GOVERNMENT OF INDIA DEPARTMENT OF ATOMIC ENERGY LOK SABHA UNSTARRED QUESTION NO.3436 TO BE ANSWERED ON 22.03.2017

WATER PURIFICATION TECHNOLOGY

3436. SHRI MUTHAMSETTI SRINIVASA RAO (AVANTHI):

Will the PRIME MINISTER be pleased to state:

- (a) whether the Department of Atomic Energy has developed water purification technology;
- (b) if so, the details thereof;
- (c) whether the said technology would be deployed in Visakhapatnam and Anakapalle to allay the reported apprehensions of villagers of the said areas and provide pure drinking water and if so, the details thereof; and
- (d) if not, the reasons therefor?

ANSWER

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

- (a)&(b) Yes, Sir. Department of Atomic Energy (DAE) has developed various Membrane Technologies for Water Purification.
 - <u>Ultra-filtration (UF) membrane technology</u> removes turbidity and microbial contamination from contaminated water. UF coupled with physicochemical processes, removes arsenic and iron.
 - <u>Charged Nano filtration (NF) membrane technology</u> removes heavy metals and hardness in addition to contaminants removed by the UF process.
 - <u>Reverse Osmosis (RO) membrane technology</u> produces fresh water from seawater or brackish water.
- (c) Bhabha Atomic Research Centre (BARC) has the capability to deploy suitable membrane technologies for safe drinking water for Achutapuram and nearby villages like Anakapalle. BARC Technology Display and Dissemination Centre (BTDDC) has been setup at Gitam University, Dibbapalem, Visakhapatnam for conducting awareness and training programs in villages for deploying membrane based water purification technologies developed by BARC.
- (d) Does not arise in view of (c) above.
