GOVERNMENT OF INDIA

MINISTRY OF JAL SHAKTI

DEPARTMENT OF WATER RESOURCES, RIVER DEVELOPMENT & GANGA REJUVENATION

LOK SABHA

UNSTARRED QUESTION NO. 2394

ANSWERED ON 13.03.2025

URANIUM AND ARSENIC CONTAMINATION IN GROUNDWATER

2394. SHRI NAVEEN JINDAL

Will the Minister of **JAL SHAKTI** be pleased to state:

(a) whether the uranium and arsenic contamination of groundwater is on rise in certain parts of the country and if so, the details thereof, State/UT-wise;

(b) the details of drinking water standards for uranium and arsenic contamination in groundwater; and

(c) the steps taken/being taken by the Government to deal with the uranium and arsenic contamination in the groundwater and drinking water and the results thereof?

ANSWER

THE MINISTER OF STATE FOR JAL SHAKTI

(SHRI RAJ BHUSHAN CHOUDHARY**)**

(a) Central Ground Water Board (CGWB) conducts ground water quality monitoring for several contaminants including Uranium and Arsenic on a regular basis throughout the country and also generates ground water quality data on a regional scale during various scientific studies. These studies indicate the occurrence of Uranium and Arsenic in ground water beyond permissible limits (as per BIS) for human consumption in isolated pockets of some States / UTs. Details of such reported contamination for the year 2023 are provided in **Annexure.** Further, it is to state that though relatively higher number of cases of Uranium and Arsenic contamination are reported in some isolated parts of the country, the same may be due to increased testing frequency taken up by CGWB in areas which are vulnerable to contamination.

(b) As per Bureau of Indian Standards (BIS), the safe limits of Uranium and Arsenic in water used for drinking purposes are 30 micrograms/Liter and 10 micrograms/Liter respectively.

(c) Water is a state subject and the responsibility of ground water management, including taking initiatives for improving ground water quality and mitigate the contamination issue, lies primarily with the state governments. In addition to this, several steps have been taken by the Central Government in this direction. Some of the important ones are mentioned below:-

i. The ground water quality data generated by CGWB including that for Uranium and Arsenic contamination, is regularly disseminated through Annual Reports, Half-yearly Bulletins and Fortnightly Alerts for quick action by the stakeholders.

ii. CGWB has successfully constructed Arsenic free wells in arsenic affected areas using the cement sealing technology for tapping contamination free aquifers and also providing technical assistance to state departments for replicating such construction.

iii. Under the National Aquifer Mapping Programme (NAQUIM) of CGWB, while taking up aquifer studies, special attention is being given to the aspect of ground water quality including contamination by toxic substances such as Uranium and Arsenic in ground water.

iv. Central Pollution Control Board (CPCB) in association with State Pollution Control Boards/Pollution Control Committees (SPCBs/PCCs) is implementing the provisions of the Water (Prevention & Control) Act, 1974 and the Environment (Protection) Act, 1986 to prevent and control pollution in water. CPCB has made a comprehensive programme on water pollution for controlling point sources by developing industry specific standards and general standards for discharge of effluents notified under the Environment (Protection) Act, 1986 for enforcement by SPCBs/PCCs.

v. Government of India in partnership with States, is implementing Jal Jeevan Mission (JJM) – Har Ghar Jal, since August 2019, to make provision of potable tap water supply in adequate quantity, of prescribed quality and on regular & long-term basis to every rural household in the country. Under the JJM, Bureau of Indian Standards' BIS:10500 standards have been adopted as prescribed norms for quality of tap water service delivery. Water safety has been one of the key priorities under the JJM since its inception. Further, under JJM, while allocating the funds to States/ UTs, 10% weightage is given to the population residing in habitations affected by chemical contaminants.

vi. States/ UTs have been advised to plan and implement piped water supply schemes of bulk water transfer based on safe water sources such as surface water sources or alternative safe ground water sources for the villages with water quality issues.

vii. Further, the quality of groundwater can be improved to some extent if concerted efforts are made to improve the groundwater resources through appropriate groundwater recharge/rainwater harvesting. Government of India in this regard has taken up a number of initiatives/schemes like Jal Shakti Abhiyan, PMKSY-Watershed development, MGNREGA, Atal Bhujal Yojana etc.

***

ANNEXURE

ANNEXURE REFERRED TO IN REPLY TO PART (a) OF UNSTARRED QUESTION NO. 2394 TO BE ANSWERED IN LOK SABHA ON 13.03.2025 REGARDING "URANIUM AND ARSENIC CONTAMINATION IN GROUNDWATER".

State-wise details of Arsenic and Uranium Contamination in Ground Water for Year 2023

S.No	State	Arsenic			Uranium		
		No. of samples analysed	% of samples with As> 10 ug/L	No of districts having Arsenic > 10 ug/L in isolated pockets	No. of samples U analysed	% of samples U> 30 ug/L	No of districts having U > 30 ug/L in isolated pockets
1	Andaman & Nicobar Islands	0	0	0	0	0	0
2	Andhra Pradesh	0	0	0	0	0	0
3	Arunachal Pradesh	12	0.0	0	12	0.0	0
4	Assam	155	0.65	1	155	0.0	0
5	Bihar	0	0.0	0	752	0.1	1
6	Chandigarh UT	8	0.0	0	8	0.0	0
7	Chhattisgarh	0	0	0	783	0.6	3
8	Dadra & Nagar Haveli And Daman & Diu	0	0	0	0	0	0
9	Delhi	103	2.91	2	103	10.7	6
10	Goa	6	0.0	0	6	0.0	0
11	Gujarat	0	0.0	0	0	0	0
12	Haryana	857	0.70	5	857	18.7	16
13	Himachal Pradesh	0	0.0	0	0	0	0
14	Jammu & Kashmir	250	0.8	2	250	0.0	0
15	Jharkhand	0	0.0	0	342	0.0	0
16	Karnataka	125	3.20	2	125	4.8	3
17	Kerala	0	0.00	0	342	0.0	0
18	Madhya Pradesh	1064	0.0	0	1064	0.5	3
19	Maharashtra	0	0.00	0	1567	0.2	3
20	Meghalaya	39	0.0	0	39	0.0	0
21	Mizoram	3	0.0	0	3	0.0	0
22	Nagaland	6	0.0	0	6	0.0	0
23	Odisha	904	0.66	3	904	0.3	3
24	Pondicherry	0	0	0	4	0.0	0
25	Punjab	908	4.85	12	908	32.6	20
26	Rajasthan	0	0.0	0	627	21.2	21
27	Tamil Nadu	0	0.0	0	915	2.3	9
28	Telangana	0	0.0	0	0	0	0
29	Tripura	81	0.0	0	81	0.0	0
30	Uttar Pradesh	1386	6.70	29	1386	8.3	43
31	Uttarakhand	207	3.86	3	206	0.5	1
32	West Bengal	959	8.76	6	0	0	0
	Grand Total	**7074**	**3.55**	**65**	**11445**	**6.6**	**132**
		Parts of 65 districts in 10 States/UTs			**Parts of 132 districts in 13 States/UTs**		

***Data from the States/UTs of Manipur, Lakshadweep, Ladakh and Sikkim is not available**

*****