GOVERNMENT OF INDIA MINISTRY OF POWER

LOK SABHA UNSTARRED QUESTION NO.1698 TO BE ANSWERED ON 28.12.2017

COMPACT FLUORESCENT LAMPS

1698. SHRI ANTO ANTONY:

Will the Minister of POWER

be pleased to state:

- (a) whether Compact Fluorescent Lamps (CFL) contain mercury;
- (b) if so, the details thereof;
- (c) whether the mercury content in CFL is a health and environmental hazard;
- (d) if so, the details thereof;
- (e) whether the Government has any plan to collect non-usable CFLs; and
- (f) if so, the details thereof?

ANSWER

THE MINISTER OF STATE (INDEPENDENT CHARGE) FOR POWER AND NEW & RENEWABLE ENERGY

(SHRI R. K. SINGH)

(a) & (b) : Yes, Madam. Mercury is a vital component for functioning of Compact Fluorescent Lamps (CFLs). As per IS 15906, mercury exists in fluorescent lamps in three states, namely (i) vapor in a lamp; (ii) liquid metal or as an oxygen compound; and (iii) amalgam.

(c) & (d) : Health hazards are primarily because of organic mercury. Mercury is capable of inducing a wide range of clinical manifestations including neurodegenerative disorders, reproductive impairments and muscle skeletal abnormalities.

From environmental angle, mercury is a pollutant, which remains in the environment and it circulates in air, water, sediments, soil and biota in various forms. Atmospheric mercury can be transported to long distances through microorganisms and can contaminate the food chain.

(e) & (f): CFLs are covered under the E-waste (Management) Rules 2016, notified by the Ministry of Environment, Forest & Climate Change on 23rd March 2016. The said Rules stipulate that producers have to ensure collection and channelization of e-waste, which includes CFLs, generated from the 'end of life' of their own products or 'end of life' products of any other brand as per Extended Producer Responsibility. The Rules also stipulates that in case of mercury containing lamps such as CFLs, where recyclers are not available, channelization must be done from collection centre to Treatment, Storage and Disposal Facility (TSDF).

During the Eleventh Five Year Plan period, Bureau of Energy Efficiency (BEE) had implemented the Bachat Lamp Yojana (BLY) under which incandescent lamps were replaced by CFLs. The Programme included in its component steps for safe disposal of fused CFLs.
