GOVERNMENT OF INDIA

MINISTRY OF JAL SHAKTI

DEPARTMENT OF WATER RESOURCES, RIVER DEVELOPMENT & GANGA REJUVENATION

RAJYA SABHA

UNSTARRED QUESTION NO. 3457

ANSWERED ON 23.03.2026

URANIUM CONTAMINATION IN WATER OF DELHI AND OTHER STATES

3457. Dr. LAXMIKANT BAJPAYEE:

Will the Minister of **Jal Shakti** be pleased to state:

(a) whether a recent reports has confirmed Uranium contamination in ground and river water of Delhi and other States with many areas exceeding safe limits, making it a serious health concern, if so, the State / UT-wise details of Uranium contamination during the last five years, year-wise;

(b) whether the safe limits of Uranium in water used for drinking purpose with details of areas in the country having serious high limits; and

(c) the outcome and achievements of the steps taken by the Central Government for improving groundwater quality and mitigate Uranium contamination issue in various States /UTs?

ANSWER

THE MINISTER OF STATE FOR JAL SHAKTI

(SHRI RAJ BHUSHAN CHOUDHARY)

(a) & (b) Monitoring of groundwater quality in the country is conducted by the Central Ground Water Board (CGWB) under this Ministry and respective State Governments on a regular basis. As per the available data, ground water quality in the country remains largely potable but for localized occurrence of certain contaminants in isolated pockets. However, this Ministry has not analyzed river water samples for Uranium contamination.

As per the Annual Ground Water Quality Report - 2025, released by CGWB, 3,754 groundwater samples were analyzed in 2024 for Uranium concentration across the country. Out of these, about 6.71% samples were found to have Uranium above the limit of 30 ppb, which is the prescribed maximum permissible limit for drinking purpose as per BIS Standard IS 10500:2012.

Further, as per Annual Ground Water Quality Report - 2025, the higher occurrences of Uranium above prescribed limit were observed in isolated pockets of Punjab, Haryana, Delhi, Karnataka and Uttar Pradesh. Moderate contamination occurred in Rajasthan and Chhattisgarh while most other states showed uranium levels within safe limits.

Here, it must be noted that CGWB had introduced a Standard Operating Procedure (SOP) in 2023 for Groundwater Quality Monitoring, providing for more frequent and denser sampling in vulnerable areas. Therefore, the higher proportion of Uranium-affected samples in some States reflects targeted trend and hot-spot monitoring in vulnerable areas and should not be construed to mean that all

groundwater sources in those States are affected. Moreover, occurrence of Uranium in groundwater is primarily geogenic and is influenced by local geological and hydrogeological conditions.

State/UT-wise and year-wise details of groundwater samples exceeding BIS permissible limits for Uranium are given in the **Annexure.**

(c) 'Water' is a State subject and the responsibility of taking initiatives to mitigate ground water contamination and to provide safe drinking water to citizens lies primarily with the State Governments. However, to complement the efforts of the state governments, several steps have been taken by the Central Government to address these issues in the country. Some of the important ones are mentioned below:-

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

ii. CGWB has been taking several initiatives to increase public awareness on ground water contamination issues and prescribing practical solutions for its mitigation. Particularly for Uranium affected areas, CGWB has advocated treatment technologies such as adsorption, coagulation, reverse osmosis and evaporation, depending upon local conditions, cost and effectiveness.

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 including Uranium.

iv. Jal Jeevan Mission (JJM) – Har Ghar Jal, being implemented by this Ministry in partnership with states, marks an important milestone for providing contamination free potable tap water to every rural household of the country in adequate quantity, of prescribed quality and on regular & long-term basis. As on date 15.82 Crore rural households of the country have been provided with functional tap connection under the Scheme as compared to 3.23 Crore at the time of Scheme commencement in August 2019. Following measures have been taken under JJM to facilitate action on water quality aspects at state level :-

- Under the JJM, Bureau of Indian Standards' BIS:10500 standards have been adopted as prescribed norms for quality of tap water service delivery.
- While allocating the funds to States/ UTs, 10% weightage is given to the population residing in habitations affected by chemical contaminants.

