

**GOVERNMENT OF INDIA
ATOMIC ENERGY
LOK SABHA**

UNSTARRED QUESTION NO:546
ANSWERED ON:28.07.2010
ASSESSMENT OF NUCLEAR WASTE
Thomas Shri P. T.

Will the Minister of ATOMIC ENERGY be pleased to state:

- (a) whether the Government has recently assessed the quantity of nuclear waste likely to be generated by the nuclear power plants in the country;
- (b) if so, the details thereof, Plant-wise and State-wise; and
- (c) the manner in which the Government proposes to dispose of this waste?

Answer

THE MINISTER OF STATE FOR SCIENCE & TECHNOLOGY AND EARTH SCIENCES (INDEPENDENT CHARGE), PMO, PERSONNEL, PUBLIC GRIEVANCES AND PENSIONS AND PARLIAMENTARY AFFAIRS. (SHRI PRITHVIRAJ CHAVAN):

(a) to (c) The wastes generated at the nuclear power stations during their operation are of low & intermediate activity level and are managed at the site itself. These wastes are treated, concentrated, compacted, immobilized in solid materials like cement, bitumen, polymers etc. and stored in specially constructed structures such as reinforced concrete trenches and tile holes, located at the site. Such facilities are located at all the nuclear power stations viz. Tarapur (Maharashtra), Rawatbhata (Rajasthan), Kalpakkam (Tamilnadu), Narora (Uttar Pradesh), Kakrapar (Gujarat) and Kaiga (Karnataka). The waste to be stored at site during the life time including decommissioning is within 0.15 cubic meters/year/MW.

Spent nuclear fuel from unsafeguarded reactors is sent back to BARC for reprocessing and for management of high level (radioactive) waste. High level waste is vitrified into a glassy form, contained in multiple barrier containers and stored for an interim period of three to four decades in engineered vaults with necessary surveillance facilities. After cooling down in these storage facilities, waste containers will be stored for long term in deep geological repositories.