GOVERNMENT OF INDIA
DEPARTMENT OF ATOMIC ENERGY
LOK SABHA
UNSTARRED QUESTION NO.749
TO BE ANSWERED ON 07.02.2018

TREATMENT OF SEWAGE

749. SHRI RAGHAV LAKHANPAL:

Will the PRIME MINISTER be pleased to state:

(a) whether Bhabha Atomic Research Centre (BARC) has developed or proposes to develop a technology for treatment of sewage through radiation and its conversion into bio-fertilizer;

(b) if so, the details and the benefits thereof; and

(c) whether the Government has deployed the said technology in actual usage and if so, the details thereof and if not, the reasons therefor?

ANSWER

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

(a) Yes, Madam.

(b) Conventionally sewage treatment plant treats the sewage and the same is dried. The technology developed by BARC subjects the dried sludge to crushing and exposure to 10 kGy radiation dose. This kills the pathogens in the sludge and makes it safer for use. In the next step, BIO-NPK (Nitrogen Phosphorus Potassium) microorganisms are sprayed on to it to make it bio-fertilizer. The use of such bio-fertilizer provides organic carbon and other nutrients to the soil. The process also helps in recycling of the waste material to useful Bio-fertilizer.

(c) (i) A 100 ton/day capacity facility has been constructed at Ahmedabad under Memorandum of Understanding (MoU) with Ahmedabad Municipal Corporation.

(ii) The cold trials have been completed successfully.

(iii) The facility is scheduled to be fully operational soon after radiation source loading.

(iv) Another similar facility of 100 ton/day capacity will be constructed at Indore under MoU with BARC.

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