

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

**LOK SABHA**  
**UNSTARRED QUESTION NO. 1978**  
TO BE ANSWERED ON 28/07/2022

**PARAMETERS OF DRINKING WATER QUALITY**

†1978. DR. DHAL SINGH BISEN:

Will the Minister of JAL SHAKTI be pleased to state:

- (a) the parameters of drinking water quality and the measures being taken for testing of drinking water quality;
- (b) whether Officers/employees such as scientists/ chemists etc. are appointed for testing of drinking water quality; and
- (c) if so, the qualifications for the said posts
- (d) the number of laboratories opened for testing of water quality in Madhya Pradesh, district-wise;
- (e) the details of tests conducted in laboratories; and
- (f) the details of measures taken for water treatment if it is not found to be potable?

**ANSWER**

THE MINISTER OF STATE FOR JAL SHAKTI  
(SHRI PRAHLAD SINGH PATEL)

(a) Bureau of Indian Standards IS-10500: 2012 specifies ‘acceptable limit’ and ‘permissible limit in the absence of alternate source’ for various physio-chemical and bacteriological parameters for drinking water quality as provided in the **Annex-I**.

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. Under Jal Jeevan Mission, as per existing guidelines, IS:10500 is to be adopted for ensuring safe drinking water supply.

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>

This portal also provides automated alerts to concerned authorities in States/ UTs, if the water sample tested is contaminated, to initiate remedial actions. On this portal an individual can also register his sample and choose nearby water quality testing laboratory to get the water sample tested.

(b) to (f) Drinking Water being a State subject, it is States who plan, design, approve and implement drinking water supply schemes including to set up/ strengthen labs & to make available required human resources in labs. The staff positions in laboratories may be filled with regular/ contractual personnel or can even be outsourced following due procedure as per extant rules of respective State/ UT.

The district-wise details of drinking water quality testing laboratories in Madhya Pradesh is at **Annex-II**.

The State-wise details of water samples tested in laboratories is at **Annex-III**.

The States may take up appropriate water treatment system/ technology depending upon techno- economic feasibility. As such details of individual projects/ schemes for rural water supply projects are not maintained at the Government of India level.

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**Annex–I referred to in the reply to part (a) of Lok Sabha unstarred Question No. 1978 due for reply on 28.07.2022**

**‘Acceptable limit’ and ‘permissible limit in the absence of alternate source’ 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		

Annex-II referred to in the reply to Lok Sabha unstarred Question No. 1978 due for reply on 28.07.2022

**District-wise details of drinking water quality testing laboratories in Madhya Pradesh**

S. No.	District Name	No. of drinking water quality testing labs		
		District level	Block/ Sub Division level	Total
1.	Agar	1	-	1
2.	Alirajpur	1	2	3
3.	Anuppur	1	1	2
4.	Ashoknagar	1	1	2
5.	Balaghat	1	4	5
6.	Barwani	1	1	2
7.	Betul	1	4	5
8.	Bhind	1	2	3
9.	Bhopal	1	1	2
10.	Burhanpur	1	1	2
11.	Chhatarpur	1	3	4
12.	Chhindwara	1	5	6
13.	Damoh	1	2	3
14.	Datia	1	-	1
15.	Dewas	1	2	3
16.	Dhar	1	5	6
17.	Dindori	1	2	3
18.	Guna	1	1	2
19.	Gwalior	1	1	2
20.	Harda	1	-	1
21.	Hoshangabad	1	3	4
22.	Indore	1	1	2
23.	Jabalpur	1	2	3
24.	Jhabua	1	1	2
25.	Katni	1	2	3
26.	Khandwa	1	2	3
27.	Khargone	1	3	4
28.	Mandla	1	4	5
29.	Mandsaur	1	1	2
30.	Morena	1	2	3
31.	Narsinghpur	1	2	3
32.	Neemuch	1	1	2
33.	Niwari	-	1	1
34.	Panna	1	1	2
35.	Raisen	1	3	4
36.	Rajgarh	1	2	3
37.	Ratlam	1	2	3
38.	Rewa	1	4	5

S. No.	District Name	No. of drinking water quality testing labs		
		District level	Block/ Sub Division level	Total
39.	Sagar	1	4	5
40.	Satna	1	3	4
41.	Sehore	1	3	4
42.	Seoni	1	3	4
43.	Shahdol	1	2	3
44.	Shajapur	1	1	2
45.	Sheopur	1	1	2
46.	Shivpuri	1	3	4
47.	Sidhi	1	2	3
48.	Singrouli	1	1	2
49.	Tikamgarh	1	1	2
50.	Ujjain	1	2	3
51.	Umaria	1	-	1
52.	Vidisha	1	2	3
<b>Total</b>		<b>51</b>	<b>103</b>	<b>154</b>

*Source: JJM-IMIS*

Annex-III referred to in the reply to Lok Sabha unstarred Question No. 1978 due for reply on 28.07.2022

**State/UT-wise details of water samples tested in laboratories since 01.04.2021**

<b>S. No.</b>	<b>Name of State/ UT</b>	<b>Water samples tested in labs</b>
1.	A & N Islands	2,028
2.	Andhra Pradesh	5,63,647
3.	Arunachal Pradesh	36,224
4.	Assam	2,55,665
5.	Bihar	2,89,947
6.	Chhattisgarh	1,00,780
7.	DNH and D&D	NR
8.	Goa	13,470
9.	Gujarat	3,39,569
10.	Haryana	1,33,078
11.	Himachal Pradesh	3,50,272
12.	J & K	2,61,455
13.	Jharkhand	2,05,883
14.	Karnataka	2,29,143
15.	Kerala	3,37,646
16.	Ladakh	8,372
17.	Madhya Pradesh	4,84,213
18.	Maharashtra	1,99,243
19.	Manipur	25,439
20.	Meghalaya	13,435
21.	Mizoram	30,604
22.	Nagaland	10,291
23.	Odisha	3,02,212
24.	Puducherry	1,956
25.	Punjab	23,709
26.	Rajasthan	1,54,688
27.	Sikkim	11,302
28.	Tamil Nadu	4,53,511
29.	Telangana	3,28,547
30.	Tripura	41,067
31.	Uttar Pradesh	1,54,362
32.	Uttarakhand	99,483
33.	West Bengal	4,94,369
<b>Total</b>		<b>59,55,610</b>

NR: Not Reported

Source: JJM-IMIS