

Effects of waste atomic material

756. SHRIMATI SAROJINI HEMBRAM: Will the PRIME MINISTER be pleased to state:

(a) whether the waste materials and other materials extracted from the Atomic Plants/Nuclear Plants of our country are being managed properly keeping in view of its adverse effect on human beings and other living beings, if so, the details thereof; and

(b) whether any cases of adverse effect is reported due to the extraction of poisonous/harmful substances from Atomic/Nuclear plants in any part of our country?

THE MINISTER OF STATE IN THE PRIME MINISTER'S OFFICE (DR. JITENDRA SINGH): (a) Yes, Sir. Management of radioactive waste in Indian context includes all types of radioactive wastes generated from the entire nuclear fuel cycle and also from installations using radionuclides in medicine, industry and research. In the choice of processes and technologies adopted utmost emphasis is given to waste minimisation and volume reduction. The comprehensive radioactive waste management operations are carried out fulfilling all prescribed regulatory requirements to avoid any adverse effect on the worker, the public and the environment.

(b) No, Sir. There is no extraction of poisonous substances in any of the nuclear plants in our country.

Regulation of nuclear and radiation safety in the country

757. DR. T.N. SEEMA: Will the PRIME MINISTER be pleased to state:

(a) whether Government agrees to the fact that there are many apprehensions about regulation of nuclear and radiation safety in the country if so, the details thereof and the reaction of Government thereto;

(b) whether it is a fact that several experts have warned that Government is plunging into buying new nuclear reactors without site studies or using unproven and untested reactor designs, if so, the reasons therefor; and

(c) if not, the details of purchases made in last three years and the further proposed purchase plans?

THE MINISTER OF STATE IN THE PRIME MINISTER'S OFFICE (DR. JITENDRA SINGH): (a) No, Sir. A robust regulatory framework for nuclear and radiation safety is established and functional under the guidance of Atomic Energy Regulatory Board (AERB). The Government has constituted AERB by exercising the

powers conferred by the Atomic Energy Act, 1962 to carry out the regulatory and safety functions under sections 16, 17 and 23 of the Act. AERB also has the powers of the Competent Authority for the safety related rules issued under the Act, namely the Atomic Energy (Radiation Protection) Rules, 2004, the Atomic Energy (Safe Disposal of Radioactive Wastes) Rules, 1987 and the Atomic Energy (Factories) Rules, 1996. AERB has been effectively fulfilling its mandate of safety review and regulation concerning nuclear and radiation safety with various nuclear facilities in India. This is evident from the very good safety performance of the nuclear facilities which is on par with the international benchmarks. Further to bolster the nuclear safety, reviews of the Indian nuclear power plants are carried out periodically by the AERB. In addition, international peer reviews are also carried out by experts of the World Association of Nuclear Operators (WANO). Post Fukushima, Government invited Operational Safety Review Team (OSART) of IAEA to get the safety of RAPS Units 3 and 4 reviewed. Thus AERB has evolved a robust mechanism to ensure complete nuclear safety.

(b) Government is aware of some misleading media reports in this regard. Sites for locating nuclear power plants are selected after detailed scientific evaluation of the prospective sites in accordance with the criteria laid down in the Atomic Energy Regulatory Board (AERB) Code of Practice on Safety in nuclear power plant siting. Similarly, the safety of the nuclear power reactors to be set up in the country is extensively reviewed at every stage by the AERB and only after its stage-wise clearance, the reactors are set up. In respect of reactors to be set up with foreign cooperation, these have to be certified by both the regulatory authority of the vendor country and AERB in India.

(c) Nuclear power plants are being constructed and proposed to be constructed with technology and equipment commercially obtained from our partner countries such as Russia, France and the U.S. With Russian collaboration, Unit-1 (of 1000 MW) of the Kudankulam Nuclear Power Project has already commenced commercial operation *w.e.f.* 31.12.2014, while Unit-2 (also of 1000 MW) is slated to be completed by the end of 2015. Nuclear Power Corporation of India Ltd. is engaged in negotiations to finalise the techno-commercial offers with nuclear power plant suppliers in the U.S. (Westinghouse and GE-Hitachi) and France (AREVA) for setting up of nuclear power plants in Gujarat (Chhaya Mithivirdi), Andhra Pradesh (Kovvada) and Maharashtra (Jaitapur) respectively.

Contribution to nuclear insurance pool

758. PROF. M.V. RAJEEV GOWDA: Will the PRIME MINISTER be pleased to state:

(a) the plan within the Ministry to increase Government's contribution to