BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL PRINCIPAL BENCH

O.A. No. 728 OF 2023

IN THE MATTER OF :

Suo moto Arsenic found in Ground Water in 25 States, Fluoride in 27 States

INDEX

S. No.	PARTICULARS	PAGE No.
1.	Fresh report on behalf of Central Ground Water Authority (R-29)	1-9
2.	CGWA letters to Principal Secretary (s) of remaining States/UTs (Annexure-I)	10-37
3.	ATR of Chhattisgarh (Annexure-II)	38-85
4.	ATR of Delhi (Annexure-III)	86-87
5.	ATR of Himachal Pradesh (Annexure-IV)	88-238
6.	ATR of J&K (Annexure-V)	239-240
7.	ATR of Karnataka (Annexure-VI)	241-362
8.	ATR of Madhya Pradesh (Annexure-VII)	363-375
9.	ATR of Punjab (Annexure-VIII)	376-379
10.	ATR of Tamil Nadu (Annexure-IX)	380-383
11.	ATR of Uttarakhand (Annexure-X)	384-444
12.	ATR of West Bengal (Annexure-XI)	445-452
13.	SOP for Arsenic (Annexure-XII)	453-492
14.	SOP for Fluoride (Annexure-XIII)	493-528

Dated 01/08/24

Through

GIGI C. GEORGE, ADVOCATE
STANDING COUNSEL (UOI)
CH. NO. 457, LAWYERS BLOCK -1,
DELHI HIGH COURT, NEW DELHI
Gigicgeorge.adv42@yahoo.in
M-9810625315

BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL PRINCIPAL BENCH

O.A. No. 728 OF 2023

IN THE MATTER OF :

Suo moto Arsenic found in Ground Water in 25 States, Fluoride in 27 States

FRESH REPORT ON BEHALF OF CENTRAL GROUND WATER AUTHORITY (RESPONDENT NO. 29)

It is most respectfully submitted :

1. That Hon'ble NGT (PB) registered Original Application No. 728 of 2023 by exercising suo moto jurisdiction based on the newspaper report published in Business Standard under the heading "Arsenic found in groundwater in 25 States, fluoride in 27 States: Govt." Hon'ble Tribunal vide order dated 20.12.2023 impleaded 28 States/UTs as respondents. Hon'ble Tribunal vide order dated 15.02.2024 directed Central Ground Water Authority (R-29) hereinafter referred as to CGWA to file fresh report keeping in view the observations and disclosing the action taken at the ground level.

2. That CGWA filed fresh report on 22.04.2024, which also included ATR filed by the 11 States/UTs in response to CGWA letter. Hon'ble Tribunal vide order dated 26.04.2024 directed CGWA to file fresh report on the observations and directions passed thereto by Hon'ble Tribunal in the order. Relevant paragraphs of the order dated 26.04.2024, wherein Hon'ble Tribunal has issued directions to CGWA, are reproduced hereunder:

"5. *The CGWA will send the reminder and take further action to obtain the report from the States/Union Territories from whom it is awaited.*

7. *These are the hot spots where the CGWA is required to focus and take remedial action but, in the report no such remedial action is reflected.*

8. *Hence, CGWA will disclose in the next report, remedial action which has been taken at the places where the samples have been found to be beyond the prescribed limit and outcome of such an action.*

9. *In the report, though, details of the States/Blocks where arsenic level is found to be beyond the limits have been disclosed but, so far as, presence of fluoride in the groundwater is concerned, no such tabulated information is disclosed. Hence, in the next report for all the concerned States and Blocks details in tabulated forms will be disclosed.*

10. Hence, we direct as under:-
ii. CGWA to file the report in terms of observations made above and specifically covering status of commissioning and operation of Arsenic and Fluoride remediation system at household level in areas having excessive Arsenic and Fluoride beyond permissible level and also tabulated status on Fluoride".

3. In compliance to the directions of Hon'ble Tribunal vide para 5 of the order, reminder sent to Principal Secretary/Secretary of the States/UTs from whom ATR was awaited, vide letters dated 30.05.2024 (**copy enclosed as Annexure-I**).

4. That the ATR has been received from 11 States/UTs Whereas ATR from 7 States/UTs (Maharashtra, Nagaland, Jharkhand, Tripura, Gujarat, Odisha, Daman & Diu) is still awaited. Reminder mail sent on 23.07.2024 to submit ATR by 26.07.2024.

ATR Status of ATR received from States/UTs is summarized below:

<table>
<tr><th>Sl.</th><th>State/UT</th><th>Action taken by States/UTs</th></tr>
<tr><td>1.</td><td>Chhattisgarh</td><td>In response to CGWA letter dated 30.05.2024, PHED, Chhattisgarh submitted ATR vide letter dated 02.05.2024 (Anneuxre-II).

Status of drinking water supply in Arsenic affected villages:
<table>
<tr><td>Arsenic affected sources</td><td>Closed</td><td>Construction of Arsenic Removal Plant</td></tr>
<tr><td>65</td><td>61</td><td>4</td></tr>
</table>
Status of drinking water supply in Fluoride affected villages:
<table>
<tr><td>Fluoride affected sources</td><td>Closed</td><td>Construction of Fluoride Removal Plant</td></tr>
<tr><td>1653</td><td>1012</td><td>641</td></tr>
</table></td></tr>
<tr><td>2.</td><td>Delhi</td><td>NCT of Delhi conducted re-sampling of Arsenic and Fluoride affected areas (Anneuxre-III).

Status is summarized below:
Out of the 03 number of samples from arsenic hot spot re-analyzed and Arsenic in all the samples found within</td></tr>
</table>

		permissible limit. Out of the 15 number of samples Fluoride re-analyzed, 08 numbers of samples found beyond permissible limit 07 numbers within limit.
3.	Himachal Pradesh	In response to CGWA letter, Govt. of H.P. forwarded copy of reply **(Annexure-IV)** submitted to the Hon'ble Tribunal. Wherein Himachal Pradesh Ground Water Authority, confirmed that the Executive Engineer, Jal Shakti Vibhag has conducted ground water sampling through M/s Eco Paryavaran Laboratories and Consultants Pvt. Limited, Mohali, a NABL accredited laboratory. All the tests conducted for the ground water samples for Arsenic & Fluoride are reported to be within acceptable limit.
4.	Jammu & Kashmir	In response to CGWA letter, Jal Shakti Department of J & K **(Annexure-V)** has confirmed that no presence of Arsenic and Fluoride has been encountered in already drilled tube wells/bore wells of Jammu province till date. Habitants are provided safe water supply.
5.	Karnataka	In response to CGWA letter, Rural Drinking Water and Sanitation Department, Karnataka filed ATR vide letter dated 04.07.2024 **(Annexure-VI).** On perusal of the report, it has been observed that safe drinking water is being provided through alternate

		sources i.e. Multi Village Scheme (MVS) or RO based WPP to habitants of Arsenic and Fluoride affected villages.
6.	Madhya Pradesh	In response to CGWA letter, PHED, Bhopal vide letter dated 12/06/2024 **(Annexure-VII)** confirmed that no excessive Arsenic and Fluoride found in the State of MP during 2023-24.
7.	Punjab	In response to CGWA letter, Govt. of Punjab forwarded copy of reply furnished before Hon'ble Tribunal **(Anneuxre-VIII)**. In the report filed before Hon'ble Tribunal the Punjab stated that *"ground water monitoring carried out by pollution control board across 07 districts of the state of Punjab has not revealed presence of Arsenic. Monitoring of remaining 10 districts will be carried out as per frequency of National Water Monitoring Programme".* *"Ground water monitoring carried out in 10 districts, fluoride in 02 districts i.e. Bathinda and Muktsar Saheb found beyond permissible limit i.e. 1.5 mg/l and same is due to geogenic reason. Monitoring of remaining 09 districts will be carried out as per frequency of National Water Monitoring Programme".*

8.	Tamil Nadu	Tamil Nadu vide letter dated 06.04.2024 **(Annexure-IX)** stated that there is no presence of Arsenic in ground water in the State of T.N. As far as Fluoride is concerned, 5 blocks in Dharmapuri and 8 blocks in Krishagiri Districts are affected by Fluoride contamination and habitations are being supplemented by Hogenakkal water supply Fluorosis mitigation project with river Cauvery as source, where supply of treated potable water to the tune of 30 lpcd in rural areas and 50 lpcd in urban areas is ensured since 2013.
9.	Uttarakhand	On scrutiny of report **(Annexure-X)** it has been observed that Arsenic affected hand pumps in Charechi (Block Bhatwari) have been sealed. No Arsenic has not been detected in remaining locations. There is no presence of Fluoride in the state as per revised sampling.
10.	West Bengal	In ATR W.B. **(Annexure-XI)** confirmed that **Arsenic** "Therefore *as of now all the Arsenic affected villages of the State have been covered by either long term measures through implementation of Piped Water Supply Scheme (PWSS) or covered by Community Water Purification Plants (CWPP). After implementation of Piped Water Supply Scheme (PWSS) all the Arsenic affected blocks will be brought under long term solution*".

		Fluoride : "Therefore *as of now all the Arsenic affected villages of the State have been covered by either long term measures through implementation of Piped Water Supply Scheme (PWSS) or covered by Community Water Purification Plants (CWPP). After implementation of Piped Water Supply Scheme (PWSS) all the Arsenic affected blocks will be brought under long term solution*

5. In compliance to Para 7, 8 and 10, of the order dated 26.04.2024, it is most respectfully submitted that Standard Operating Procedure (s) for Arsenic and Fluoride have been prepared addressing the observations made by the Hon'ble Tribunal. Standard Operating Procedure for Arsenic is annexed as **Annexure-XII** & Standard Operating Procedure for Fluoride is annexed as **Annexure-XIII.**

6. In compliance to the directions issued vide para 9 of the order dated 26.04.2024, **Occurrence of Fluoride in 27 States/ UTs is tabulated below:**

Table 1.2 : Occurrence of Fluoride in 27 States/ UTs

S. No.	State	Total Samples	Samples above Permi-ssible Limit*	% Samples above permi-ssible limit	Total Blocks	Blocks with one or more sample above permissible limit	% Blocks with fluoride above permissible limit
1	Andhra Pradesh	940	92	10%	667	76	11%
2	Assam	440	0	0%	245	0	0%

3	Bihar	800	106	13%	536	29	5%
4	Chhattisgarh	917	46	5%	146	29	20%
5	Daman	22	1	5%	2	1	50%
6	Gujarat	660	78	12%	252	54	21%
7	Haryana	465	51	11%	143	39	27%
8	Himachal Pradesh	140	7	5%	10	6	60%
9	J&K	273	2	1%	20	2	10%
10	Jharkhand	397	10	3%	263	10	4%
11	Karnataka	345	61	18%	234	36	15%
12	Kerala	347	5	1%	152	5	3%
13	Madhya Pradesh	1143	15	1%	317	12	4%
14	Maharashtra	1567	30	2%	353	20	6%
15	Manipur	21	1	5%	9	1	11%
16	Meghalaya	36	0	0%	39	0	0%
17	Nagaland	7	0	0%	52	0	0%
18	NCT of Delhi	95	15	16%	34	10	29%
19	Odisha	1283	30	2%	314	22	7%
20	Punjab	338	4	1%	153	22	14%
21	Rajasthan	809	211	26%	302	107	35%
22	Tamil Nadu	1199	117	10%	313	80	26%
23	Telangana	892	166	19%	612	137	22%
24	Tripura	71	0	0%	59	0	0%
25	Uttar Pradesh	1386	78	6%	836	57	7%
26	Uttarakhand	200	1	1%	18	1	6%
27	West Bengal	712	5	1%	345	5	1%

*Permissible Limit: 1.5 mg/l

In view of the above, Hon'ble Tribunal is requested that the present reply may kindly be taken on record. The directions passed by the Hon'ble Tribunal shall be complied with by the CGWA.

30/07/2024

For Member Secretary
Central Ground Water Authority

VINOD KUMAR DHAUNDIYAL
Administrator
Central Ground Water Authority
Government of India
Ministry of Jal Shakti
Department of Water Resources, RD & GR
New Delhi

Dated -07-2024

Through

GIGI C. GEORGE, ADVOCATE
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CH. NO. 457, LAWYERS BLOCK -1,
DELHI HIGH COURT, NEW DELHI
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Annexure - 865

भारत सरकार
जल शक्ति मंत्रालय
जल संसाधन,नदी विकास और गंगा संरक्षण विभाग
केंद्रीय भूजल प्राधिकरण
18/11, जामनगर हाउस, मानसिंह रोड
नई दिल्ली-110011
ई-मेल: cgwa@nic.in

Government of India
Ministry of Jal Shakti
Department of Water Resources, RD & GR
Central Ground Water Authority
18/11, Jamnagar House, Mansingh Road
New Delhi – 110011
E-mail: cgwa@nic.in

File No: CGWA-22/3/2024-CGWA - 830

Date: 30 MAY 2024

To

The Principal Secretary
Public works Department
DHN & DD, Vidhyut Bhawan, Kachigam
Daman-396210

Sub – News item appearing in Hindustan dated 30.11.2023 titled "Arsenic found in groundwater in 25 States, Fluoride in 27 States: Govt." – reg.

Ref – This office letter No. CGWA-22/3/2024-CGWA dated 15.03.2024

Sir

This has reference to the Original Application No. 728/2023 titled **"Arsenic found in groundwater in 25 States, fluoride in 27 States: Govt."** on the subject matter, registered by Hon'ble Tribunal by exercising *suomoto* jurisdiction under Section 14 and 15 of National Green Tribunal Act, 2010, expressing serious concern of the issue of presence of toxic elements Arsenic and Fluoride in groundwater, contaminating it and causing serious toxic effect to the human body. Hon'ble Tribunal vide order dated 20.12.2023, impleaded 27 States/UTs as respondents.

2. Central Ground Water Authority **vide letter under reference** issued following directions to the respondent States/UTs and also directed to furnish ATR/ information to CGWA on the same :

i. Ensure supply of Arsenic/ Fluoride free drinking water to its populace

ii. Action(s) taken by the State in this regard which should, inter-alia, include habitations affected by arsenic/ fluoride in groundwater

iii. Habitations already covered under safe/ alternate water supply (including the number under Jal Jeevan Mission)

iv. Number of arsenic- and fluoride-free wells constructed, number of arsenic/ fluoride removal plant installed, in-situ remediation schemes, awareness programmes etc

v. The information about number of health cases reported due to consumption of arsenic/ fluoride groundwater may also be provided.

It is seen that ATR has not been received from the State of UT of DNH & DD. ***Hon'ble Tribunal vide Para 5 of the order dated 26.04.2024 (copy enclosed) directed CGWA to send the reminder and take further action to obtain the report from the States/UTs from whom it is awaited.***

It is therefore directed to file status report on the above mentioned points at the earliest **by 15.06.2024.** It is further directed to file State's reply to Hon'ble Tribunal urgently, ensuring that there is no discrepancy between the information furnished to this Authority and that to Hon'ble Tribunal.

Yours faithfully

Encl: As above

(**Dr S K Ambast**)
Chairman, CGWA

Copy for information and necessary action:

1. The Chief Secretary, UT of DNH & DD
2. The Regional Director, CGWB, WCR, Ahemedabad, Gujarat-380022, with the advice to follow up with concerned State Department for obtaining information

S K Ambast

(Dr S K Ambast)
Chairman, CGWA

भारत सरकार
जल शक्ति मंत्रालय
जल संसाधन,नदी विकास और गंगा संरक्षण विभाग
केंद्रीय भूजल प्राधिकरण
18/11 जामनगर हाउस, मानसिंह रोड
नई दिल्ली-110011
ई-मेल: cgwa@nic.in

Government of India
Ministry of Jal Shakti
Department of Water Resources, RD & GR
Central Ground Water Authority
18/11, Jamnagar House, Mansingh Road
New Delhi – 110011
E-mail: cgwa@nic.in

File No: CGWA-22/3/2024-CGWA – 3241 **Date:** 30 MAY 2024

To

The Principal Secretary
Gujarat Water Supply and Sewerage Board
9th Floor, 7th Block, Sachivalaya, Gandhinagar-382010
E-mail: secws@gujarat.gov.in

Sub – News item appearing in Hindustan dated 30.11.2023 titled "Arsenic found in groundwater in 25 States, Fluoride in 27 States: Govt." – reg.

Ref – This office letter No. CGWA-22/3/2024-CGWA dated 08.03.2024

Sir

This has reference to the Original Application No. 728/2023 titled **"Arsenic found in groundwater in 25 States, fluoride in 27 States: Govt."** on the subject matter, registered by Hon'ble Tribunal by exercising *suomoto* jurisdiction under Section 14 and 15 of National Green Tribunal Act, 2010, expressing serious concern of the issue of presence of toxic elements Arsenic and Fluoride in groundwater, contaminating it and causing serious toxic effect to the human body. Hon'ble Tribunal vide order dated 20.12.2023, impleaded 27 States/UTs as respondents.

2. Central Ground Water Authority **vide letter under reference** issued following directions to the respondent States/UTs and also directed to furnish ATR/ information to CGWA on the same :

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iii. Habitations already covered under safe/ alternate water supply (including the number under Jal Jeevan Mission)

iv. Number of arsenic- and fluoride-free wells constructed, number of arsenic/ fluoride removal plant installed, in-situ remediation schemes, awareness programmes etc

v. The information about number of health cases reported due to consumption of arsenic/ fluoride groundwater may also be provided.

