GOVERNMENT OF INDIA DEPARTMENT OF ATOMIC ENERGY LOK SABHA

UNSTARRED QUESTION NO.38

TO BE ANSWERED ON 02.02.2022

DISPOSAL OF NUCLEAR WASTES

38. SHRIMATI POONAMBEN MAADAM:

Will the PRIME MINISTER be pleased to state:

- (a) whether the Government has devised safe disposal methods of nuclear waste from atomic power stations;
- (b) if so, the details thereof;
- (c) whether there is any monitoring mechanism to ensure safety of life and nature around these plants; and
- (d) if so, the details thereof?

ANSWER

THE MINISTER OF STATE FOR PERSONNEL, PUBLIC GRIEVANCES & PENSIONS AND PRIME MINISTER'S OFFICE (DR.JITENDRA SINGH):

- (a) & (b) The wastes generated at the nuclear power stations during their operation are of low and intermediate radioactivity level. These wastes are appropriately treated, concentrated and subjected to volume reduction. The concentrates are immobilized in inert materials like cement, bitumen, polymers etc. and stored in specially constructed structures located at the site under monitoring. The treated liquids and gases are diluted and discharged under continuous monitoring, ensuring that the discharges are well within the limits set by Atomic Energy Regulatory Board (AERB). The radioactivity level of the stored wastes reduces with time and by the end of the plant life, falls to very low levels.
- (c) Yes, Sir.

(d) The design of all Nuclear Power Plants is such that the radiation dose to members of the public is well within the limit stipulated by AERB. The monitoring of environmental matrices like, air, water, vegetation, crops, seafood, etc around the site is carried out by an independent Environmental Survey Laboratory (ESL) for radioactivity. The data collected has established that there is a negligible change in radioactivity and radiation levels in the environment / environmental matrices in over five decades of operation of the nuclear power plants in the country. There is a robust regulatory mechanism in place. The regulatory authority, Atomic Energy Regulatory Board (AERB) monitors all aspects of nuclear power plants through an elaborate, multi-tier system of safety reviews.
