

GOVERNMENT OF INDIA  
MINISTRY OF JAL SHAKTI  
DEPARTMENT OF DRINKING WATER AND SANITATION

**LOK SABHA**  
**STARRED QUESTION NO.\*79**  
TO BE ANSWERED ON 02.12.2021

**SAFE DRINKING WATER**

†\* 79. SHRI DILESHWAR KAMAIT:  
SHRIMATI RITI PATHAK:

Will the Minister of JAL SHAKTI be pleased to state:

- (a) whether the government is aware that ground water with hazardous chemical components therein having adverse effect on human health is being used for drinking across the country and if so, the details thereof;
- (b) whether the Government has conducted any scientific study on this issue; and
- (c) if so, the State-wise details thereof and if not, the reasons therefor; and
- (d) the measures taken or proposed to be taken by the Government in coordination with various States to ensure safe drinking water to the citizens?

**ANSWER**

THE MINISTER FOR JAL SHAKTI  
(SHRI GAJENDRA SINGH SHEKHAWAT)

(a) to (d) A Statement of reply is laid on the Table of the House.

**Statement referred to in the reply to Lok Sabha Starred Question No. 79 due for reply on 02.12.2021**

(a) to (d) Bureau of Indian Standards IS-10500: 2012 specifies acceptable and permissible limits in the absence of alternate source for various physio-chemical and bacteriological parameters for drinking water quality as provided in the **Annex-I**. As reported by States/ UTs, State-wise details of habitations affected by Arsenic, Fluoride, Iron, Salinity, Nitrate & Heavy Metals are at **Annex-II**.

Central Ground Water Board generates ground water quality data on regional scale during various scientific studies and ground water monitoring programme throughout the country. Data on ground water quality has been shared with concerned State Governments for taking remedial measures, awareness and monitoring of drinking water use.

To make provision of potable tap water supply in adequate quantity, of prescribed quality and on regular & long-term basis to every rural household by 2024, since August, 2019, Government of India in partnership with States, is implementing Jal Jeevan Mission (JJM) – Har Ghar Jal including water quality-affected habitations. Under JJM, while allocating the funds to States/ UTs, 10% weightage is given to the population residing in habitations affected by chemical contaminants.

Under JJM, while planning for potable water supply to household through tap water connection, priority is to be given to quality-affected habitations. Since, planning, implementation and commissioning of piped water supply scheme based on a safe water source takes time, purely as an interim measure, States/ UTs have been advised to install community water purification plants (CWPPs) especially in Arsenic and Fluoride affected habitations to provide potable water to every household at the rate of 8–10 litre per capita per day (lpcd) to meet their drinking and cooking requirements. Out of 2,961 rural habitations with reported Arsenic contamination beyond permissible limit in drinking water sources, CWPPs have been installed in 1,608 habitations to provide potable drinking water. Similarly, out of 2,131 habitations reported to have Fluoride contaminations beyond permissible limits in drinking water sources, CWPPs have been installed in 1,498 habitations to provide potable drinking water.

Under Jal Jeevan Mission, as per existing guidelines, IS:10500 is to be adopted for ensuring safe drinking water supply and States/ UTs have been advised to carry out testing of drinking water sources once in year for chemical and physical parameters, and twice in a year for bacteriological parameters. To enable States/ UTs to test water samples for water quality, and for sample collection, reporting, monitoring and surveillance of drinking water sources, an online JJM – Water Quality Management Information System (WQMIS) portal has been developed. The State-wise details of water quality test reported through WQMIS is available in public domain on JJM Dashboard and can also be accessed at:

<https://neer.icmr.org.in/website/main.php>

To encourage water quality testing to ensure potable drinking water supply, States/ UTs have been advised to open water quality testing laboratories to general public at a nominal rate for testing of their water samples.

States/ UTs have been advised to identify and train 5 persons preferably women in each village viz. ASHA workers, health workers, VWSC members, teachers, etc. to conduct water quality tests using FTKs/ bacteriological vials at village level and report the same on the portal.

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**Annex referred in the reply to Lok Sabha starred Question No. 79 due for reply on  
02.12.2021**

**Acceptable and permissible limits prescribed by Bureau of Indian Standard (BIS)  
(extract) for various physio-chemical and bacteriological parameters for drinking  
water quality**

<b>S.No.</b>	<b>Characteristics</b>	<b>Unit</b>	<b>Acceptable Limit</b>	<b>Permissible Limit</b>
1.	pH value	..	6.5 -8.5	No relaxation
2.	Total dissolved solids	Milligram/ litre	500	2,000
3.	Turbidity	NTU	1	5
4.	Chloride	Milligram/ litre	250	1,000
5.	Total Alkalinity	Milligram/ litre	200	600
6.	Total Hardness	Milligram/ litre	200	600
7.	Sulphate	Milligram/ litre	200	400
8.	Iron	Milligram/ litre	1.0	No relaxation
9.	Total Arsenic	Milligram/ litre	0.01	No relaxation
10.	Fluoride	Milligram/ litre	1.0	1.5
11.	Nitrate	Milligram/ litre	45	No relaxation
12.	Total Coliform bacteria	Shall not be detectable in any 100 ml sample		
13.	E-coli or thermo-tolerant coliform bacteria	Shall not be detectable in any 100 ml sample		

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**State-wise number of water quality-affected habitations and  
CWPPs installed in Arsenic and Fluoride affected habitations**

S.No.	State/UT	Number of quality-affected habitations							
		Fluoride	CWPP installed	Arsenic	CWPP installed	Iron	Salinity	Nitrate	Heavy metals
1.	Andhra Pradesh	86	86	-	-	-	12	1	-
2.	Arunachal Pradesh	-	-	-	-	224	-	-	-
3.	Assam	12	12	1,193	1,193	19,528	-	-	5
4.	Bihar	23	-	24	2	3,919	-	-	-
5.	Chhattisgarh	154	31	-	-	30	-	-	-
6.	Haryana	1	-	-	-	-	-	-	-
7.	Jammu & Kashmir	1	-	-	-	2	-	-	-
8.	Jharkhand	48	47	1	1	127	-	-	-
9.	Kerala	5	-	-	-	61	18	8	-
10.	Madhya Pradesh	53	-	-	-	24	7	2	-
11.	Maharashtra	14	-	-	-	8	13	44	-
12.	Odisha	68	1	-	-	3,336	33	23	-
13.	Punjab	176	11	570	94	10	-	37	184
14.	Rajasthan	1,304	1,270	-	-	5	10,104	691	-
15.	Tripura	-	-	-	-	1,080	-	-	-
16.	Uttar Pradesh	41	39	107	107	281	79	10	-
17.	Uttarakhand	-	-	-	-	2	-	2	-
18.	West Bengal	145	1	1,066	211	1,630	72	-	67
	<b>Total</b>	<b>2,131</b>	<b>1,498</b>	<b>2,961</b>	<b>1,608</b>	<b>30,267</b>	<b>10,338</b>	<b>818</b>	<b>256</b>