It is seen that ATR has not been received from the State of Gujarat. ***Hon'ble Tribunal vide Para 5 of the order dated 26.04.2024 (copy enclosed) directed CGWA to send the reminder and take further action to obtain the report from the States/UTs from whom it is awaited.***

It is therefore directed to file status report on the above mentioned points at the earliest **by 15.06.2024.** It is further directed to file State's reply to Hon'ble Tribunal urgently, ensuring that there is no discrepancy between the information furnished to this Authority and that to Hon'ble Tribunal.

Yours faithfully

Encl: As above

(Dr S K Ambast)
Chairman, CGWA

-13

Copy for information and necessary action:

1. The Chief Secretary, 1st Block, 5th floor, Sachivalaya, Gujarat -382010
2. The Regional Director, CGWB, WCR, Swami Narayan College, Shah Alam Toinaka, Ahmadabad, Gujarat-380022 with the advice to follow up with concerned State Department for obtaining information

(Dr S K Ambast)
Chairman, CGWA

भारत सरकार
जल शक्ति मंत्रालय
जल संसाधन, नदी विकास और गंगा संरक्षण विभाग
केंद्रीय भूजल प्राधिकरण
18/11, जामनगर हाउस, मानसिंह रोड
नई दिल्ली-110011
ई. मेल: cgwa@nic.in

Government of India
Ministry of Jal Shakti
Department of Water Resources, RD & GR
Central Ground Water Authority
18/11, Jamnagar House, Mansingh Road
New Delhi – 110011
E-mail: cgwa@nic.in

File No: CGWA-22/3/2024-CGWA - 818 **Date:** 30 MAY 2024

To

The Add. Chief Secretary
Jal Shakti Department (J&K)
Civil Secretariat, Jammu, UT of J&K 180001
E-mail: pscsphe@gmail.com plansectionhyd@gmail.com

Sub – News item appearing in Hindustan dated 30.11.2023 titled "Arsenic found in groundwater in 25 States, Fluoride in 27 States: Govt." – reg.

Ref – This office letter No. CGWA-22/3/2024-CGWA dated 08.03.2024

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2. Central Ground Water Authority **vide letter under reference** issued following directions to the respondent States/UTs and also directed to furnish ATR/ information to CGWA on the same :

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ii. Action(s) taken by the State in this regard which should, inter-alia, include habitations affected by arsenic/ fluoride in groundwater

iii. Habitations already covered under safe/ alternate water supply (including the number under Jal Jeevan Mission)

iv. Number of arsenic- and fluoride-free wells constructed, number of arsenic/ fluoride removal plant installed, in-situ remediation schemes, awareness programmes etc

v. The information about number of health cases reported due to consumption of arsenic/ fluoride groundwater may also be provided.

It is seen that ATR has not been received from the State of Jammu & Kashmir. ***Hon'ble Tribunal vide Para 5 of the order dated 26.04.2024 (copy enclosed) directed CGWA to send the reminder and take further action to obtain the report from the States/UTs from whom it is awaited.***

It is therefore directed to file status report on the above mentioned points at the earliest **by 15.06.2024.** It is further directed to file State's reply to Hon'ble Tribunal urgently, ensuring that there is no discrepancy between the information furnished to this Authority and that to Hon'ble Tribunal.

Yours faithfully

Encl: As above

(Dr S K Ambast)
Chairman, CGWA

Copy for information and necessary action:

1. The Chief Secretary, R.No.2/7, 2nd floor, main Building, Civil Secretariat, Jammu & Kashmir State

2. The Regional Director, CGWB, NWHR, 298/299, Shastri Nagar, Jammu and Kashmir -180004 with the advice to follow up with concerned State Department for obtaining information

(Dr S K Ambast)
Chairman, CGWA

भारत सरकार
जल शक्ति मंत्रालय
जल संसाधन,नदी विकास और गंगा संरक्षण विभाग
केंद्रीय भूजल प्राधिकरण
18/11 जामनगर हाउस, मानसिंह रोड
नई दिल्ली-110011
ई मेल cgwa@nic.in

Government of India
Ministry of Jal Shakti
Department of Water Resources, RD & GR
Central Ground Water Authority
18/11, Jamnagar House, Mansingh Road
New Delhi – 110011
E-mail: cgwa@nic.in

File No: CGWA-22/3/2024-CGWA - 819

Date: 30 MAY 2024

To

The Principal Secretary
Department of Drinking Water and Sanitation
Nepal House, Doranda Ranchi, Jharkhand -834002
E-mail: dwsdccs@gmail.com

Sub – News item appearing in Hindustan dated 30.11.2023 titled "Arsenic found in groundwater in 25 States, Fluoride in 27 States: Govt." – reg.

Ref – This office letter No. CGWA-22/3/2024-CGWA dated 08.03.2024

Sir

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iv. Number of arsenic- and fluoride-free wells constructed, number of arsenic/ fluoride removal plant installed, in-situ remediation schemes, awareness programmes etc

v. The information about number of health cases reported due to consumption of arsenic/ fluoride groundwater may also be provided.

It is seen that ATR has not been received from the State of Jharkhand. ***Hon'ble Tribunal vide Para 5 of the order dated 26.04.2024 (copy enclosed) directed CGWA to send the reminder and take further action to obtain the report from the States/UTs from whom it is awaited.***

It is therefore directed to file status report on the above mentioned points at the earliest **by 15.06.2024.** It is further directed to file State's reply to Hon'ble Tribunal urgently, ensuring that there is no discrepancy between the information furnished to this Authority and that to Hon'ble Tribunal.

Yours faithfully

Encl: As above

(Dr S K Ambast)
Chairman, CGWA

Copy for information and necessary action:

1. The Chief Secretary, 1st floor, Project Building, Dhurwa, Ranchi,Jharkhand-834004.

2. The Regional Director, CGWB, Mid Eastern Region, 6th & 7th Floor, Lok Nayak Jai Prakash Bhawan, Frazer Road, Dak Banglow, PATNA, BIHAR, 800011, with the advice to follow up with concerned State Department for obtaining information

(Dr S K Ambast)
Chairman, CGWA

भारत सरकार
जल शक्ति मंत्रालय
जल संसाधन,नदी विकास और गंगा संरक्षण विभाग
केंद्रीय भूजल प्राधिकरण
18/11 जामनगर हाउस, मानसिंह रोड
नई दिल्ली-110011
ई-मेल: cgwa@nic.in

Government of India
Ministry of Jal Shakti
Department of Water Resources, RD & GR
Central Ground Water Authority
18/11, Jamnagar House, Mansingh Road
New Delhi – 110011
E-mail: cgwa@nic.in

File No: CGWA-22/3/2024-CGWA - 893

Date: 30 MAY 2024

To

The Chairman, BWSSB,
1st Floor, Cauvery Bhavan,
Kempegowda Road,Bengaluru-560009
E-mail: chairman@bwssb.gov.in

The Addl. Chief Seceratory
RD & Panchayati Raj,
3rd gate, 3rd floor, MS Building
Bangalore-560001

Sub – News item appearing in Hindustan dated 30.11.2023 titled "Arsenic found in groundwater in 25 States, Fluoride in 27 States: Govt." – reg.

Ref – This office letter No. CGWA-22/3/2024-CGWA dated 08.03.2024

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iv. Number of arsenic- and fluoride-free wells constructed, number of arsenic/ fluoride removal plant installed, in-situ remediation schemes, awareness programmes etc

v. The information about number of health cases reported due to consumption of arsenic/ fluoride groundwater may also be provided.

It is seen that ATR has not been received from the State of Karnataka. ***Hon'ble Tribunal vide Para 5 of the order dated 26.04.2024 (copy enclosed) directed CGWA to send the reminder and take further action to obtain the report from the States/UTs from whom it is awaited.***

It is therefore directed to file status report on the above mentioned points at the earliest **by 15.06.2024**. It is further directed to file State's reply to Hon'ble Tribunal urgently, ensuring that there is no discrepancy between the information furnished to this Authority and that to Hon'ble Tribunal.

Yours faithfully

Encl. As above

(Dr S K Ambast)
Chairman, CGWA

Copy for information and necessary action:

1. The Chief Secretary, Govt. of Karnataka, Room No. 320, Bangaluru-560001.
2. The Regional Director, CGWB, SWR, Bengaluru, Karnataka-560102, with the advice to follow up with concerned State Department for obtaining information

(Dr S K Ambast)
Chairman, CGWA

Government of India
Ministry of Jal Shakti
Department of Water Resources, RD & GR
Central Ground Water Authority
13/11, Jamnagar House, Shahjahan Road
New Delhi – 110011
E-mail: cgwa@nic.in

File No. CGWA-22/3/2024-CGWA - 1331 Date: 20/5/24

To

The Principal Secretary
Kerala Water Authority,
Govt. Secretrait Kerala

Sub – News item appearing in Hindustan dated 30.11.2023 titled "Arsenic found in groundwater in 25 States, Fluoride in 27 States: Govt." – reg.

Ref – This office letter No. CGWA-22/3/2024-CGWA dated 08.03.2024

Sir

This has reference to the Original Application No. 720/2023 titled **"Arsenic found in groundwater in 25 States, fluoride in 27 States: Govt."** on the subject matter, registered by Hon'ble Tribunal by exercising *suomoto* jurisdiction under Section 14 and 15 of National Green Tribunal Act, 2010, expressing serious concern of the issue of presence of toxic elements Arsenic and Fluoride in groundwater contaminating it and causing serious toxic effect to the human body. Hon'ble Tribunal vide order dated 20.12.2023, impleaded 27 States/UTs as respondents.

2. Central Ground Water Authority **vide letter under reference** issued following directions to the respondent States/UTs and also directed to furnish ATR/ information to CGWA on the same

i. Ensure supply of Arsenic/ Fluoride free drinking water to its populace.

ii. Action(s) taken by the State in this regard which should, inter-alia, include habitations affected by arsenic/ fluoride in groundwater

iii. Habitations already covered under safe/ alternate water supply (including the number under Jal Jeevan Mission)

iv. Number of arsenic- and fluoride-free wells constructed, number of arsenic/ fluoride removal plant installed, in-situ remediation schemes, awareness programmes etc

v. The information about number of health cases reported due to consumption of arsenic/ fluoride groundwater may also be provided.

It is seen that ATR has not been received from the State of Kerala. ***Hon'ble Tribunal vide Para 5 of the order dated 26.04.2024 (copy enclosed) directed CGWA to send the reminder and take further action to obtain the report from the States/UTs from whom it is awaited.***

It is therefore directed to file status report on the above mentioned points at the earliest **by 15.06.2024.** It is further directed to file State's reply to Hon'ble Tribunal urgently, ensuring that there is no discrepancy between the information furnished to this Authority and that to Hon'ble Tribunal.

Yours faithfully

(Dr S K Ambast)
Chairman, CGWA

Encl: As above

Copy for information and necessary action:

1. The Chief Secretary, Room No 202, North Sandwich Block Thiruvanathapuram
2. The Regional Director, CGWB, Kerala Region, Thiruvanathapuram Kerala-695004, with the advice to follow up with concerned State Department for obtaining information

(Dr S K Ambasht)
Chairman, CGWA

भारत सरकार
जल शक्ति मंत्रालय
जल संसाधन,नदी विकास और गंगा संरक्षण विभाग
केंद्रीय भूजल प्राधिकरण
18/11, जामनगर हाउस, मानसिंह रोड
नई दिल्ली-110011
ई- मेल: cgwa@nic.in

Government of India
Ministry of Jal Shakti
Department of Water Resources, RD & GR
Central Ground Water Authority
18/11, Jamnagar House, Mansingh Road
New Delhi – 110011
E-mail: cgwa@nic.in

File No: CGWA-22/3/2024-CGWA - 237

Date: 30 MAY 2024

To

The Principal Secretary
Department of Water Supply & Saniation
The Principal Secretary, Department of Water Supply and Sanitation,
7th Floor, New Ministry, LT Marg Mumbai - 400 001

Sub – News item appearing in Hindustan dated 30.11.2023 titled "Arsenic found in groundwater in 25 States, Fluoride in 27 States: Govt." – reg.

Ref – This office letter No. CGWA-22/3/2024-CGWA dated 15.03.2024

Sir

This has reference to the Original Application No. 728/2023 titled **"Arsenic found in groundwater in 25 States, fluoride in 27 States: Govt."** on the subject matter, registered by Hon'ble Tribunal by exercising *suomoto* jurisdiction under Section 14 and 15 of National Green Tribunal Act, 2010, expressing serious concern of the issue of presence of toxic elements Arsenic and Fluoride in groundwater, contaminating it and causing serious toxic effect to the human body. Hon'ble Tribunal vide order dated 20.12.2023, impleaded 27 States/UTs as respondents.

2. Central Ground Water Authority **vide letter under reference** issued following directions to the respondent States/UTs and also directed to furnish ATR/ information to CGWA on the same :

i. Ensure supply of Arsenic/ Fluoride free drinking water to its populace

ii. Action(s) taken by the State in this regard which should, inter-alia, include habitations affected by arsenic/ fluoride in groundwater

iii. Habitations already covered under safe/ alternate water supply (including the number under Jal Jeevan Mission)

iv. Number of arsenic- and fluoride-free wells constructed, number of arsenic/ fluoride removal plant installed, in-situ remediation schemes, awareness programmes etc

v. The information about number of health cases reported due to consumption of arsenic/ fluoride groundwater may also be provided.

It is seen that ATR has not been received from the State of Maharashtra. ***Hon'ble Tribunal vide Para 5 of the order dated 26.04.2024 (copy enclosed) directed CGWA to send the reminder and take further action to obtain the report from the States/UTs from whom it is awaited.***

It is therefore directed to file status report on the above mentioned points at the earliest **by 15.06.2024.** It is further directed to file State's reply to Hon'ble Tribunal urgently, ensuring that there is no discrepancy between the information furnished to this Authority and that to Hon'ble Tribunal.

Yours faithfully

Encl: As above

(**Dr S K Ambast**)
Chairman, CGWA

Copy for information and necessary action:

1. The Chief Secretary, Maharashtra State
2. The Regional Director, CGWB, CR, Nagpur, Maharshtra-440001, with the advice to follow up with concerned State Department for obtaining information

(**Dr S K Ambast**)
Chairman, CGWA

भारत सरकार
जल शक्ति मंत्रालय
जल संसाधन,नदी विकास और गंगा संरक्षण विभाग
केंद्रीय भूजल प्राधिकरण
18/11, जामनगर हाउस, मानसिंह रोड
नई दिल्ली-110011
ई-मेल: cgwa@nic.in

Government of India
Ministry of Jal Shakti
Department of Water Resources, RD & GR
Central Ground Water Authority
18/11, Jamnagar House, Mansingh Road
New Delhi – 110011
E-mail: cgwa@nic.in

File No: CGWA-22/3/2024-CGWA - 328

Date: 30 MAY 2024

To

The Principal Secretary
Public health engineering
department, Vallabh bhawan,Bhopal

Sub – News item appearing in Hindustan dated 30.11.2023 titled "Arsenic found in groundwater in 25 States, Fluoride in 27 States: Govt." – reg.

Ref – This office letter No. CGWA-22/3/2024-CGWA dated 08.03.2024

Sir

This has reference to the Original Application No. 728/2023 titled **"Arsenic found in groundwater in 25 States, fluoride in 27 States: Govt."** on the subject matter, registered by Hon'ble Tribunal by exercising *suomoto* jurisdiction under Section 14 and 15 of National Green Tribunal Act, 2010, expressing serious concern of the issue of presence of toxic elements Arsenic and Fluoride in groundwater, contaminating it and causing serious toxic effect to the human body. Hon'ble Tribunal vide order dated 20.12.2023, impleaded 27 States/UTs as respondents.

2. Central Ground Water Authority **vide letter under reference** issued following directions to the respondent States/UTs and also directed to furnish ATR/ information to CGWA on the same :

i. Ensure supply of Arsenic/ Fluoride free drinking water to its populace

ii. Action(s) taken by the State in this regard which should, inter-alia, include habitations affected by arsenic/ fluoride in groundwater

iii. Habitations already covered under safe/ alternate water supply (including the number under Jal Jeevan Mission)

iv. Number of arsenic- and fluoride-free wells constructed, number of arsenic/ fluoride removal plant installed, in-situ remediation schemes, awareness programmes etc

v. The information about number of health cases reported due to consumption of arsenic/ fluoride groundwater may also be provided.

It is seen that ATR has not been received from the State of Madhya pardesh. ***Hon'ble Tribunal vide Para 5 of the order dated 26.04.2024 (copy enclosed) directed CGWA to send the reminder and take further action to obtain the report from the States/UTs from whom it is awaited.***

It is therefore directed to file status report on the above mentioned points at the earliest **by 15.06.2024.** It is further directed to file State's reply to Hon'ble Tribunal urgently, ensuring that there is no discrepancy between the information furnished to this Authority and that to Hon'ble Tribunal.

