 90% of all lighting waste is sourced from commercial and public lighting. It is here that increased recycling activity will have the most impact from

both an environmental as well as economic point of view. It will build on considerable existing infrastructure as well as some individual but fragmented activities by companies to recycle their waste lamps."

Over time, it is expected that the scope of the program will be broadened to include lamps from the domestic or household sector, which will address increasing volumes of waste lamps as current CFLs reach end-of-life.

A variety of lamp types used in Australia require mercury to operate. Further, the higher the power usage, the more mercury that is required to operate the lamp. However, mercury that is left in landfills can leach through the landfill waste into underground waterways, or rise to the surface in gas form.

Mercury containing lamps include:

- High intensity discharge (HID) lamps, such as mercury vapour lamps used for street lighting, which contain between 50 and 1,000mg of mercury;
- Linear fluorescent tubes, as used in most commercial and public buildings, which are required by an Australian Standard to contain less than 15mg;
- CFLs, which are used mostly in homes, can contain no more than 5mg under a new Australian Standard; and,
- Some neon tubes, as used in signs.

Waste disposal and handling is primarily a State and local government

responsibility in Australia. Landfill disposal of large amounts of MCLs, such as those generated by businesses, institutions, or councils is frowned on in some regions, so check with your council first.

An alternative to landfill disposal is taking mercury containing lamps to specialty recyclers who are able to safely recover not only the mercury, but also the glass, phosphor and aluminium contained in the lamps.

Internationally, there is concern that the levels of mercury being released to the environment are gradually increasing. As mercury is toxic to human health and the environment, governments around the world are increasing their efforts to recover mercury where possible and making it available for re-use.

With federal funding of up to \$500,000 over the next three years, the FluoroCycle scheme will be delivered jointly by the Australian Government and the Lighting Council Australia in collaboration with NECA, the Property Council of Australia, the Facility Management Association of Australia, the Australian Council of Recyclers, the Australian Local Government Association and other key bodies.

Electricians are ideally placed to make a significant contribution to the appropriate management of waste MCLs. Firstly, they can become informed about the local collection points and the local waste collection companies that accept waste MCLs. They are then in a position not only to dispose of waste product appropriately but also to encourage their customers, big and small, to do likewise.

Keeping well-informed about the types of lamps that are available and the levels of mercury they contain is another way that electricians can make a contribution. ■



**The FluoroCycle scheme addresses how to dispose of MCLs safely at the end of their lifespan, says Federal Minister for the Environment Peter Garrett.**