- Around 2870 water quality testing laboratories have been set up in the country. Besides this, five persons, preferably women are identified and trained from every village for testing the water samples through Field Test Kits (FTKs).
- States/UTs have also been advised to install community water purification plants (CWPPs) as an interim measure, especially in quality affected habitations, to provide potable drinking water to every household.

v. Improvement in ground water quality can also be achieved to some extent by taking up artificial recharge of aquifers, which dilutes the contaminants to bring them under permissible limits. Accordingly, Ministry of Jal Shakti and other central ministries are implementing several programmes towards this end like the annual Jal Shakti Abhiyan (JSA) campaign, Jal Sanchay Jan Bhagidari (JSJB) initiative, Mission Amrit Sarovar, MGNREGS etc. Under the Mission mode campaign of JSA, so far, more than 2 Crore water conservation and artificial recharge works have been taken up throughout the country and under the community led efforts of JSJB, more than 46 lakh low cost and locally suited rain water harvesting and artificial recharge structures have come up.

vi. The ground water pollution also owes its origin to contamination of surface water sources for which various efforts have been made in the country like installing Sewage Treatment Plants, Effluent Treatment Plants and better system of sewage networks etc. Under National Mission for Clean Ganga (NMCG), the government has initiated several steps for improving the water quality along the river Ganga and its tributaries and for other rivers, the same is being done through the National River Conservation Plan (NRCP).

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ANNEXURE

ANNEXURE REFERRED TO IN REPLY TO PART (a) & (b) OF UNSTARRED QUESTION NO. 3457 TO BE ANSWERED IN RAJYA SABHA ON 23.03.2026 REGARDING "URANIUM CONTAMINATION IN WATER OF DELHI AND OTHER STATES".

State/UT-wise and Year-wise Details (2019, 2022, 2023 & 2024) of Groundwater Samples Analysed for Uranium and % of Samples Exceeding BIS Limit (U > 30 ppb)

S.No.	State	2019		2022		2023		2024	
		No. of Samples U analyzed	% of Samples Having U> 30 ppb	No. of Samples U analyzed	% of Samples Having U> 30 ppb	No. of Samples U analyzed	% of Samples Having U> 30 ppb	No. of Samples U analyzed	% of Samples Having U> 30 ppb
1	Andaman & Nicobar Islands	95	0	110	0	-	-	27	0
2	Andhra Pradesh	588	4.9	-	-	-	-	-	-
3	Arunachal Pradesh	19	0	17	0	12	0	15	0
4	Assam	204	0	161	0	155	0	154	0
5	Bihar	607	1.8	472	4.87	752	0.1	13	0
6	Chandigarh UT	10	0	1	0	8	0	8	0
7	Chhattisgarh	917	1.3	592	0.17	783	0.6	257	1.56
8	Delhi	60	11.7	-	-	103	10.7	83	13.25
9	Dadra And Nagar Haveli and Daman and Diu	12	0	14	0	-	-	-	-
10	Goa	66	0	54	0	6	0	6	0
11	Gujarat	543	0.9	395	0.51	0	0	126	2.38
12	Haryana	450	19.6	454	18.5	857	18.7	160	15
13	Himachal Pradesh	122	0.8	-	-	-	-	-	-
14	Jammu & Kashmir	314	0	273	0	250	0	17	5.88
15	Jharkhand	397	1.5	248	1.21	342	0	-	-
16	Karnataka	737	2	579	6.74	125	4.8	118	8.47
17	Kerala	423	0	320	0	342	0	185	0
18	Madhya Pradesh	1182	1.4	1136	0.97	1064	0.5	51	0
19	Maharashtra	1073	0.3	1358	0.44	1567	0.2	331	0.6
20	Meghalaya	39	0	33	0	39	0	38	0
21	Manipur	-	-	-	-	-	-	3	0
22	Mizoram	-	-	-	-	3	0	-	-
23	Nagaland	8	0	8	0	6	0	66	0

24	Odisha	1114	0.4	-	-	904	0.3	413	0.24
25	Pondicherry	-	-	16	0	4	0	7	0
26	Punjab	302	24.2	323	33.75	908	32.6	296	53.04
27	Rajasthan	671	7.2	-	-	627	21.2	100	5
28	Tamil Nadu	1208	1.6	1173	3.15	915	2.3	286	1.75
29	Telangana	345	10.4	-	-	-	-	-	-
30	Tripura	82	0	67	0	81	0	44	0
31	Uttar Pradesh	824	4.4	-	-	1386	8.3	612	4.74
32	Uttarakhand	186	0	-	-	206	0.5	103	0
33	West Bengal	849	0.1	729	0	-	-	235	0
	Grand Total	**13447**	**3.04**	**8533**	**3.7**	**11445**	**6.6**	**3754**	**6.71**

***Out of 36 States, Ground water Quality data is collected only from 33 States. Ladakh, Lakshadweep and Sikkim did not have Ground Water Monitoring Stations of CGWB during the year mentioned above.**

(-) Indicates no samples for uranium analysis were collected in the given States/UTs for that year

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