Yours faithfully

Encl: As above

(**Dr S K Ambast**)
Chairman, CGWA

Copy for information and necessary action:

1. The Chief Secretary, MP Mantralaya Bhopal-462004
2. The Regional Director, CGWB, NCR, Bhopal, MP-462011, with the advice to follow up with concerned State Department for obtaining information

(Dr S K Ambast)
Chairman, CGWA

भारत सरकार
जल शक्ति मंत्रालय
जल संसाधन,नदी विकास और गंगा संरक्षण विभाग
केंद्रीय भूजल प्राधिकरण
18/11 जामनगर हाउस, मानसिंह रोड
नई दिल्ली-110011
ई- मेल: cgwa@nic.in

Government of India
Ministry of Jal Shakti
Department of Water Resources, RD & GR
Central Ground Water Authority
18/11, Jamnagar House, Mansingh Road
New Delhi – 110011
E-mail: cgwa@nic.in

File No: CGWA-22/3/2024-CGWA - 329

Date: 30 MAY 2024

To

The Principal Secretary
Public health & Engg Department
Nagaland Civil Secetarait,
New Secretariat Nagaland-797004

Sub – News item appearing in Hindustan dated 30.11.2023 titled "Arsenic found in groundwater in 25 States, Fluoride in 27 States: Govt." – reg.

Ref – This office letter No. CGWA-22/3/2024-CGWA dated 15.03.2024

Sir

This has reference to the Original Application No. 728/2023 titled **"Arsenic found in groundwater in 25 States, fluoride in 27 States: Govt."** on the subject matter, registered by Hon'ble Tribunal by exercising *suomoto* jurisdiction under Section 14 and 15 of National Green Tribunal Act, 2010, expressing serious concern of the issue of presence of toxic elements Arsenic and Fluoride in groundwater, contaminating it and causing serious toxic effect to the human body. Hon'ble Tribunal vide order dated 20.12.2023, impleaded 27 States/UTs as respondents.

2. Central Ground Water Authority **vide letter under reference** issued following directions to the respondent States/UTs and also directed to furnish ATR/ information to CGWA on the same :

i. Ensure supply of Arsenic/ Fluoride free drinking water to its populace

ii. Action(s) taken by the State in this regard which should, inter-alia, include habitations affected by arsenic/ fluoride in groundwater

iii. Habitations already covered under safe/ alternate water supply (including the number under Jal Jeevan Mission)

iv. Number of arsenic- and fluoride-free wells constructed, number of arsenic/ fluoride removal plant installed, in-situ remediation schemes, awareness programmes etc

v. The information about number of health cases reported due to consumption of arsenic/ fluoride groundwater may also be provided.

It is seen that ATR has not been received from the State of Nagaland. ***Hon'ble Tribunal vide Para 5 of the order dated 26.04.2024 (copy enclosed) directed CGWA to send the reminder and take further action to obtain the report from the States/UTs from whom it is awaited.***

It is therefore directed to file status report on the above mentioned points at the earliest **by 15.06.2024.** It is further directed to file State's reply to Hon'ble Tribunal urgently, ensuring that there is no discrepancy between the information furnished to this Authority and that to Hon'ble Tribunal.

Yours faithfully

(**Dr S K Ambast**)
Chairman, CGWA

Encl: As above

Copy for information and necessary action:

1. The Chief Secretary, Nagaland
2. The Regional Director, CGWB, NER, Guwahti,Assam-781035, with the advice to follow up with concerned State Department for obtaining information

(**Dr S K Ambast**)
Chairman, CGWA

भारत सरकार
जल शक्ति मंत्रालय
जल संसाधन,नदी विकास और गंगा संरक्षण विभाग
केंद्रीय भूजल प्राधिकरण
18/11, जामनगर हाउस, शाहजहां रोड
नई दिल्ली-110011
ई-मेल: cgwa@nic.in

Government of India
Ministry of Jal Shakti
Department of Water Resources, RD & GR
Central Ground Water Authority
18/11, Jamnagar House, Mansingh Road
New Delhi – 110011
E-mail: cgwa@nic.in

File No: CGWA-22/3/2024-CGWA - 886 **Date:** 30 MAY 2024

To

The Principal Secretary
Panchayati Raj & Drinking Water Department
Panchayati Raj and Drinking Water Department, Odisha Govt. ,Secretariat Building,Bhuvaneswar, Pin- 751001, Odisha
E-mail: prsec.or@nic.in

Sub – News item appearing in Hindustan dated 30.11.2023 titled "Arsenic found in groundwater in 25 States, Fluoride in 27 States: Govt." – reg.

Ref – This office letter No. CGWA-22/3/2024-CGWA dated 15.03.2024

Sir

This has reference to the Original Application No. 728/2023 titled **"Arsenic found in groundwater in 25 States, fluoride in 27 States: Govt."** on the subject matter, registered by Hon'ble Tribunal by exercising *suomoto* jurisdiction under Section 14 and 15 of National Green Tribunal Act, 2010, expressing serious concern of the issue of presence of toxic elements Arsenic and Fluoride in groundwater, contaminating it and causing serious toxic effect to the human body. Hon'ble Tribunal vide order dated 20.12.2023, impleaded 27 States/UTs as respondents.

2. Central Ground Water Authority **vide letter under reference** issued following directions to the respondent States/UTs and also directed to furnish ATR/ information to CGWA on the same :

i. Ensure supply of Arsenic/ Fluoride free drinking water to its populace

ii. Action(s) taken by the State in this regard which should, inter-alia, include habitations affected by arsenic/ fluoride in groundwater

iii. Habitations already covered under safe/ alternate water supply (including the number under Jal Jeevan Mission)

iv. Number of arsenic- and fluoride-free wells constructed, number of arsenic/ fluoride removal plant installed, in-situ remediation schemes, awareness programmes etc

v. The information about number of health cases reported due to consumption of arsenic/ fluoride groundwater may also be provided

It is seen that ATR has not been received from the State of Odisha. ***Hon'ble Tribunal vide Para 5 of the order dated 26.04.2024 (copy enclosed) directed CGWA to send the reminder and take further action to obtain the report from the States/UTs from whom it is awaited.***

It is therefore directed to file status report on the above mentioned points at the earliest **by 15.06.2024.** It is further directed to file State's reply to Hon'ble Tribunal urgently, ensuring that there is no discrepancy between the information furnished to this Authority and that to Hon'ble Tribunal.

Yours faithfully

Encl. As above

(**Dr S K Ambast**)
Chairman, CGWA

Copy for information and necessary action:

1. The Chief Secretary, Odisha State
2. The Regional Director, CGWB, SER, Khandagiri Square, NH-5, Bhuvneshwar, odisha-751030 with the advice to follow up with concerned State Department for obtaining information

(**Dr S K Ambast**)
Chairman, CGWA

भारत सरकार
जल शक्ति मंत्रालय
जल संसाधन,नदी विकास और गंगा संरक्षण विभाग
केंद्रीय भूजल प्राधिकरण
18/11 जामनगर हाउस, मानसिंह रोड
नई दिल्ली-110011
ई-मेल: cgwa@nic.in

Government of India
Ministry of Jal Shakti
Department of Water Resources, RD & GR
Central Ground Water Authority
18/11, Jamnagar House, Mansingh Road
New Delhi – 110011
E-mail: cgwa@nic.in

File No: CGWA-22/3/2024-CGWA - 885 **Date:** 30 MAY 2024

To

The Principal Secretary
Punjab Water Supply & Sewerage Board (Urban)
PUNJAB WATER SUPPLY & SEWERAGE BOARD PLOT NO.1-B SECTOR 27-A
MADHYA MARG, CHANDIGARH – 160019
E-mail: secy.lg@punjab.gov.in

Sub – News item appearing in Hindustan dated 30.11.2023 titled "Arsenic found in groundwater in 25 States, Fluoride in 27 States: Govt." – reg.

Ref – This office letter No. CGWA-22/3/2024-CGWA dated 08.03.2024

Sir

This has reference to the Original Application No. 728/2023 titled **"Arsenic found in groundwater in 25 States, fluoride in 27 States: Govt."** on the subject matter, registered by Hon'ble Tribunal by exercising *suomoto* jurisdiction under Section 14 and 15 of National Green Tribunal Act, 2010, expressing serious concern of the issue of presence of toxic elements Arsenic and Fluoride in groundwater, contaminating it and causing serious toxic effect to the human body. Hon'ble Tribunal vide order dated 20.12.2023, impleaded 27 States/UTs as respondents.

2. Central Ground Water Authority **vide letter under reference** issued following directions to the respondent States/UTs and also directed to furnish ATR/ information to CGWA on the same :

i. Ensure supply of Arsenic/ Fluoride free drinking water to its populace

ii. Action(s) taken by the State in this regard which should, inter-alia, include habitations affected by arsenic/ fluoride in groundwater

iii. Habitations already covered under safe/ alternate water supply (including the number under Jal Jeevan Mission)

iv. Number of arsenic- and fluoride-free wells constructed, number of arsenic/ fluoride removal plant installed, in-situ remediation schemes, awareness programmes etc

v. The information about number of health cases reported due to consumption of arsenic/ fluoride groundwater may also be provided.

It is seen that ATR has not been received from the State of Punjab. ***Hon'ble Tribunal vide Para 5 of the order dated 26.04.2024 (copy enclosed) directed CGWA to send the reminder and take further action to obtain the report from the States/UTs from whom it is awaited.***

It is therefore directed to file status report on the above mentioned points at the earliest **by 15.06.2024.** It is further directed to file State's reply to Hon'ble Tribunal urgently, ensuring that there is no discrepancy between the information furnished to this Authority and that to Hon'ble Tribunal.

Yours faithfully

Encl: As above

(Dr S K Ambast)
Chairman, CGWA

Copy for information and necessary action:

1. The Chief Secretary, Govt. of Punjab, Chandigarh-160001.
2. The Regional Director, CGWB, NWR, Bhujal Bhawan, Sector-27A, Chandigarh, with the advice to follow up with concerned State Department for obtaining information

(Dr S K Ambast)
Chairman, CGWA

भारत सरकार
जल शक्ति मंत्रालय
जल संसाधन,नदी विकास और गंगा संरक्षण विभाग
केंद्रीय भूजल प्राधिकरण
18/11 जामनगर हाउस, मानसिंह रोड
नई दिल्ली-110011
ई-मेल: cgwa@nic.in

Government of India
Ministry of Jal Shakti
Department of Water Resources, RD & GR
Central Ground Water Authority
18/11, Jamnagar House, Mansingh Road
New Delhi – 110011
E-mail: cgwa@nic.in

File No: CGWA-22/3/2024-CGWA - 280

Date: 30 MAY 2024

To
The Principal Secretary
Principal Secretary to Government,
MA &WS Department,Secretariat, Chennai,600009
E-mail: twadho@gmail.com, cmwssb@tn.gov.in

The Principal Secretary,
RD& PR Department,
Fort St. George, Chennai

Sub – News item appearing in Hindustan dated 30.11.2023 titled "Arsenic found in groundwater in 25 States, Fluoride in 27 States: Govt." – reg.

Ref – This office letter No. CGWA-22/3/2024-CGWA dated 08.03.2024

Sir

This has reference to the Original Application No. 728/2023 titled **"Arsenic found in groundwater in 25 States, fluoride in 27 States: Govt."** on the subject matter, registered by Hon'ble Tribunal by exercising *suomoto* jurisdiction under Section 14 and 15 of National Green Tribunal Act, 2010, expressing serious concern of the issue of presence of toxic elements Arsenic and Fluoride in groundwater, contaminating it and causing serious toxic effect to the human body. Hon'ble Tribunal vide order dated 20.12.2023, impleaded 27 States/UTs as respondents.

2. Central Ground Water Authority **vide letter under reference** issued following directions to the respondent States/UTs and also directed to furnish ATR/ information to CGWA on the same :

i. Ensure supply of Arsenic/ Fluoride free drinking water to its populace

ii. Action(s) taken by the State in this regard which should, inter-alia, include habitations affected by arsenic/ fluoride in groundwater

iii. Habitations already covered under safe/ alternate water supply (including the number under Jal Jeevan Mission)

iv. Number of arsenic- and fluoride-free wells constructed, number of arsenic/ fluoride removal plant installed, in-situ remediation schemes, awareness programmes etc

v. The information about number of health cases reported due to consumption of arsenic/ fluoride groundwater may also be provided.

It is seen that ATR has not been received from the State of Tamil Nadu. ***Hon'ble Tribunal vide Para 5 of the order dated 26.04.2024 (copy enclosed) directed CGWA to send the reminder and take further action to obtain the report from the States/UTs from whom it is awaited.***

It is therefore directed to file status report on the above mentioned points at the earliest **by 15.06.2024.** It is further directed to file State's reply to Hon'ble Tribunal urgently, ensuring that there is no discrepancy between the information furnished to this Authority and that to Hon'ble Tribunal.

Yours faithfully

Encl: As above

(Dr S K Ambast)
Chairman, CGWA

Copy for information and necessary action:

1. The Chief Secretary, Secetarait,Tamil Nadu-600009
2. The Regional Director, CGWB, SECR, E-wing, G-Block, Rajaji Bhawan, CGO Complex, Besant Nagar, Chennai with the advice to follow up with concerned State Department for obtaining information
3. The Chief Engineer, State Ground & Surface water, Resources data Center, PWD, Tharamani, Chennai-600113

(**Dr S K Ambast**)
Chairman, CGWA

भारत सरकार
जल शक्ति मंत्रालय
जल संसाधन नदी विकास और गंगा संरक्षण विभाग
केंद्रीय भूजल प्राधिकरण
18/11 जामनगर हाउस, मानसिंह रोड
नई दिल्ली-110011
ई. मेल: cgwa@nic.in

Government of India
Ministry of Jal Shakti
Department of Water Resources, RD & GR
Central Ground Water Authority
18/11, Jamnagar House, Mansingh Road
New Delhi – 110011
E-mail: cgwa@nic.in

File No: CGWA-22/3/2024-CGWA - 388 Date: 30 MAY 2024

To

The Secretary,
Public Work Department (Drinking Water and Sanitation),
Government of Tripura, Secretary, PWD (DWS),
New Secretariat Complex, Agartala, Tripura
E-mail: secretaryswse010422@gmail.com

Sub – News item appearing in Hindustan dated 30.11.2023 titled "Arsenic found in groundwater in 25 States, Fluoride in 27 States: Govt." – reg.

Ref – This office letter No. CGWA-22/3/2024-CGWA dated 15.03.2024

Sir

This has reference to the Original Application No. 728/2023 titled **"Arsenic found in groundwater in 25 States, fluoride in 27 States: Govt."** on the subject matter, registered by Hon'ble Tribunal by exercising *suomoto* jurisdiction under Section 14 and 15 of National Green Tribunal Act, 2010, expressing serious concern of the issue of presence of toxic elements Arsenic and Fluoride in groundwater, contaminating it and causing serious toxic effect to the human body. Hon'ble Tribunal vide order dated 20.12.2023, impleaded 27 States/UTs as respondents.

2. Central Ground Water Authority **vide letter under reference** issued following directions to the respondent States/UTs and also directed to furnish ATR/ information to CGWA on the same :

i. Ensure supply of Arsenic/ Fluoride free drinking water to its populace

ii. Action(s) taken by the State in this regard which should, inter-alia, include habitations affected by arsenic/ fluoride in groundwater

iii. Habitations already covered under safe/ alternate water supply (including the number under Jal Jeevan Mission)

iv. Number of arsenic- and fluoride-free wells constructed, number of arsenic/ fluoride removal plant installed, in-situ remediation schemes, awareness programmes etc

v. The information about number of health cases reported due to consumption of arsenic/ fluoride groundwater may also be provided.

It is seen that ATR has not been received from the State of Tripura. ***Hon'ble Tribunal vide Para 5 of the order dated 26.04.2024 (copy enclosed) directed CGWA to send the reminder and take further action to obtain the report from the States/UTs from whom it is awaited.***

It is therefore directed to file status report on the above mentioned points at the earliest **by 15.06.2024.** It is further directed to file State's reply to Hon'ble Tribunal urgently, ensuring that there is no discrepancy between the information furnished to this Authority and that to Hon'ble Tribunal.

Yours faithfully

Encl. As above

(Dr S K Ambast)
Chairman, CGWA

Copy for information and necessary action:

1. The Chief Secretary, Tripura State
2. The Regional Director, CGWB, NER, Betkuchi, Guwahti, Assam-781035, with the advice to follow up with concerned State Department for obtaining information

(Dr S K Ambast)
Chairman, CGWA

भारत सरकार
जल शक्ति मंत्रालय
जल संसाधन,नदी विकास और गंगा संरक्षण विभाग
केंद्रीय भूजल प्राधिकरण
18/11 जामनगर हाउस, मानसिंह रोड
नई दिल्ली-110011
ई मेल: cgwa@nic.in

Government of India
Ministry of Jal Shakti
Department of Water Resources, RD & GR
Central Ground Water Authority
18/11, Jamnagar House, Mansingh Road
New Delhi – 110011
E-mail: cgwa@nic.in

File No: CGWA-22/3/2024-CGWA - 891

Date: 30 MAY 2024

To

The Secretary
Public Health Engineering Department, Govt. of Chhattisgarh
Secretary, Public Health Engineering Department, Mahanadi Bhawan,
Mantralaya, Atal Nagar, Nava Raipur - 492101
E-mail: secybgovtcg@gmail.com; secy-commind.cg@gov.in

Sub – News item appearing in Hindustan dated 30.11.2023 titled "Arsenic found in groundwater in 25 States, Fluoride in 27 States: Govt." – reg.

