

**GOVERNMENT OF INDIA  
ATOMIC ENERGY  
LOK SABHA**

UNSTARRED QUESTION NO:2043  
ANSWERED ON:23.07.2014  
CONVERSION OF WASTE INTO BIO FERTILIZERS  
Gaddigoudar Shri Parvatagouda Chandanagouda

**Will the Minister of ATOMIC ENERGY be pleased to state:**

(a) whether the Government has developed or proposed to develop a technology for treatment of sewage and converting it into bio-fertilizer using radiation; and

(b) if so, the details thereof and the cities/ States where the technology is likely to be used?

**Answer**

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

(a)&(b) Bhabha Atomic Research Centre (BARC), a constituent unit of the Department has developed the technology for sewage sludge hygienisation using Gamma Radiation. A demonstration plant, Sludge Hygienisation Research Irradiator (SHRI) has been jointly set up at Vadodara in Gujarat by BARC, Vadodara Municipal Corporation and Government of Gujarat and has been in operation for about sixteen years. In the process, wet sludge containing about 4% solid and 96 % water is hygienised using radiation. This wet sludge is poured into drying beds where under sun light the wet sludge dries to solid cake. This hygienised solid cake is used in agricultural practices as such and as formulations containing it. It has been observed that directly hygienising solid cake (80% solid + 20% moisture) is more economical and scalable to meet the requirement of big towns and cities. The technology can be used in cities and towns where sewage treatment plant (STP) exist.