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OFFICIAL STATEMENT BY IESSA ON ENERGY SAVER (CFL) LAMPS

The Illumination Engineering Society of South Africa (IESSA) was alarmed when the content of a malicious and negative e-mail regarding the so-called “dangers” of energy saver (CFL) lamps that had been circulated to end users, was brought to our notice. Below is an extract from this e-mail:-

This is scary!!! We have these energy savers in every room in our home...

An energy saving bulb has broken - evacuate the room now!!!

E-mails of this nature distort the facts and make consumers feel disoriented when negative campaigns like this are launched. IESSA would like to set the record straight by separating the truths from the untruths in the following statement:-

Energy saver lamps are safe to use in your house or business. Although a small amount of mercury vapour could be released when breaking an energy saver lamp, it is unlikely to threaten your health. The effects of the exposure to mercury from a broken lamp to the human body are not measurable as it only poses a real danger if the concentration which is allowed for workers in the industry who are exposed to higher levels of mercury during an 8-hour working day on a continuous basis, is exceeded. Only if several lamps are broken every day in your home in a closed environment, and if you are exposed to all of the mercury at once, could there be a concern to your health which would have to be assessed.

The Scientific Committee on Emerging and Newly Identified Health Risks (SCENIHR) concluded in a statement issued in 2008 that there was no health impact of energy-saver lamps on consumers. SCENIHR experts reviewed scientific data related to flicker, electromagnetic fields (EMF), UV and blue light radiation and no evidence was found that would indicate that either EMF or flicker from energy saver lamps posed a risk for consumers, including people with light sensitivity diseases.

Energy saver lamps do contain a small amount of mercury (less than 5mg compared to a typical thermometer which contains 500mg of mercury) which is used to radiate light in the lamp. In many CFL lamps, this small amount of mercury is an amalgam which will not vaporize at room temperatures. The radiation is converted by the phosphors on the inside of the glass tube into visible light. The phosphors used are fully annealed inert substances that pose no risk to health, even if they are released as result of the lamp breaking.

The possible “dangers” of mercury vapour exposure can even further be minimized by proper ventilation and cleanup. If you break an energy saver lamp or any other type of fluorescent lamp, **DO NOT PANIC, DO NOT START RUNNING**, and take the following steps:-

- 1) Leave the room and ventilate for 15-20 minutes by opening a window
- 2) On hard surfaces, carefully scoop up the fragments and powder using stiff paper or cardboard and place them in a canning jar or in a sealed plastic bag. Use sticky tape to pick up any remaining small glass fragments and powder. Wipe the area clean with damp paper towels or disposable wet wipes and place these in the jar or bag.
- 3) On carpeted areas, using protective gloves, pick up the glass fragments and put them in a jar or bag. Again, use sticky tape to pick up the remaining bits and powder. If vacuuming is needed after all visible materials are removed, vacuum the area where the lamp was broken and dispose of the vacuum bag in a sealed plastic bag.
- 4) Dispose of the waste in the garbage can. Currently in South Africa, there is no effective collection and recycling systems in place to take care of hazardous waste. Once such systems are in place, despose of the waste at a collection point.

For any further information, please direct all enquiries to info@iessa.org.za.