Ref – This office letter No. CGWA-22/3/2024-CGWA dated 15.03.2024

Sir

This has reference to the Original Application No. 728/2023 titled **"Arsenic found in groundwater in 25 States, fluoride in 27 States: Govt."** on the subject matter, registered by Hon'ble Tribunal by exercising *suomoto* jurisdiction under Section 14 and 15 of National Green Tribunal Act, 2010, expressing serious concern of the issue of presence of toxic elements Arsenic and Fluoride in groundwater, contaminating it and causing serious toxic effect to the human body. Hon'ble Tribunal vide order dated 20.12.2023, impleaded 27 States/UTs as respondents.

2. Central Ground Water Authority **vide letter under reference** issued following directions to the respondent States/UTs and also directed to furnish ATR/ information to CGWA on the same :

i. Ensure supply of Arsenic/ Fluoride free drinking water to its populace

ii. Action(s) taken by the State in this regard which should, inter-alia, include habitations affected by arsenic/ fluoride in groundwater

iii. Habitations already covered under safe/ alternate water supply (including the number under Jal Jeevan Mission)

iv. Number of arsenic- and fluoride-free wells constructed, number of arsenic/ fluoride removal plant installed, in-situ remediation schemes, awareness programmes etc

v. The information about number of health cases reported due to consumption of arsenic/ fluoride groundwater may also be provided.

It is seen that ATR has not been received from the State of Chhattisgarh. ***Hon'ble Tribunal vide Para 5 of the order dated 26.04.2024 (copy enclosed) directed CGWA to send the reminder and take further action to obtain the report from the States/UTs from whom it is awaited.***

It is therefore directed to file status report on the above mentioned points at the earliest **by 15.06.2024.** It is further directed to file State's reply to Hon'ble Tribunal urgently, ensuring that there is no discrepancy between the information furnished to this Authority and that to Hon'ble Tribunal.

Yours faithfully

Encl: As above

(Dr S K Ambast)
Chairman, CGWA

Copy for information and necessary action:

1. The Chief Secretary, Chhattisgarh State
2. The Regional Director, CGWB, NCCR, 2nd Floor, LK Corporate & logistic Park, NH-30, Chhattisgarh with the advice to follow up with concerned State Department for obtaining information

(Dr S K Ambast)
Chairman, CGWA

Annexure-III

रजिस्टर्ड डाक

33
20 MAY 2024

छत्तीसगढ़ शासन
लोक स्वास्थ्य यांत्रिकी विभाग
मंत्रालय
महानदी भवन, नवा रायपुर अटल नगर

क्र. एफ 17–1/2024/34–2/677 नवा रायपुर अटल नगर, दिनांक 02/05/2024

प्रेषकः– टी.आर. भतपहरी
अवर सचिव
छत्तीसगढ़ शासन
लोक स्वास्थ्य यांत्रिकी विभाग, मंत्रालय
महानदी भवन, नवा रायपुर अटल नगर

#रस ओ पी के स्थित से अवगत कराये।
श्री मी. के. दोंदियाल
ग्रहमान्त्री
20/05/2024
श्री राकेश कुमार
वरि. भू.
24/5/2024

प्रेषितीः– अध्यक्ष,
केन्द्रीय भूजल प्राधिकरण,
18/11, जामनगर हाउस, मानसिंग रोड,
नई दिल्ली–110011

विषयः– **NGT, New Delhi Order Passed On Original Application No. 728/2023 (Arsenic found in groundwater in 25 States, fluoride in 27 States:Govt.)**

संदर्भ :– आपका पत्र क्र. CGWA-22/3/2024-CGWA-95 दिनांक 08.03.2024

——00——

विषयांतर्गत संदर्भित पत्र के तारतम्य में छत्तीसगढ़ प्रदेश में भू–जल में आर्सेनिक एवं फ्लोराइड प्रभावित ग्राम/बसाहटवार तथा उनके निदान हेतु विभाग द्वारा की गई कार्यवाही की एकजाई जानकारी संलग्न प्रेषित है।

सहपत्रः–उपरोक्तानुसार।

P.R.Bhatpahari 02.05.24
(टी.आर. भतपहरी)
अवर सचिव
छत्तीसगढ़ शासन
लोक स्वास्थ्य यांत्रिकी विभाग

पृ.क्र. एफ 17–1/2024/34–2 नवा रायपुर अटल नगर, दिनांक / /2024

प्रतिलिपिः–

प्रमुख अभियंता, लोक स्वास्थ्य यांत्रिकी विभाग, छत्तीसगढ़, नवा रायपुर अटल नगर की ओर सूचनार्थ प्रेषित।

अवर सचिव
छत्तीसगढ़ शासन
लोक स्वास्थ्य यांत्रिकी विभाग

प्रपत्र –1

भू–जल में आर्सेनिक से प्रभावित ग्रामों में पेयजल व्यवस्था की जानकारी

क्र.	जिला का नाम	प्रभावित ग्रामों की संख्या	कुल स्त्रोतों की संख्या	आर्सेनिक से प्रभावित स्त्रोतों की संख्या	विभाग द्वारा की गई कार्यवाही					टिप्पणी
					बंद किये गये आर्सेनिक प्रभावित स्त्रोत की संख्या	स्थापित आर्सेनिक निष्क्रिय प्लांट की संख्या	स्थल जल प्रदाय योजनाओं से जल प्रदाय किये जाने वाले प्रभावित ग्रामों की संख्या	सौलर पम्प के माध्यम से जल प्रदाय किये जाने वाले प्रभावित बसाहट की संख्या	नलजल जल प्रदाय योजनाओं से जल प्रदाय किये जाने वाले प्रभावित ग्रामों की संख्या	
1	2	3	4	5	6	7	8	9	10	11
1	गरियाबंद	1	19	3	0	3	0	2	0	-
2	मोहला–मानपुर–अ. चौकी	16	260	62	61	1	0	5	सतही स्त्रोत पर आधारित आर्सेनिक समूह जल प्रदाय योजना से जल प्रदाय किया जा रहा है।	-
	योग :	17	279	65	61	4	0	7	0	

(डॉ एम एल अग्रवाल)
प्रमुख अभियंता
लोक स्वास्थ्य यांत्रिकी विभाग
छत्तीसगढ़, नवा रायपुर

भू-जल में आर्सेनिक से प्रभावित ग्रामों में पेयजल व्यवस्था की जानकारी

क्र०	जिला का नाम	प्रभावित ग्रामों की संख्या	ब्लाक का नाम	कुल स्त्रोतों की संख्या	आर्सेनिक से प्रभावित स्त्रोतों की संख्या	विभाग द्वारा की गई कार्यवाही					रिमार्क
						बंद किये गये आर्सेनिक प्रभावित स्त्रोत की संख्या	स्थापित आर्सेनिक रिमूवल प्लांट की संख्या	स्थित जल प्रदाय योजनाओं से जल प्रदाय किये जाने वाले प्रभावित ग्रामों की संख्या	सोलर पंप के माध्यम से जल प्रदाय किये जाने वाले प्रभावित बसाहट की संख्या	नलजल जल प्रदाय योजनाओं से जल प्रदाय किये जाने वाले प्रभावित ग्रामों की संख्या	
1	2	3	4	5	6	7	8	9	10	11	12
1	परियावद	सूपबेड़ा	शासकीय स्कूल बंदपारा	19	1	0	1	0	2	0	
2	परियावद		हरिकृष्ण धाडक सेवा केंद्र के पास		1	0	1	0		0	
3	परियावद		उपसेन घर के पास गायत्री पारा		1	0	1	0		0	
	कुल	1		19	3	0	3	0	2	0	
1	मोहला-मानपुर-अ ौधौकी	बिहरीलुर	आवासपारा	1	0	0	0	0	0	स्थानीय स्तर पर आर्सेनिक मुक्त जल प्रदाय योजना से जल प्रदाय किया जा रहा है।	
2	मोहला-मानपुर-अ ौधौकी		बिहरीलुर	10	1	1	0	0	0		
3	मोहला-मानपुर-अ ौधौकी	कोडीकसा	दुर्गा चौक	5	2	2	0	0	0		
4	मोहला-मानपुर-अ ौधौकी		कोडीकसा	6	2	2	0	0	0		
5	मोहला-मानपुर-अ ौधौकी		मडकमसरा	3	1	1	0	0	0		

क्र0	जिला का नाम	प्रभावित ग्रामों की संख्या	बसाहट का नाम	कुल स्त्रोतों की संख्या	आर्सेनिक से प्रभवित स्त्रातों की संख्या	विभाग द्वारा की गई कार्यवाही					रिमार्क
						बंद किये गये आर्सेनिक प्रभावित स्त्रोत की संख्या	स्थापित आर्सेनिक रिमुवल प्लांट की संख्या	स्थल जल प्रदाय योजनाओ से जल प्रदाय किये जाने वाले प्रभावित ग्रामों की संख्या	सोलर पंप के माध्यम से जल प्रदाय किये जाने वाले प्रभावित बसाहट की संख्या	नलजल जल प्रदाय योजनाओं से जल प्रदाय किये जाने वाले प्रभावित ग्रामों की संख्या	
1	2	3	4	5	6	7	8	9	10	11	12
6	मोहला–मानपुर–अ0चौकी	कौड़ीकसा	सोनझरियापारा	3	3	3	0	0	0		
7	मोहला–मानपुर–अ0चौकी		तरियापारा	3	2	2	0	0	0		
8	मोहला–मानपुर–अ0चौकी	पांगरी	मेनपारा	4	0	0	0	0	0		
9	मोहला–मानपुर–अ0चौकी		पांगरी	4	0	0	0	0	0		
10	मोहला–मानपुर–अ0चौकी		स्कूलपारा	5	1	1	0	0	1		
11	मोहला–मानपुर–अ0चौकी	मुल्लेटीटोला	दंतेश्वरी मंदिर	4	2	2	0	0	0	शासी स्त्रोत पर आधारित आर्सेनिक समूह जल प्रदाय योजना से जल प्रदाय किया जा रहा है।	
12	मोहला–मानपुर–अ0चौकी		लोहार पारा	5	2	2	0	0	0		
13	मोहला–मानपुर–अ0चौकी		मुल्लेटीटोला	7	2	2	0	0	0		
14	मोहला–मानपुर–अ0चौकी		सडक पारा	5	1	1	0	0	0		
15	मोहला–मानपुर–अ0चौकी	बाघाबाजार	बाघाबाजार	13	1	1	0	0	0		
16	मोहला–मानपुर–अ0चौकी		फोकट पारा	3	2	2	0	0	0		

क्र0	जिला का नाम	प्रभावित ग्रामों की संख्या	बसावट का नाम	कुल स्रोतों की संख्या	आर्सेनिक से प्रभावित स्रोतों की संख्या	विभाग द्वारा की गई कार्यवाही					रिमार्क
						बंद किये गये आर्सेनिक प्रभावित स्त्रोत की संख्या	स्थापित आर्सेनिक रिमूवल प्लांट की संख्या	स्थल जल प्रदाय योजनाओं से जल प्रदाय किये जाने वाले प्रभावित ग्रामों की संख्या	सोलर पंप के माध्यम से जल प्रदाय किये जाने वाले प्रभावित बसावट की संख्या	नलजल जल प्रदाय योजनाओं से जल प्रदाय किये जाने वाले प्रभावित ग्रामों की संख्या	
1	2	3	4	5	6	7	8	9	10	11	12
17	गोहला-मानपुर-अ ०चौकी	बोधाबाजार	मनसामंदिर पारा	2	1	1	0	0	0		
18	गोहला-मानपुर-अ ०चौकी		मुसलमानपारा	1	1	1	0	0	0		
19	गोहला-मानपुर-अ ०चौकी	जादूटोला	जादूटोला	8	0	0	0	0	1		
20	गोहला-मानपुर-अ ०चौकी		मिल बस्ती	9	3	3	0	0	0		
21	गोहला-मानपुर-अ ०चौकी	जोसाराई	आदमपारा	3	2	2	0	0	0		
22	गोहला-मानपुर-अ ०चौकी		हरिजन पारा	3	2	2	0	0	0		
23	गोहला-मानपुर-अ ०चौकी		जोसाराई	4	2	2	0	0	0		
24	गोहला-मानपुर-अ ०चौकी		मुख्य बस्ती	3	2	2	0	0	0		
25	गोहला-मानपुर-अ ०चौकी		तरियापारा	2	1	1	0	0	0		
26	गोहला-मानपुर-अ ०चौकी	कंकतीटोला	कंकतीटोला	7	1	1	0	0	1		

क्र0	जिला का नाम	प्रभावित ग्रामों की संख्या	बसाहट का नाम	कुल स्त्रोतों की संख्या	आर्सेनिक से प्रभवित स्त्रातों की संख्या	विभाग द्वारा की गई कार्यवाही					रिमार्क
						बंद किये गये आर्सेनिक प्रभावित स्त्रोत की संख्या	स्थापित आर्सेनिक रिमुव्वल प्लांट की संख्या	स्थल जल प्रदाय योजनाओ से जल प्रदाय किये जाने वाले प्रभावित ग्रामों की संख्या	सोलर पंप के माध्यम से जल प्रदाय किये जाने वाले प्रभावित बसाहट की संख्या	नलजल जल प्रदाय योजनाओं से जल प्रदाय किये जाने वाले प्रभावित ग्रामों की संख्या	
1	2	3	4	5	6	7	8	9	10	11	12
27	मोहला–मानपुर–अं0चौकी	केकतीटोला	आवासपारा	1	0	0	0	0	0		
28	मोहला–मानपुर–अं0चौकी		मंदिरपारा	1	0	0	0	0	0		
29	मोहला–मानपुर–अं0चौकी		सतनामीपारा	1	0	0	0	0	0		
30	मोहला–मानपुर–अं0चौकी	केशला	केशला	10	4	4	0	0	0		
31	मोहला–मानपुर–अं0चौकी	कौडुटोला	धोबीपारा	3	1	1	0	0	0		
32	मोहला–मानपुर–अं0चौकी		दिरवीटोला	2	1	1	0	0	0		
33	मोहला–मानपुर–अं0चौकी		कोसाटोला	8	1	1	0	0	0		
34	मोहला–मानपुर–अं0चौकी		कौडुटोला	5	2	2	0	0	0		
35	मोहला–मानपुर–अं0चौकी		लुकाटोला	2	1	1	0	0	0		
36	मोहला–मानपुर–अं0चौकी		पिनकापार	12	0	0	0	0	0		
37	मोहला–मानपुर–अं0चौकी		तरियापारा	2	0	0	0	0	0		

सतही स्त्रोत एवं प्रभावित आर्सेनिक समूह जल प्रदाय योजना से जल प्रदाय किया जा रहा है।

-495-

क्र0	जिला का नाम	प्रभावित ग्रामों की संख्या	बस्ताहट का नाम	कुल स्त्रोतों की संख्या	आर्सेनिक से प्रभावित स्त्रोतों की संख्या	विभाग द्वारा की गई कार्यवाही					रिमार्क
						बंद किये गये आर्सेनिक प्रभावित स्त्रोत की संख्या	स्थापित आर्सेनिक रिमूवल प्लांट की संख्या	स्थल जल प्रदाय योजनाओं से जल प्रदाय किये जाने वाले प्रभावित ग्रामों की संख्या	सोलर पंप के माध्यम से जल प्रदाय किये जाने वाले प्रभावित बस्ताहट की संख्या	नलजल जल प्रदाय योजनाओं से जल प्रदाय किये जाने वाले प्रभावित ग्रामों की संख्या	
1	2	3	4	5	6	7	8	9	10	11	12
36	मोहत्ता-मानपुर-अ ०चौकी	सागती	हरिजन पारा	2	1	1	0	0	0	ग्रामों स्तर पर आर्सेनिक स्त्रोत जल प्रदाय योजना से जल प्रदाय किया जा रहा है।	
39	मोहत्ता-मानपुर-अ ०चौकी		जैलाशनगर	2	0	0	0	0	1		
40	मोहत्ता-मानपुर-अ ०चौकी		नदियापारा	1	0	0	0	0	0		
41	मोहत्ता-मानपुर-अ ०चौकी		नाईपारा	2	0	0	0	0	0		
42	मोहत्ता-मानपुर-अ ०चौकी		सागती	12	1	1	0	0	0		
43	मोहत्ता-मानपुर-अ ०चौकी	सोनखानटोला	सडकपारा	3	2	2	0	0	0		
44	मोहत्ता-मानपुर-अ ०चौकी		शाकपारा	3	2	2	0	0	0		
45	मोहत्ता-मानपुर-अ ०चौकी		सोनखानटोला	4	2	1	1	0	0		
46	मोहत्ता-मानपुर-अ ०चौकी	तेलीटोला	आवासपारा	2	0	0	0	0	0		
47	मोहत्ता-मानपुर-अ ०चौकी		तरिखपारा	2	0	0	0	0	0		

क्र0	जिला का नाम	प्रभावित ग्रामों की संख्या	बसाहट का नाम	कुल स्रोतों की संख्या	आर्सेनिक से प्रभावित स्रोतों की संख्या	विभाग द्वारा की गई कार्यवाही					रिमार्क
						बंद किये गये आर्सेनिक प्रभावित स्रोत की संख्या	स्थापित आर्सेनिक रिमुवल प्लांट की संख्या	स्थल जल प्रदाय योजनाओं से जल प्रदाय किये जाने वाले प्रभावित ग्रामों की संख्या	सौलर पंप के माध्यम से जल प्रदाय किये जाने वाले प्रभावित बसाहट की संख्या	गहरजल जल प्रदाय योजनाओं से जल प्रदाय किये जाने वाले प्रभावित ग्रामों की संख्या	
1	2	3	4	5	6	7	8	9	10	11	12
48	भोजला-मानपुर-अ0 एवीकी	तेलीटोला	तेलीटोला	4	2	2	0	0	0		
49	भोजला-मानपुर-अ0 एवीकी	अरजकुण्ड	अरजकुण्ड	4	0	0	0	0	0		
50	भोजला-मानपुर-अ0 एवीकी		हरिजनपारा	1	0	0	0	0	0		
51	भोजला-मानपुर-अ0 एवीकी		मझकपारा	4	3	3	0	0	0		
52	भोजला-मानपुर-अ0 एवीकी		कोरैटोला	4	0	0	0	0	0		
53	भोजला-मानपुर-अ0 एवीकी		उपरपारा	3	0	0	0	0	0		
54	भोजला-मानपुर-अ0 एवीकी	आमगांव	आमगांव	12	1	1	0	0	0		
55	भोजला-मानपुर-अ0 एवीकी		चाउरपारा	5	0	0	0	0	0		
56	भोजला-मानपुर-अ0 एवीकी		हरिजनपारा	3	0	0	0	0	0		
57	भोजला-मानपुर-अ0 एवीकी		मझपारा	4	0	0	0	0	0		
58	भोजला-मानपुर-अ0 एवीकी		पंचायतपारा	2	0	0	0	0	1		

क्र०	जिला का नाम	प्रभावित ग्रामों की संख्या	बसाहट का नाम	कुल स्त्रोतों की संख्या	आर्सेनिक से प्रभावित स्त्रोतों की संख्या	विभाग द्वारा की गई कार्यवाही					रिमार्क
						बंद किये गये आर्सेनिक प्रभावित स्त्रोत की संख्या	स्थापित आर्सेनिक रिमूवल प्लांट की संख्या	स्वस्थ जल प्रदाय योजनाओं से जल प्रदाय किये जाने वाले प्रभावित ग्रामों की संख्या	शोलर पंप से संचालन से जल प्रदाय किये जाने वाले प्रभावित बसाहट की संख्या	गलजल जल प्रदाय योजनाओं से जल प्रदाय किये जाने वाले प्रभावित ग्रामों की संख्या	
1	2	3	4	5	6	7	8	9	10	11	12
59	मोहला–मानपुर–अ उमरीकी	मांगटोला	आवरपाल	1	0	0	0	0	0		
60	मोहला–मानपुर–अ उमरीकी		लोहारपारा	1	0	0	0	0	0		
61	मोहला–मानपुर–अ उमरीकी		मांगटोला	5	0	0	0	0	0		
62	मोहला–मानपुर–अ उमरीकी		सरियापाला	4	1	1	0	0	0		
योग		16		260	62	61	1	0	5	0	
महायोग		17		279	65	61	4	0	7	0	

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प्रमुख अभियंता
लोक स्वास्थ्य यांत्रिकी विभाग
छत्तीसगढ़, नया रायपुर

प्रपत्र –2

भू–जल में फ्लोराईड प्रभावित ग्रामों में पेयजल व्यवस्था की जानकारी

क्र.	जिला का नाम	प्रभावित ग्रामों की संख्या	कुल स्त्रोतों की संख्या	फ्लोराईड से प्रभावित स्त्रोतों की संख्या	विभाग द्वारा की गई कार्यवाही					रिमार्क
					बंद किये गये फ्लोराईड स्त्रोत की संख्या	स्थापित FRP की संख्या	स्थल जल प्रदाय योजनाओं से जल प्रदाय किये जाने वाले प्रभावित ग्रामों की संख्या	सोलर पम्प के माध्यम से जल प्रदाय किये जाने वाले प्रभावित बसाहट की संख्या	गहराजल जल प्रदाय योजनाओं से जल प्रदाय किये जाने वाले प्रभावित ग्रामों की संख्या	
1	2	3	4	5	6	7	8	9	10	11
1	राजपुर	32	538	53	36	17	5	4	8	फ्लोराईड से प्रभावित कुल 32 ग्रामों में जल जीवन मिशन अन्तर्गत ट्रीटमेन्ट प्लान्ट युक्त 02 योजना प्रस्तावित है जिसमें से 14 ग्रामों में कार्य पूर्ण, 12 ग्रामों में योजना प्रगतिरत तथा 4 ग्राम (मुडामुड) सम्मिलित नगरी योजना में प्रस्तावित। इसके अतिरिक्त जल जीवन मिशन से पूर्व संचालित योजना क्रमशः सह योजना, नया जल प्रदाय योजना, ओवर जल प्रदाय योजना तथा हैण्डपम्पों के माध्यम से जल प्रदाय किया जा रहा है।
2	गरियाबंद	39	1484	112	69	43	0	3	7	
3	छुरा	57	226	86	67	19	12	28	22	
4	महासमुंद	54	413	69	12	57	19	31	17	
5	दुर्ग	15	361	20	20	0	1	31	8	दुर्ग के 15 ग्रामों में इस समय फ्लोराईड प्रभावित पाये गये थे जिसे बंद कर दिया गया है। इन्हे पेयजल जल आपूर्ति से सेकेजार प्रदाय किया जा रहा है। वर्तमान में दुर्ग जिले में फ्लोराईड प्रभावित ग्राम नही है।
6	बालोद	31	299	56	27	29	5	3	11	जल जीवन मिशन की प्रगतिरत योजना ग्रामों में नलजल योजना का कार्य प्रगतिरत है, जिसे शीघ्र पूर्ण कर नलजल प्रदाय प्रारम्भ किया जायेगा।
7	बेमेतरा	1	5	2	1	1	0	0	0	0
8	राजनांदगांव	6	109	17	17	0	0	0	6	
9	मोहला–मानपुर–अ. चौकी	7	37	9	9	0	0	6	1	
10	खैरागढ–छुईखदान–गंडई	1	8	1	1	0	0	0	1	
11	कोरबा	169	1677	511	411	100	3	118	11	

क्र.	जिला का नाम	प्रभावित ग्रामों की संख्या	कुल स्त्रोतों की संख्या	फ्लोराईड से प्रभावित स्त्रोतों की संख्या	विभाग द्वारा की गई कार्यवाही					रिमार्क
					बंद किये गये फ्लोराईड स्त्रोत की संख्या	स्थापित PHP की संख्या	स्थल जल प्रदाय योजनाओं से जल प्रदाय किये जाने वाले प्रभावित ग्रामों की संख्या	सोलर पम्प के माध्यम से जल प्रदाय किये जाने वाले प्रभावित बसाहट की संख्या	नलजल जल प्रदाय योजनाओं से जल प्रदाय किये जाने वाले प्रभावित ग्रामों की संख्या	
1	2	3	4	5	6	7	8	9	10	11
12	रायगढ़	9	109	50	35	15	0	2	5	
13	सारंगढ़–बिलाईगढ़	2	3	3	1	2	0	0	1	
14	सरगुजा	80	627	200	64	136	8	6	7	
15	बलरामपुर	23	325	64	2	62	0	24	19	
16	सूरजपुर	44	282	67	48	19	0	6	2	
17	कोरिया	8	39	10	0	10	0	8	2	
18	मनेंद्रगढ़–चिरमिरी–भरतपुर	7	36	8	0	8	1	6	1	
19	बस्तर	22	340	158	153	5	3	9	6	12 ग्रामों के इस बसाहटों में सोलरपम्प संचालित जल प्रदाय योजना से एवं 160 सुनिश्चित हैंडपंप के माध्यम से शुद्ध पेयजल उपलब्ध की जा रही है।
20	बीजापुर	3	27	10	10	0	0	0	3	
21	कोण्डागांव	30	179	76	21	55	4	3	6	
22	कांकेर	25	410	71	8	63	0	7	16	
	योग	715	7534	1653	1012	641	61	295	160	

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प्रमुख अभियंता
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भू–जल में फ्लोराईड प्रभावित ग्रामों में पेयजल व्यवस्था की जानकारी

क्र.	जिला	विकासखण्ड का नाम	प्रभावित ग्राम का नाम	प्रभावित बसाहट का नाम	कुल स्त्रोतों की संख्या	फ्लोराईड से प्रभावित स्त्रोतों की संख्या	विभाग द्वारा की गई कार्यवाही					रिमार्क
							बंद किये गये फ्लोराईड स्त्रोत की संख्या	स्थापित FRP की संख्या	स्थल जल प्रदाय योजनाओं से जल प्रदाय किये जाने वाले प्रभावित ग्रामों की संख्या	सोलर पम्प के माध्यम से जल प्रदाय किये जाने वाले प्रभावित बसाहट की संख्या	नलजल प्रदाय योजनाओं से जल प्रदाय किये जाने वाले प्रभावित ग्रामों की संख्या	
1	2	3	4	5	6	7	8	9	10	11	12	13
1	रायपुर	अमलेश्वर	बेलर	बेलर	18	1	1	0	0	0	1	
2	रायपुर	अमलेश्वर	डोंगीतराई	अवधपारा	19	1	1	0	1	1	0	
3	रायपुर	अमलेश्वर	आलेखुटा	आलेखुटा	16	1	0	1	0	1	0	
4	रायपुर	अमलेश्वर	उमरघोटी	हरिजनपारा	18	2	0	2	0	0	0	
5	रायपुर	अमलेश्वर	उमरघोटी	उमरघोटी		1	0	1	0	0	0	
6	रायपुर	अमलेश्वर	उमरघोटी	बरतीपारा		1	1	0	0	0	0	
7	रायपुर	अमलेश्वर	धम्मारण	भाटापारा	33	1	1	0	0	0	1	
8	रायपुर	आरंग	अछोली	अछोली	12	1	1	0	0	0	1	
9	रायपुर	आरंग	बैसमुडी	बैसमुडी	15	1	0	1	0	0	0	
10	रायपुर	आरंग	सेजा	सतनामीपारा	23	1	0	1	0	0	0	
11	रायपुर	आरंग	सेजा	सेजा		1	1	0	0	0	0	
12	रायपुर	आरंग	कुटेला	कुटेला	15	1	1	0	0	0	1	
13	रायपुर	आरंग	कुसमुन्द	खासबस्ती	17	1	1	0	0	0	0	
14	रायपुर	आरंग	खपरी – 3	खपरी	11	1	1	0	1	0	0	
15	रायपुर	आरंग	कुकरा	तराईड	23	1	0	1	0	0	1	
16	रायपुर	आरंग	कोटनी	खासबस्ती	16	1	1	0	0	1	0	
17	रायपुर	आरंग	तादुल	खासबस्ती	14	1	1	0	0	0	0	
18	रायपुर	आरंग	मोखला	खासबस्ती	29	1	0	1	0	0	0	
19	रायपुर	आरंग	छटेरा	खासबस्ती	21	1	0	1	0	0	0	
20	रायपुर	आरंग	छटेरा	टिकरापारा		3	2	1	0	0	0	
21	रायपुर	आरंग	छटेरा	खासबस्ती		1	1	0	0	0	0	
22	रायपुर	आरंग	छटेरा	भाटापारा		2	0	2	0	0	0	
23	रायपुर	आरंग	भलेसर	खासबस्ती	19	4	3	1	0	0	0	
24	रायपुर	आरंग	गोरघाट	खासबस्ती	21	2	2	0	0	0	0	
25	रायपुर	धरसींवा	तिलरैया	नईबस्ती	18	1	1	0	0	0	0	
26	रायपुर	धरसींवा	कपसदा	गौठानपारा	13	1	0	1	1	0	0	
27	रायपुर	धरसींवा	निमोरा	निमोरा	15	2	2	0	1	0	0	
28	रायपुर	तिल्दा	सिलपट्टी	सिलपट्टी	12	1	1	0	0	0	0	
29	रायपुर	तिल्दा	रजिया	रजिया	9	3	2	1	1	0	0	
30	रायपुर	तिल्दा	बोईरडिह	बोईरडिह	13	1	1	0	0	0	0	
31	रायपुर	तिल्दा	मोहदी	भाटापारा	14	3	3	0	0	0	0	

क्र	जिला	विकासखण्ड का नाम	प्रभावित ग्राम का नाम	प्रभावित बसाहट का नाम	कुल स्त्रोतों की संख्या	फ्लोराईड से प्रभावित स्त्रोतों की संख्या	विभाग द्वारा की गई कार्यवाही					टिप्पणी
							बंद किये गये फ्लोराईड स्त्रोत की संख्या	स्थापित RRP की संख्या	स्थल जल प्रदाय योजनाओं से जल प्रदाय किये जाने वाले प्रभावित ग्रामों की संख्या	वोलर पम्प के माध्यम से जल प्रदाय किये जाने वाले प्रभावित बसाहट की संख्या	पेयजल प्रदाय योजनाओं से जल प्रदाय किये जाने वाले प्रभावित ग्रामों की संख्या	
1	2	3	4	5	6	7	8	9	10	11	12	13
32	सरगुजा	लिलवा	गरिमाडीह	गरिमाडीह	7	1	1	0	0	0	0	
33	सरगुजा	लिलवा	भडहा	भडहा	19	1	0	1	0	0	1	
34	सरगुजा	लिलवा	बेलदारसिंगनी	बेलदारसिंगनी	20	1	0	1	0	0	1	
35	सरगुजा	लिलवा	सिवरा	सिवरा	10	2	2	0	0	0	1	
36	सरगुजा	लिलवा	सिवरा	भाटापारा	7	1	1	0	0			
37	सरगुजा	लिलवा	भेजरीडीह	भेजरीडीह	8	1	1	0	0	0		
38	सरगुजा	लिलवा	पहाडभाट	पहाडभाट	13	1	1	0	0	0	0	
39	सरगुजा	लिलवा	कुम्हारी–	कुम्हारी–1	20	1	1	0	0	1	0	
		कुल			538	53	36	17	5	4	8	
1	सरिसाबंद	देवभोग	दहीगांव	प्राथमिक शाला परिसर	22	2	2	0	0	0	0	
2	सरिसाबंद	देवभोग	दहीगांव	पंप घर								
3	सरिसाबंद	देवभोग	पुरनापानी	देवी आसन	26	10	9	1	0	0	0	8 ग्रामों की सूचीबद्ध समूह जल प्रदाय योजना का कार्य प्रगति पर है।
4	सरिसाबंद	देवभोग	पुरनापानी	शिव मंदिर								
5	सरिसाबंद	देवभोग	पुरनापानी	साली पारा जितेन्द्र घर के पास								
6	सरिसाबंद	देवभोग	पुरनापानी	साली पारा धरम घर पास								
7	सरिसाबंद	देवभोग	पुरनापानी	साहा पारा मधु घर के पास								
8	सरिसाबंद	देवभोग	पुरनापानी	साहू पारा भीरसु घर के पास								
9	सरिसाबंद	देवभोग	पुरनापानी	नहरिया पारा नरेश घर के पास								
10	सरिसाबंद	देवभोग	पुरनापानी	बंदपारा प्रमोद घर पास								
11	सरिसाबंद	देवभोग	पुरनापानी	माध्यमिक शाला								
12	सरिसाबंद	देवभोग	पुरनापानी	साली पारा मनीराम घर के पास								
13	सरिसाबंद	देवभोग	कोदोकेरा	प्रा.शा.	13	1	0	1	0	0	0	
14	सरिसाबंद	देवभोग	लाटापारा	कोटवार घर के पास	50	5	2	3	0	0	0	
15	सरिसाबंद	देवभोग	लाटापारा	फुण्डेल पारा प्राथमिक शाला								
16	सरिसाबंद	देवभोग	लाटापारा	छोटे लाटापारा प्राथमिक								
17	सरिसाबंद	देवभोग	लाटापारा	कापडपारा प्राथमिक शाला								
18	सरिसाबंद	देवभोग	बंदपारा	लालरिंग घर के पास बोरवेल								
19	सरिसाबंद	देवभोग	दौलतमुडा	पुराना टंकी पंचायत भवन के पास	24	2	1	1	0	0	1	
20	सरिसाबंद	देवभोग	दौलतमुडा	बिलकल पारा प्रा.शा.								

606

क्र	जिला	विकासखण्ड का नाम	प्रभावित ग्राम का नाम	प्रभावित बसाहट का नाम	कुल स्त्रोतों की संख्या	फ्लोराईड से प्रभावित स्त्रोतों की संख्या	विभाग द्वारा की गई कार्यवाही					रिमार्क
							बंद किये गये फ्लोराईड स्त्रोत की संख्या	स्थापित FMP की संख्या	स्थल जल प्रदाय योजनाओं से जल प्रदाय किये जाने वाले प्रभावित ग्रामों की संख्या	सोलर पम्प के माध्यम से जल प्रदाय किये जाने वाले प्रभावित बसाहट की संख्या	नलजल प्रदाय योजनाओं से जल प्रदाय किये जाने वाले प्रभावित ग्रामों की संख्या	
1	2	3	4	5	6	7	8	9	10	11	12	13
21	गरियाबंद	देवभोग	खोखसरा	बस्ती मे	22	1	1	0	0	0	0	
22	गरियाबंद	देवभोग	खम्हारगुडा	बस्ती मे	7	1	1	0	0	0	0	
23	गरियाबंद	देवभोग	सेन्दमुडा	बस्ती मे	15	1	1	0	0	0	0	
24	गरियाबंद	देवभोग	मोटसापारा	बस्ती मे	7	1	1	0	0	0	0	
25	गरियाबंद	देवभोग	सुपेबेडा	रवासिंग सोरी घर के पास	19	3	0	3	0	0	0	
26	गरियाबंद	देवभोग	सुपेबेडा	जितेजी आदिल खेत के पास								
27	गरियाबंद	देवभोग	सुपेबेडा	पदमन नागेश घर के पास बदपारा								
28	गरियाबंद	देवभोग	तिरलीगुडा	बस्ती मे	8	1	1	0	0	0	0	
29	गरियाबंद	देवभोग	फुलीमुडा	बस्ती मे	11	1	1	0	0	0	0	
30	गरियाबंद	देवभोग	परेवापाली	बस्ती मे	11	1	1	0	0	0	0	
31	गरियाबंद	देवभोग	तिरलीगुडा	अस्पताल के पास	23	1	1	0	0	0	0	
32	गरियाबंद	देवभोग	सोनाघाटी	पानी टंकी पास	37	1	1	0	0	0	0	
33	गरियाबंद	देवभोग	कोन्दवदर	स्कुल के पास	22	1	1	0	0	0	0	
34	गरियाबंद	देवभोग	गिरसुल	कोन्दुपाटी रोड के पास	40	1	1	0	0	0	0	
35	गरियाबंद	देवभोग	चिचिया	दासोपारा प्रा.शा.	47	2	0	2	0	0	0	
36	गरियाबंद	देवभोग	चिचिया	कुटलीपारा प्रा.शा.								
37	गरियाबंद	देवभोग	नवागांव	प्रा.शा.	18	1	0	1	0	0	0	
38	गरियाबंद	देवभोग	माहुलकोट	जाखमुडी प्रा.शा.	25	2	0	2	0	0	0	
39	गरियाबंद	देवभोग	माहुलकोट	झाखरपारा								
40	गरियाबंद	देवभोग	डोगरीगुडा	प्रा.शा.	10	1	0	1	0	0	0	
41	गरियाबंद	देवभोग	गाडाघाट	बहालपारा प्रा.शा.	25	1	0	1	0	0	0	
42	गरियाबंद	देवभोग	सुकतीमाठा	प्रा.शा.	17	1	0	1	0	0	0	
43	गरियाबंद	देवभोग	धुपकोट	बंदपारा प्रा.शा.	9	1	0	1	0	0	0	
44	गरियाबंद	देवभोग	गंगराजपुर	बिंगरापारा प्रा.शा.	26	2	0	2	0	0	0	
45	गरियाबंद	देवभोग	गंगराजपुर	प्रा.शा.								
46	गरियाबंद	देवभोग	झुमपीटा	प्रा.शा.	21	1	0	1	0	0	0	
47	गरियाबंद	देवभोग	जदरा	बस्ती मे	16	1	0	1	0	0	0	
48	गरियाबंद	देवभोग	मगरोडा	बस्ती मे	12	1	0	1	0	0	0	
49	गरियाबंद	देवभोग	फलसापारा	प्रा.शा.	17	1	0	1	0	0	0	
50	गरियाबंद	देवभोग	कोदोमाटा	प्रा.शा.	12	1	0	1	0	0	0	
51	गरियाबंद	देवभोग	माछागांव	बस्ती मे	41	1	0	1	0	0	0	
52	गरियाबंद	देवभोग	मुरलीगुडा	प्रा.शा.	7	1	0	1	0	0	0	
53	गरियाबंद	देवभोग	सुकतीमाठा न	प्रा.शा.	13	1	0	1	0	0	0	
54	गरियाबंद	देवभोग	सिलाडीजोर	बस्ती मे	29	1	0	1	0	0	0	

क्र	जिला	विकासखण्ड का नाम	प्रभावित ग्राम का नाम	प्रभावित बसाहट का नाम	कुल स्त्रोतों की संख्या	फ्लोराईड से प्रभावित स्त्रोतों की संख्या	विभाग द्वारा की गई कार्यवाही					रिमार्क
							बंद किये गये फ्लोराईड स्त्रोत की संख्या	स्थापित FRP की संख्या	जलजल प्रदाय योजनाओं से जल प्रदाय किये जाने वाले प्रभावित ग्रामों की संख्या	सोलर पम्प के माध्यम से जल प्रदाय किये जाने वाले प्रभावित बसाहट की संख्या	नलजल प्रदाय योजनाओं से जल प्रदाय किये जाने वाले प्रभावित ग्रामों की संख्या	
1	2	3	4	5	6	7	8	9	10	11	12	13
55	गरियाबंद	देवभोग	धौराकोट	प्रा.शा.	32	1	0	1	0	0	0	
56	गरियाबंद	देवभोग	कुसकोना	प्रा.शा.	4	1	0	1	0	0	0	
57	गरियाबंद	देवभोग	गोंदर	दरलीपारा प्रा.शा.	25	1	0	1	0	0	0	
58	गरियाबंद	देवभोग	कदलीमुड़ा	प्रा.शा.	35	1	0	1	0	0	0	
59	गरियाबंद	देवभोग	गोहरापदर	प्रा.शा.	17	1	0	1	0	0	0	
60	गरियाबंद	देवभोग	झासरपारा	प्रा.शा.	55	1	0	1	0	0	0	
61	गरियाबंद	देवभोग	ओड़कीपारा	प्रा.शा.	3	1	0	1	0	0	0	
62	गरियाबंद	देवभोग	सहसखोल	प्रा.शा.	11	1	0	1	0	0	0	
63	गरियाबंद	देवभोग	खाखसपारा	प्रा.शा.	4	1	0	1	0	0	0	
64	गरियाबंद	देवभोग	बालीगांव	मुरमुड़ा प्रहरी चौक के पास	26	1	1	0	0	0	0	
65	गरियाबंद	देवभोग	मुरमुड़ा	प्राथमिक शाला	9	1	0	1	0	0	0	
66	गरियाबंद	देवभोग	मुगझर	डी.ए.वी. स्कुल परिसर	38	1	1	0	0	0	0	
67	गरियाबंद	देवभोग	गोंडीपारा	आंगनबाड़ी के पास बोरवेल	37	1	1	0	0	0	0	
68	गरियाबंद	देवभोग	कर्तिया	सामुदायिक भवन के पास बोरवेल	18	1	1	0	0	0	0	
69	गरियाबंद	देवभोग	पीटापारा	प्रा.शा.	6	1	0	1	0	0	0	
70	गरियाबंद	देवभोग	दरलीपारा	प्रा.शा.	24	1	0	1	0	0	0	
71	गरियाबंद	देवभोग	नागलदेही	प्राथमिक शाला के पास बोरवेल	6	1	0	1	0	0	0	
72	गरियाबंद	देवभोग	मोहागुड़ा	बस्ती में	23	1	1	0	0	0	0	
73	गरियाबंद	देवभोग	मुरलीगुड़ा	पानी टंकी पास	3	1	0	1	0	0	1	
74	गरियाबंद	मैनपुर	कुल्हाड़ीघाट	सी.आर.पी.एफ. परिसर	20	2	2	0	0	0	0	
75	गरियाबंद	मैनपुर	कुल्हाड़ीघाट	सी.आर.पी.एफ. परिसर								
76	गरियाबंद	मैनपुर	बोईरगांव	प्राथमिक शाला के पास	24	3	3	0	0	0	0	
77	गरियाबंद	मैनपुर	बोईरगांव	प्राथमिक शाला बोरवेल								
78	गरियाबंद	मैनपुर	झारगांव	प्री मैट्रिक आदिवासी बालक छात्रावास								
79	गरियाबंद	मैनपुर	बेहराडीह	कमार बालक आश्रम	5	1	1	0	0	0	0	
80	गरियाबंद	मैनपुर	ओलारास	गीता देवी घर के पास	2	1	1	0	0	0	0	
81	गरियाबंद	मैनपुर	जांगरमा	स्कूलपारा के पास	3	1	1	0	0	1	0	
82	गरियाबंद	मैनपुर	माटीगढ़	आयुष्मान आरोग्य एवं स्वास्थ्य केन्द्र बोरवेल	23	1	1	0	0	0	0	
83	गरियाबंद	गरियाबंद	दरीपारा	पानी टंकी पास	24	2	2	0	0	0	1	
84	गरियाबंद	गरियाबंद	दरीपारा	माध्यमिक शाला								
85	गरियाबंद	गरियाबंद	कोठीहरदी	अकलपारा	18	2	2	0	0	0	0	

क्र	जिला	विकासखण्ड का नाम	प्रभावित ग्राम का नाम	प्रभावित बसाहट का नाम	कुल स्त्रोतों की संख्या	फ्लोराईड से प्रभावित स्त्रोतों की संख्या	विभाग द्वारा की गई कार्यवाही					रिमार्क
							बंद किये गये फ्लोराईड स्त्रोत की संख्या	स्थापित FMP की संख्या	स्थल जल प्रदाय योजनाओं से जल प्रदाय किये जाने वाले प्रभावित ग्रामों की संख्या	सोलर पम्प के माध्यम से जल प्रदाय किये जाने वाले प्रभावित बसाहट की संख्या	नलजल प्रदाय योजनाओं से जल प्रदाय किये जाने वाले प्रभावित ग्रामों की संख्या	
1	2	3	4	5	6	7	8	9	10	11	12	13
86	गरियाबंद	गरियाबंद	कोरोहरदी	युधराज ध्रुव घर के पास								
87	गरियाबंद	गरियाबंद	गुजरा	माध्यमिक शाला	18	2	2	0	0	0	0	
88	गरियाबंद	गरियाबंद	गुजरा	प्राथमिक शाला परिसर								
89	गरियाबंद	गरियाबंद	सिरखली	आंगनबाड़ी के पास	29	2	2	0	0	0	0	
90	गरियाबंद	गरियाबंद	छाछाबाय	बालकुमार कश्यप घर के पास								
91	गरियाबंद	गरियाबंद	उदुली	लिजउराम नंदलाल घर के पास	6	1	1	0	0	0	0	
92	गरियाबंद	गरियाबंद	बेन्दकुरा	भूपेन्द्र ध्रुव घर पास सोलर पंप	32	1	1	0	0	1	0	
93	गरियाबंद	गरियाबंद	पेण्ड्रा	सोलरपंप के पास	15	1	1	0	0	1	0	
94	गरियाबंद	गरियाबंद	लोहारखारी	प्राथमिक शाला	22	1	1	0	0	0	0	
95	गरियाबंद	गरियाबंद	बकैयाकुरा	सामुदायिक शौचालय के पास	18	1	1	0	0	0	0	
96	गरियाबंद	गरियाबंद	कोसमकुरा	आयमन घर के पास	17	1	1	0	0	0	0	
97	गरियाबंद	फिंगेश्वर	पथरी	उपरपारा	20	3	3	0	0	0	0	
98	गरियाबंद	फिंगेश्वर	पथरी	प्राथमिक शाला								
99	गरियाबंद	फिंगेश्वर	पथरी	कमार पारा सम्पतिंग पहाड़िया घर के पास								
100	गरियाबंद	छुरा	सिवनी	उपरपारा गोविंद घर के पास	19	3	3	0	0	0	0	
101	गरियाबंद	छुरा	सिवनी	मेनरोड पास								
102	गरियाबंद	छुरा	सिवनी	मिलाउ भुंजिया घर के पास								
103	गरियाबंद	छुरा	कांसराज	उपरपारा कृष्णा नागेश घर पास	15	4	4	0	0	0	0	
104	गरियाबंद	छुरा	कांसराज	माध्यमिक शाला								
105	गरियाबंद	छुरा	कांसराज	उपरपारा आगनबाड़ी पास								
106	गरियाबंद	छुरा	कांसराज	हिमांसी किराना स्टोर्स के								
107	गरियाबंद	छुरा	दादरगांव पुरैना	पुराना टंकी	16	2	2	0	0	0	2	
108	गरियाबंद	छुरा	दादरगांव पुरैना	टंकी के पास								
109	गरियाबंद	छुरा	कण्डरी	झागसिंग किराना स्टोर्स के पास	14	1	1	0	0	0	0	
110	गरियाबंद	छुरा	मुड़गांव	टीपपारा प्राथमिक शाला	18	2	2	0	0	0	1	
111	गरियाबंद	छुरा	मुड़गांव	टंकी के पास								
112	गरियाबंद	छुरा	रानीपरतेपा	टंकी के पास	24	1	1	0	0	0	1	
	कुल				1484	112	69	43	0	3	7	

-53-

912

क्र	जिला	विकासखण्ड का नाम	प्रभावित ग्राम का नाम	प्रभावित बसाहट का नाम	कुल स्त्रोतों की संख्या	फ्लोराईड से प्रभावित स्त्रोतों की संख्या	विभाग द्वारा की गई कार्यवाही					रिमार्क
							बंद किये गये फ्लोराईड स्त्रोत की संख्या	व्यापित FRP की संख्या	स्थल जल प्रदाय योजनाओं से जल प्रदाय किये जाने वाले प्रभावित ग्रामों की संख्या	सीमेन्ट पाईप से गठित से जल प्रदाय किये जाने वाले प्रभावित बसाहट की संख्या	नलजल प्रदाय योजनाओं से जल प्रदाय किये जाने वाले प्रभावित ग्रामों की संख्या	
1	2	3	4	5	6	7	8	9	10	11	12	13
1	धमतरी	धमतरी	पटरीपारी (मार्ग)	मुख्यबस्ती	5	1	1	0	0	1	0	
2	धमतरी	धमतरी	विश्रामपुरी	उपरपारा	2	1	1	0	0	0	0	
3	धमतरी	धमतरी	मालगांव	आश्रितोंपारा	2	1	0	1	1	0	0	
4	धमतरी	धमतरी	कोहका (अकलाडोंगरी)	स्कूलपारा	3	1	0	1	0	2	0	
5	धमतरी	धमतरी	पहाड़िमाकोना	मुख्यबस्ती	3	1	1	0	0	1	0	
6	धमतरी	धमतरी	पटेलगुड़ा	मुख्यबस्ती	4	2	2	0	0	1	0	
7	धमतरी	धमतरी	भाटेगहन	आवासपारा	3	1	0	1	0	0	0	
8	धमतरी	धमतरी	भाटेगहन	मुख्यबस्ती	5	1	1	0	1	0	0	
9	धमतरी	धमतरी	भाटेगहन	स्कूलपारा	4	1	1	0	0	0	0	
10	धमतरी	धमतरी	कोड़ागहन	मुख्यबस्ती	2	1	0	1	0	1	0	
11	धमतरी	धमतरी	भिंडावर	मुख्यबस्ती	3	1	0	1	0	0	1	
12	धमतरी	धमतरी	भिंडावर	तालाबपारा	2	1	1	0	0	0	0	
13	धमतरी	धमतरी	मोगरागहन	मुख्यबस्ती	5	1	1	0	0	0	1	
14	धमतरी	धमतरी	मोगरागहन	दुमरपारा	3	1	1	0	0	0	0	
15	धमतरी	धमतरी	मोगरागहन	आदिवासीपारा	4	1	1	0	0	0	0	
16	धमतरी	धमतरी	सेहराडबरी	स्कूलपारा	1	1	1	0	0	1	1	
17	धमतरी	धमतरी	तर्रेगा	ठाकुर पारा	4	1	1	0	0	0	1	
18	धमतरी	धमतरी	तिरी	मुख्यबस्ती	3	1	1	0	1	2	0	
19	धमतरी	धमतरी	बोरिदखुर्द	पंचायत भवन के पास	4	1	1	0	0	0	1	
20	धमतरी	धमतरी	जोंगा	मुख्यबस्ती	8	1	1	0	0	0	1	
21	धमतरी	नगरी	देवपुर	ढोंगरीपारा	2	2	2	0	1	1	0	
22	धमतरी	नगरी	देवपुर	आवासपारा	2	2	1	1	0	0	0	
23	धमतरी	नगरी	देवपुर	मुख्यबस्ती	2	1	1	0	0	1	0	
24	धमतरी	नगरी	देवपुर	स्कूलपारा	2	1	1	0	0	0	0	
25	धमतरी	नगरी	देवपुर	सड़कपारा	1	1	1	0	0	0	0	
26	धमतरी	नगरी	घुरलाड़	आदिवासी पारा	2	1	1	0	0	0	1	
27	धमतरी	नगरी	घुरलाड़	सड़कपारा	2	1	0	1	0	0	0	
28	धमतरी	नगरी	अंजरी	मुख्यबस्ती	2	1	0	1	0	1	0	
29	धमतरी	नगरी	सांकरा	मुख्यबस्ती	4	1	1	0	0	1	1	
30	धमतरी	नगरी	सांकरा	मखानडबरा	2	1	1	0	0	0	0	
31	धमतरी	नगरी	सिरसिदा	मुख्यबस्ती	2	1	0	1	1	0	0	
32	धमतरी	नगरी	भोथापारा(रैयत)	मुख्यबस्ती	3	3	3	0	1	1	0	
33	धमतरी	नगरी	भोथापारा(रैयत)	कोटलापारा	2	1	1	0	0	0	0	
34	धमतरी	नगरी	पटुला	स्कूलपारा	2	1	0	1	0	1	1	
35	धमतरी	नगरी	हरदीभाटा	आदिवासीपारा	2	1	0	1	0	1	0	

क्र.	जिला	विकासखण्ड का नाम	ग्रामीण क्षेत्र का नाम	ग्रामीण बस्ती का नाम	कुल मतदाता की संख्या	फोटोयुक्त वो ग्रामीण मतदाता की संख्या	निर्णय हुआ की गई कार्यवाही					टिप्पणी
							बद किये गये फोटोयुक्त मतदाता की संख्या	ग्रामीण स्थान की संख्या	मतदान केन्द्र प्रदान मतदाताओं से जारी प्रदान किये जाने वाले ग्रामीण प्रपत्रों की संख्या	मतदान केन्द्र से मतदान से जारी प्रदान किये जाने वाले ग्रामीण बस्ती की संख्या	मतदान प्रदान मतदाताओं से जारी प्रदान किये जाने वाले ग्रामीण प्रपत्रों की संख्या	
1	2	3	4	5	6	7	8	9	10	11	12	13
36	धमतरी	नगरी	हरदीझरा	नया बुटारी	2	2	2	0	0	0	0	
37	धमतरी	नगरी	हरदीझरा	पुराबस्ती	3	2	2	0	0	0	0	
38	धमतरी	नगरी	खाईजंगरा	हरिजन पारा	2	2	0	2	0	2	1	
39	धमतरी	नगरी	खाईजंगरा	टिकरापारा	1	1	1	0	0	0	0	
40	धमतरी	नगरी	खाईजंगरा	सड़कपारा	1	1	0	1	0	0	0	
41	धमतरी	नगरी	कावरा	पुरावस्ती	1	1	0	1	0	0	1	
42	धमतरी	नगरी	देवगांव	बीगांव	1	1	0	1	0	0	0	
43	धमतरी	नगरी	खाईजंगरा	पुरावस्ती	3	1	1	0	0	0	1	
44	धमतरी	नगरी	कोलिर	नयापारा	1	1	1	0	0	0	0	
45	धमतरी	नगरी	सीतरास	सड़कपारा	2	1	0	1	0	1	1	
46	धमतरी	नगरी	दुरगी	छत्तीसपारा	1	1	1	0	0	1	1	
47	धमतरी	नगरी	छाजगी	नयापारा	1	1	1	0	0	0	0	
48	धमतरी	नगरी	कोरिया (अ)	पुरावस्ती	1	1	0	1	0	0	0	
49	धमतरी	नगरी	सड़ारी	नयापारा	2	1	1	0	0	1	0	
50	धमतरी	नगरी	डोंडरा	पानाबंधा	2	1	1	0	0	1	0	
51	धमतरी	नगरी	सिहावा	नयापारा	1	1	1	0	0	1	1	
52	धमतरी	नगरी	सर्दीपाल	सड़कपारा	1	1	1	0	0	0	0	
53	धमतरी	नगरी	गढ़बोगरी नया	नयापारा	1	1	1	0	1	1	0	
54	धमतरी	नगरी	बहीगांव	पुरावस्ती (अ. जा.	1	1	1	0	0	1	0	
55	धमतरी	नगरी	बोरेमुड़ा	पुरावस्ती (अ. जा.	2	1	1	0	0	0	0	
56	धमतरी	नगरी	सिहावा	पुरावस्ती (अ.ज.जा.	1	1	1	0	1	1	0	
57	धमतरी	नगरी	बोरगांवी	पुरावस्ती (अ.ज.जा.	1	1	1	0	0	1	0	
58	धमतरी	नगरी	टेमली	बीगांव	2	1	1	0	0	0	0	
59	धमतरी	नगरी	टेमली	सड़कपारा	1	2	2	0	0	0	0	
60	धमतरी	कुरूद	आरौद्धा	हरिजन पारा	2	1	1	0	0	0	1	
61	धमतरी	कुरूद	गढ़ीरी	आकाशीपारा	4	1	0	1	0	0	1	
62	धमतरी	कुरूद	तारोगोटी	सड़कपारा	2	1	1	0	0	0	1	
63	धमतरी	कुरूद	रावटरा	पुरावस्ती	1	1	1	0	0	0	1	
64	धमतरी	मगरलोड	सिलपुरी	पुरावस्ती	1	1	1	0	0	1	1	
65	धमतरी	मगरलोड	भरारा	पुरावस्ती	4	1	1	0	1	0	0	
66	धमतरी	मगरलोड	चरवाही	सड़कपारा	1	1	1	0	1	0	0	
67	धमतरी	मगरलोड	बोरई नया	पुरावस्ती	1	1	1	0	0	0	0	
68	धमतरी	मगरलोड	बोरई नया	आदिवासीपारा	2	1	1	0	0	0	0	
69	धमतरी	मगरलोड	कोरलमहरा	आदिवासीपारा	2	1	1	0	0	0	0	
70	धमतरी	मगरलोड	कोरलमहरा	पुरावस्ती अ.ज.	2	1	1	0	0	0	0	

क्र	जिला	विकासखण्ड का नाम	प्रभावित ग्राम का नाम	प्रभावित बसाहट का नाम	कुल स्त्रोतों की संख्या	फ्लोराईड से प्रभावित स्त्रोतों की संख्या	विभाग द्वारा की गई कार्यवाही					
							बंद किये गये फ्लोराईड स्त्रोत की संख्या	स्थापित FRP की संख्या	स्थल जल प्रदाय योजनाओं से जल प्रदाय किये जाने वाले प्रभावित ग्रामों की संख्या	सीवर पम्प के माध्यम से जल प्रदाय किये जाने वाले प्रभावित बसाहट की संख्या	नलजल प्रदाय योजनाओं से जल प्रदाय किये जाने वाले प्रभावित ग्रामों की संख्या	
1	2	3	4	5	6	7	8	9	10	11	12	13
71	धमतरी	मगरलोड	मरारगांव	छोटेपारा आ.बा.	6	1	1	0	0	0	1	
72	धमतरी	मगरलोड	मरारगांव	आदिवासीपारा	4	1	1	0	0	0	0	
73	धमतरी	मगरलोड	मरारगांव	स्कूलपारा	3	1	1	0	1	0	0	
74	धमतरी	मगरलोड	भोथीडीह	मुख्यबस्ती	3	1	1	0	0	0	1	
75	धमतरी	मगरलोड	सरईमदर	मुख्यबस्ती	2	1	1	0	0	0	0	
76	धमतरी	मगरलोड	निरई	मुख्यबस्ती प्रा. शा.	3	1	1	0	0	0	0	
77	धमतरी	मगरलोड	भोथा	मुख्यबस्ती	5	1	1	0	1	0	0	
		कुल			226	86	67	19	12	28	22	
1	महासमुन्द	महासमुन्द	सादगांव	पटेलबाहरा	3	1	0	1	0	1	0	
2	महासमुन्द	महासमुन्द	झिलमिला	मुख्य बस्ती (स्कूलपारा)	2	1	0	1	0	0	0	
3	महासमुन्द	महासमुन्द	जिवतरा	मुख्य बस्ती	6	1	0	1	1	0	0	
4	महासमुन्द	महासमुन्द	जिवतरा	कमारपारा	3	1	0	1	0	0	0	
5	महासमुन्द	महासमुन्द	परसदा (खा)	मुख्य बस्ती	8	1	0	1	1	0	0	
6	महासमुन्द	महासमुन्द	सलिहाभाठा	आदिवासी पारा	5	1	0	1	0	0	0	
7	महासमुन्द	महासमुन्द	सलिहाभाठा	मुख्य बस्ती	7	1	0	1	0	0	0	
8	महासमुन्द	महासमुन्द	तीरला	मुख्य बस्ती	9	1	0	1	1	0	0	
9	महासमुन्द	महासमुन्द	तीरला	तीरला पठार	3	1	0	1	0	0	0	
10	महासमुन्द	महासमुन्द	खल्टरा	मुख्य बस्ती	4	1	0	1	1	0	0	
11	महासमुन्द	महासमुन्द	मालपुर	मुख्य बस्ती	8	1	0	1	0	0	1	
12	महासमुन्द	बागबाहरा	बोड़ा	तेलियापारा	6	1	0	1	0	1	0	
13	महासमुन्द	बागबाहरा	हरदाडादर	मुख्य बस्ती	12	1	0	1	0	0	1	
14	महासमुन्द	बागबाहरा	कमरौद	मुख्य बस्ती हाई स्कूल के पास	12	2	1	1	1	1	0	
15	महासमुन्द	बागबाहरा	खल्लारी	मुख्य बस्ती	8	2	0	2	0	1	1	
16	महासमुन्द	बागबाहरा	कोसमर्दा	मुख्य बस्ती (प्रा.शा के पास)	17	1	0	1	0	1	0	
17	महासमुन्द	बागबाहरा	एमजीबाहरा	मुख्य बस्ती (प्रा. शा. के पास)	6	1	0	1	0	1	1	
18	महासमुन्द	बागबाहरा	पडकीपाली	मुख्य बस्ती	4	1	0	1	0	1	0	
19	महासमुन्द	बागबाहरा	बिराजपाली	मुख्य बस्ती	10	1	0	1	0	0	1	
20	महासमुन्द	बागबाहरा	अमेती	कमार पारा 01	3	1	0	1	0	1	0	
21	महासमुन्द	बागबाहरा	अमेती	कमार पारा 02	1	1	0	1	0	1	0	
22	महासमुन्द	बागबाहरा	अमेती	मुख्य बस्ती	4	1	0	1	0	1	0	
23	महासमुन्द	बागबाहरा	धरमपुर	मुख्य बस्ती	10	1	0	1	0	1	1	
24	महासमुन्द	बागबाहरा	अमलीडीह	मुख्य बस्ती	4	1	0	1	0	1	0	

क्र	जिला	विकासखण्ड का नाम	प्रभावित ग्राम का नाम	प्रभावित बसाहट का नाम	कुल स्त्रोतों की संख्या	फ्लोराईड से प्रभावित स्त्रोतों की संख्या	विभाग द्वारा की गई कार्यवाही					रिमार्क
							बंद किये गये फ्लोराईड स्त्रोत की संख्या	स्थापित FRP की संख्या	स्वजल जल प्रदाय योजनाओं से जल प्रदाय किये जाने वाले प्रभावित ग्रामों की संख्या	सोलर पम्प के माध्यम से जल प्रदाय किये जाने वाले प्रभावित बसाहट की संख्या	ग्रामजल प्रदाय योजनाओं से जल प्रदाय किये जाने वाले प्रभावित ग्रामों की संख्या	
1	2	3	4	5	6	7	8	9	10	11	12	13
25	महासमुंद	बागबाहरा	अमलीडीह	कुमारपारा	2	1	0	1	0	1	0	
26	महासमुंद	बागबाहरा	रैतारा	मुख्य बस्ती	4	1	0	1	0	1	1	
27	महासमुंद	बागबाहरा	रैतारा	कुमार पारा	2	1	0	1	0	1	0	
28	महासमुंद	बागबाहरा	जोगाडबहाई	मुख्य बस्ती	9	1	1	0	0	1	0	
29	महासमुंद	बागबाहरा	मोम्बखोज	मुख्य बस्ती	7	1	1	0	1	1	0	
30	महासमुंद	बागबाहरा	तमोरा	मुख्य बस्ती	5	1	0	1	0	0	1	
31	महासमुंद	बागबाहरा	तमोरा	स्कूलपारा	2	1	0	1	1	1	0	
32	महासमुंद	बागबाहरा	तमोरा	तमोरी	1	1	0	1	1	0	0	
33	महासमुंद	बागबाहरा	साल्हेभाठा	मुख्य बस्ती	4	1	0	1	1	0	0	
34	महासमुंद	बागबाहरा	उंगा	मुख्य बस्ती (प्रा. शा. के पास)	5	1	0	1	0	1	0	
35	महासमुंद	बागबाहरा	जोगरीपाली	मुख्य बस्ती	6	1	0	1	1	1	0	
36	महासमुंद	बागबाहरा	चरौदा	मुख्य बस्ती (बाजार चौक	11	2	1	1	0	1	1	
37	महासमुंद	बागबाहरा	जूनाजती खुर्द	मुख्य बस्ती	21	1	0	1	0	0	1	
38	महासमुंद	बागबाहरा	मोहदी	टिकरापारा	2	1	0	1	0	0	1	
39	महासमुंद	बागबाहरा	आनंदबरी	मुख्य बस्ती (प्रा. शा. के पास)	6	1	0	1	0	1	0	
40	महासमुंद	बागबाहरा	भालुडुब्बा	भालापारा	16	1	0	1	1	0	0	
41	महासमुंद	बागबाहरा	टेमरसोती	मुख्य बस्ती (दरहा पारा)	13	1	0	1	0	1	0	
42	महासमुंद	बागबाहरा	गोंधा	मुख्य बस्ती	5	1	1	0	0	0	0	
43	महासमुंद	बागबाहरा	डाडाबंद	मुख्य बस्ती	7	1	0	1	0	1	0	
44	महासमुंद	बागबाहरा	हाथीबाहरा	अरकट्टापारा	2	1	0	1	1	1	0	
45	महासमुंद	बागबाहरा	हाथीबाहरा	स्कूलपारा	2	1	0	1	0	0	0	
46	महासमुंद	बागबाहरा	हाथीबाहरा	पोटापारा	1	1	1	0	0	0	0	
47	महासमुंद	बागबाहरा	बिछलापादर	महुआपारा	2	1	0	1	1	0	0	
48	महासमुंद	बागबाहरा	बिछलापादर	मुख्य बस्ती	4	1	0	1	0	0	0	
49	महासमुंद	बागबाहरा	करहीबाहरा	मुख्य बस्ती	20	1	0	1	0	0	1	
50	महासमुंद	बागबाहरा	फतेरापाली	मुख्य बस्ती	8	1	0	1	0	0	1	
51	महासमुंद	बागबाहरा	बिंजनीखुर्द	मुख्य बस्ती	5	1	0	1	1	0	0	
52	महासमुंद	बागबाहरा	जामली	मुख्य बस्ती	7	1	1	0	1	1	0	
53	महासमुंद	बागबाहरा	छिन्दौला	मुख्य बस्ती	6	1	1	0	0	0	0	
54	महासमुंद	बागबाहरा	दुमरडीह	मुख्य बस्ती	6	1	1	0	0	1	0	
55	महासमुंद	बागबाहरा	टीलीबाधा	मुख्य बस्ती	5	1	1	0	1	1	0	
56	महासमुंद	पिथौरा	धनोरा	मुख्य बस्ती (स्कूलपारा)	6	1	0	1	1	0	0	
57	महासमुंद	पिथौरा	बोढरकसा	मुख्य बस्ती (स्कूलपारा)	10	1	0	1	0	0	1	
58	महासमुंद	पिथौरा	बोडिया	मुख्य बस्ती (स्कूलपारा)	6	1	0	1	0	0	0	

क्र	जिला	विकासखण्ड का नाम	प्रभावित ग्राम का नाम	प्रभावित बसाहट का नाम	कुल स्त्रोतों की संख्या	फ्लोराईड से प्रभावित स्त्रोतों की संख्या	विभाग द्वारा की गई कार्यवाही					टिप्पणी
							बंद किये गये फ्लोराईड स्त्रोत की संख्या	स्थापित RRP की संख्या	स्थल जल प्रदाय योजनाओं से जल प्रदाय किये जाने वाले प्रभावित ग्रामों की संख्या	सोलर पम्प के माध्यम से जल प्रदाय किये जाने वाले प्रभावित बसाहट की संख्या	महाजल प्रदाय योजनाओं से जल प्रदाय किये जाने वाले प्रभावित ग्रामों की संख्या	
1	2	3	4	5	6	7	8	9	10	11	12	13
59	महासमुंद	सिरीपुर	ठाकुरटोला कला	मुख्य बस्ती (डिस्सापारा)	8	1	0	1	0	0	1	
60	महासमुंद	सिरीपुर	मालखुन्दा	मरारपारा	11	1	1	0	1	0	0	
61	महासमुंद	सिरीपुर	राजाडेरा	बाजारपारा	2	1	1	0	1	0	0	
62	महासमुंद	सरायपाली	दर्रीभाठा	(प्राथ. शा) मुख्य बस्ती	1	1	0	1	0	1	1	
63	महासमुंद	सरायपाली	कोकड़ी	कोकड़ी	1	1	0	1	0	0	0	
64	महासमुंद	सरायपाली	गोलीडीह	(प्राथ. शा) मुख्य बस्ती	4	1	0	1	0	1	0	
65	महासमुंद	बसना	धनोट	रामपारा	10	1	0	1	0	1	1	
66	महासमुंद	बसना	सिरीसेरा	डीपापारा	3	1	0	1	0	0	0	
		कुल			413	69	12	57	19	31	17	
1	दुर्ग	पाटन	भरर	भरर	29	1	1	0	0	3	1	
2	दुर्ग	पाटन	गाडाघोट	आगनबाड़ी क्र 03	27	1	1	0	1	1	0	
3	दुर्ग	पाटन	पाहदा (परसदा)	पाहदा (परसदा)	39	1	1	0	0	6	1	
4	दुर्ग	पाटन	तेलीगुण्डरा	नाला के पास	28	3	3	0	0	3	1	
5	दुर्ग	पाटन	डिडमा	विदेशी ठाकुर घर के पास	11	2	2	0	0	2	0	
6	दुर्ग	पाटन	पाहदा (झा)	पाहदा (झा)	17	2	2	0	0	1	0	
7	दुर्ग	पाटन	करेला	सुमन वर्मा घर के पास	20	1	1	0	0	1	0	
8	दुर्ग	पाटन	जोदरासहन	1) अजयराम देवांगन घर के पास 2) परदेशी साहू घर के पास	14	2	2	0	0	2	0	
9	दुर्ग	पाटन	रेगाकलेरा	इलाही राम यादव घर के पास	12	1	1	0	0	1	0	
10	दुर्ग	पाटन	सेलूद	[illegible]	50	1	1	0	0	1	1	
11	दुर्ग	पाटन	धोबारी	शासकीय प्राथमिक शाला	11	1	1	0	0	1	1	
12	दुर्ग	पाटन	मनिकाडीह	श्मशानघाट	18	1	1	0	0	1	0	
13	दुर्ग	पाटन	खम्हरिया	कलामंच के पास	18	1	1	0	0	1	1	
14	दुर्ग	दुर्ग	हनोदा	भानू मेश्राम घर के पास	33	1	1	0	0	3	1	
15	दुर्ग	दुर्ग	धनेरा	श्मशानघाट	34	1	1	0	0	4	1	
		कुल			361	20	20	0	1	31	8	
1	बालोद	बालोद	लालगांव	लालगांव	7	1	1	0	0	0	0	जल जीवन मिशन के अंतर्गत संचालित ग्रामीण महाजल योजना का कार्य प्रगतिरत है जिसे शीघ्र पूर्ण कर नियमित प्रदाय प्रारंभ किया जायेगा।
2	बालोद	बालोद	डिडपुर	डिडपुर	10	1	1	0	1	0	0	
3	बालोद	बालोद	लालगांव	लालगांव	8	2	1	1	0	0	0	
4	बालोद	बालोद		लालगांव	11	2	1	1	0	1	0	
5	बालोद	बालोद	गोडपाल	गोडपाल	6	1	0	1	0	1	0	
6	बालोद	बालोद	मुल्लेगुड़ा	मुल्लेगुड़ा	7	1	1	0	1	0	0	
7	बालोद	गुरूर	बोरतरा	बोरतरा	7	1	1	0	0	0	0	
8	बालोद	गुरूर	दर्रा	दर्रा	6	1	1	0	1	0	0	

क्र.	जिला	विकासखण्ड का नाम	प्रभावित ग्राम का नाम	प्रभावित बसाहट का नाम	कुल स्त्रोतों की संख्या	फ्लोराईड से प्रभावित स्त्रोतों की संख्या	विभाग द्वारा की गई कार्यवाही					रिमार्क
							बंद किये गये फ्लोराईड स्त्रोत की संख्या	स्थापित FRP की संख्या	स्थल जल प्रदाय योजनाओं से जल प्रदाय किये जाने वाले प्रभावित ग्रामों की संख्या	सोलर पम्प से माध्यम से जल प्रदाय किये जाने वाले प्रभावित बसाहट की संख्या	नलजल प्रदाय योजनाओं से जल प्रदाय किये जाने वाले प्रभावित ग्रामों की संख्या	
1	2	3	4	5	6	7	8	9	10	11	12	13
9	बालोद	गुरूर	धनेली	धनेली	10	1	0	1	0	0	1	जल जीवन मिशन के अंतर्गत समस्त ग्रामों में नलजल योजना का कार्य प्रगतिस्त है जिसे शीघ्र पूर्ण कर पेयजल प्रदाय प्रारंभ किया जायेगा।
10	बालोद	गुरूर	नरबदा	नरबदा	7	1	1	0	0	0	0	
11	बालोद	गुरूर	सरबदा	सरबदा	7	1	0	1	0	0	0	
12	बालोद	गुरूर	उसरबारा	उसरबारा	9	4	2	2	1	0	0	
13	बालोद	गुरूर	बागतराई	बागतराई	3	1	0	1	0	0	1	
14	बालोद	डौण्डी	आमाडुला	आमाडुला	22	2	1	1	0	0	1	
15	बालोद	डौण्डी	बेलौदा	बेलौदा	20	4	3	1	0	0	1	
16	बालोद	डौण्डी	गुजरा	गुजरा	13	2	1	1	0	0	0	
17	बालोद	डौण्डी	खैरवाही	खैरवाही	14	2	1	1	0	0	1	
18	बालोद	डौण्डी	ओढ़गाव	ओढ़गाव	12	3	0	3	0	0	1	
19	बालोद	डौण्डी	सिरोला	सिरोला	18	5	2	3	0	0	1	
20	बालोद	डौण्डी	कटरेल	कटरेल	5	2	1	1	0	1	0	
21	बालोद	डौण्डी	कामता	कामता	12	2	1	1	0	0	1	
22	बालोद	गुण्डरदेही	भिलाई	भिलाई	12	1	1	0	0	0	1	
23	बालोद	गुण्डरदेही	पौंरा	पौंरा	11	1	1	0	0	0	1	
24	बालोद	गुण्डरदेही	देवगहन	देवगहन	6	1	1	0	0	0	1	
25	बालोद	गुण्डरदेही	सिकोला	सिकोला	3	2	0	2	0	0	0	
26	बालोद	गुण्डरदेही	गुरेदा	गुरेदा	5	4	0	4	0	0	0	
27	बालोद	गुण्डरदेही	जरौदा	जरौदा	11	1	1	0	0	0	0	
28	बालोद	गुण्डरदेही	खपरी हिरू	खपरी हिरू	5	1	1	0	0	0	0	
29	बालोद	गुण्डरदेही	मुण्डरा	मुण्डरा	5	1	1	0	1	0	0	
30	बालोद	गुण्डरदेही	पल्ला	पल्ला	8	2	0	2	0	0	0	
31	बालोद	गुण्डरदेही	तमोरा	तमोरा	13	1	1	0	0	0	0	
32	बालोद	गुण्डरदेही	नहर खपरी	नहर खपरी	6	1	0	1	0	0	0	
			कुल		**299**	**56**	**27**	**29**	**5**	**3**	**11**	
1	बेमेतरा	साजा	धौरभाखुर्द	धौरभाखुर्द	5	2	1	1	0	0	0	
			कुल		**5**	**2**	**1**	**1**	**0**	**0**	**0**	
1	राजनांदगांव	छुरिया	बादराटोला	बादराटोला	16	1	1	0	0	0	1	
2	राजनांदगांव	छुरिया	मालेखेड़ा	आदिवासी पारा	25	6	6	0	0	0	1	
3	राजनांदगांव	छुरिया	मालेखेड़ा	मालेखेड़ा								
4	राजनांदगांव	छुरिया	मालेखेड़ा	नयापारा								

क्र.	जिला	पैरामिलट्री का नाम	आवंटित यूनिट का नाम	आवंटित बटालियन का नाम	कुल स्वीकृत की संख्या	स्वीकृतियों से आवंटित स्वीकृति की संख्या	रिक्त पदों पर नियुक्ति हेतु आवेदकों की कुल संख्या					टिप्पणी
							स्वीकृत पदों पर नियुक्ति हेतु आवेदकों की संख्या	स्वीकृत रिक्त की संख्या	आवंटित यूनिट में उपलब्ध योग्यताधारी से कम उपलब्ध होने वाले अभ्यर्थियों की संख्या	योग्यता प्राप्त की संख्या से अधिक उपलब्ध होने वाले अभ्यर्थियों की संख्या	आवंटित बटालियन में उपलब्ध होने वाले अभ्यर्थियों की संख्या	
1	2	3	4	5	6	7	8	9	10	11	12	13
3	[illegible]	पुलिस	[illegible]	[illegible]	12	2	2	0	0	0	1	[illegible]
4	[illegible]	पुलिस	[illegible]	[illegible]								
5	[illegible]	[illegible]	[illegible]	[illegible]	14	2	2	0	0	0	1	
6	[illegible]	[illegible]	[illegible]	[illegible]	13	3	3	0	0	0	1	
7	[illegible]	[illegible]	[illegible]	[illegible]								
8	[illegible]	[illegible]	[illegible]	[illegible]								
9	[illegible]	[illegible]	[illegible]	[illegible]	22	1	1	0	0	0	1	
योग			6		109	17	17	6	6	6	6	-
1	[illegible]	[illegible]	[illegible]	[illegible]	9	1	1	0	0	1		
2	[illegible]	[illegible]	[illegible]	[illegible]	2	0	0	0	0	0		
3	[illegible]	[illegible]	[illegible]	[illegible]	1	0	0	0	0	0		
4	[illegible]	[illegible]	[illegible]	[illegible]	7	1	1	0	0	0		
5	[illegible]	[illegible]	[illegible]	[illegible]	2	0	0	0	0	0		
6	[illegible]	[illegible]	[illegible]	[illegible]	4	0	0	0	0	0		
7	[illegible]	[illegible]	[illegible]	[illegible]	1	0	0	0	0	0	0	
8	[illegible]	[illegible]	[illegible]	[illegible]	1	0	0	0	0	0	0	
9	[illegible]	[illegible]	[illegible]	[illegible]	2	1	1	0	0	0	0	
10	[illegible]	[illegible]	[illegible]	[illegible]	6	1	1	0	0	0	0	
11	[illegible]	[illegible]	[illegible]	[illegible]	7	1	1	0	0	1	0	
12	[illegible]	[illegible]	[illegible]	[illegible]	7	1	1	0	0	1	0	
13	[illegible]	[illegible]	[illegible]	[illegible]	6	1	1	0	0	1	0	

क्र.	जिला	विकासखण्ड का नाम	प्रभावित ग्राम का नाम	प्रभावित बसाहट का नाम	कुल स्त्रोतों की संख्या	फ्लोराईड से प्रभावित स्त्रोतों की संख्या	विभाग द्वारा की गई कार्यवाही					रिमार्क
							बंद किये गये फ्लोराईड स्त्रोत की संख्या	स्थापित FMP की संख्या	स्थल जल प्रदाय योजनाओं से जल प्रदाय किये जाने वाले प्रभावित ग्रामों की संख्या	सौलर पम्प के माध्यम से जल प्रदाय किये जाने वाले प्रभावित बसाहट की संख्या	गहरजल प्रदाय योजनाओं से जल प्रदाय किये जाने वाले प्रभावित ग्रामों की संख्या	
1	2	3	4	5	6	7	8	9	10	11	12	13
14	गोहला–मानपुर–ओ सौजी	मानपुर	डल्लापुर	डल्लापुर देवस्थान	7	1	1	0	0			
15	गोहला–मानपुर–ओ सौजी	मानपुर	सेण्डावाड़ी	गल्टेमेटा प्राथमिक शाला	2	1	1	0	0	1		
		कुल			62	9	9	0	0	5	1	
1	खैरागढ़–छुईखदान–गंडई	खैरागढ़	सोनघाटला	अहासपदरा (तालाब रोड)	8	1	1	0	0	0	1	
		कुल			8	1	1	0	0	0	1	
1	कोरबा	कटघोरा	पैनपुर	पैनपुर	15	1	1	0	0	1	0	
2	कोरबा	कोरबा	कोटबहार	मुड़पोना	2	1	1	0	0	0	0	
3	कोरबा	कोरबा	कोटबहार	डीपाडाना	1	1	1	0	0	1	0	
4	कोरबा	कोरबा	जालकुंडा	जालकुंडा	3	1	1	0	0	1	0	
5	कोरबा	कोरबा	देवपहरी	देवपहरी	29	1	1	0	0	1	0	
6	कोरबा	कोरबा	देवपहरी	कोपरीटी	4	1	1	0	0	1	0	
7	कोरबा	कोरबा	देवपहरी	डिंडसराई	7	1	1	0	0	1	0	
8	कोरबा	कोरबा	गौरबोध	गौरबोध	6	1	1	0	0	0	0	
9	कोरबा	कोरबा	नवबंदा	दलदलीसरा	2	1	1	0	0	0	0	
10	कोरबा	कोरबा	दोदरी	दोदरी	19	1	1	0	0	1	0	
11	कोरबा	कोरबा	दोदरी	बेलाकछार	12	1	0	1	0	0	0	
12	कोरबा	कोरबा	दोदरी	सरकंडा नगर	8	1	0	1	0	0	0	
13	कोरबा	कोरबा	सिलाईडांड	सिलाईडांड	18	1	1	0	0	1	0	
14	कोरबा	कोरबा	सिलाईडांड	दुदुमरा	4	1	1	0	0	0	0	
15	कोरबा	कोरबा	कोडिया घाट	पण्डरीपानी	1	1	1	0	0	0	0	
16	कोरबा	कोरबा	कोडिया घाट	पण्डरीपानी (जुनापारा)	3	2	2	0	0	0	0	
17	कोरबा	कोरबा	कोडिया घाट	सकलीभाटा	2	2	1	1	0	0	0	
18	कोरबा	कोरबा	कोडिया घाट	बारपारा	4	1	0	1	0	1	0	
19	कोरबा	कोरबा	पैसमा	पहरीपारा	3	1	0	1	0	1	0	
20	कोरबा	कोरबा	लतरेंगा	कोनई	5	1	1	0	0	1	0	
21	कोरबा	कोरबा	सोनपुरा	सोनपुरा	11	1	0	1	0	1	0	
22	कोरबा	कोरबा	जीरासकर	गोपालपहरी	3	1	1	0	0	0	0	
23	कोरबा	कोरबा	सोनपती	बस्ती	5	1	1	0	0	1	0	
24	कोरबा	कोरबा	कुदरीखार	बरगवाडांड	1	1	1	0	0	1	0	
25	कोरबा	कोरबा	अरदीना	कापुआड	7	2	2	0	0	1	0	
26	कोरबा	कोरबा	डोकरमाड़ा	सितीगुडी	4	1	0	1	0	1	0	
27	कोरबा	कोरबा	डोकरमाड़ा	मुदराडांड	3	1	1	0	0	0	0	
28	कोरबा	कोरबा	डोकरमाड़ा	चिन्दुझुई	5	2	2	0	0	0	0	
29	कोरबा	कोरबा	उरगा	उरगा बस्ती	22	2	2	0	1	1	0	
30	कोरबा	कोरबा	उरगा	लालमाटी	4	2	2	0	0	1	0	
31	कोरबा	कोरबा	चुईया	चुईया	20	2	2	0	0	1	0	

क्र.	जिला	विकासखण्ड का नाम	प्रभावित ग्राम का नाम	प्रभावित बसाहट का नाम	कुल स्त्रोतों की संख्या	फ्लोराईड से प्रभावित स्त्रोतों की संख्या	विभाग द्वारा की गई कार्यवाही					रिमार्क
							बंद किये गये फ्लोराईड स्त्रोत की संख्या	स्थापित FRP की संख्या	स्थल जल प्रदाय योजनाओं से जल प्रदाय किये जाने वाले प्रभावित ग्रामों की संख्या	सोलर पम्प के माध्यम से जल प्रदाय किये जाने वाले प्रभावित बसाहट की संख्या	नलजल प्रदाय योजनाओं से जल प्रदाय किये जाने वाले प्रभावित ग्रामों की संख्या	
1	2	3	4	5	6	7	8	9	10	11	12	13
32	कोरबा	कोरबा	सरईपाली	टेंडगरा	1	1	0	1	0	0	0	
33	कोरबा	कोरबा	सरईपाली	बिरहमतरा	1	1	1	0	0	0	0	
34	कोरबा	कोरबा	लिचकेरा	आमापाली / खैरमाटा	6	2	0	2	0	1	0	
35	कोरबा	कोरबा	सूर्दी	अमेड़ीडीह	1	1	0	1	0	1	0	
36	कोरबा	कोरबा	बरगवां	सिकटीगढ़ी	1	1	1	0	0	1	0	
37	कोरबा	कोरबा	लखनपुर	लखनपुर	11	2	2	0	0	0	0	
38	कोरबा	कोरबा	लखनपुर	बुढ़ीमाचारा	6	2	2	0	0	0	0	
39	कोरबा	कोरबा	लखनपुर	धोरेनाहिरजल	4	3	2	1	0	1	0	
40	कोरबा	कोरबा	लखनपुर	दुलपोरा	4	2	2	0	0	1	0	
41	कोरबा	कोरबा	लखनपुर	पालीपारा	3	1	1	0	0	0	0	
42	कोरबा	कोरबा	कुदुरमाल	कुदुरमाल	10	1	1	0	0	1	0	
43	कोरबा	कोरबा	पिलापाली	पिलापाली	12	1	1	0	0	1	0	
44	कोरबा	कटघोरा	भर्रीकुण्डा	भर्रीकुण्डा	10	4	4	0	0	0	0	
45	कोरबा	कटघोरा	भर्रीकुण्डा	बीलपाचारा	2	1	0	1	0	1	0	
46	कोरबा	कटघोरा	जवाली	हरिजनपारा	3	2	1	1	0	1	0	
47	कोरबा	कटघोरा	कटघोरा	कटघोरा	16	1	1	0	0	0	0	
48	कोरबा	कटघोरा	कटघोरा	लोहारपारा	2	2	2	0	0	0	0	
49	कोरबा	कटघोरा	कटघोरा	इंदिरा आवास	4	2	2	0	0	0	0	
50	कोरबा	कटघोरा	कटघोरा	स्कूलपारा	7	1	1	0	0	0	0	
51	कोरबा	कटघोरा	सरईडीहसार	बरभाठा	3	1	0	1	0	1	0	
52	कोरबा	कटघोरा	हरदीकला	हरदीकला	8	1	1	0	0	0	0	
53	कोरबा	कटघोरा	मिलईबाजार	स्कूलपारा / हरिजनपारा	8	1	1	0	0	1	1	
54	कोरबा	कटघोरा	भठौरा	भठौरा	5	1	1	0	0	0	0	
55	कोरबा	कटघोरा	टेंडगरा	टेंडगरा	10	2	2	0	0	0	0	
56	कोरबा	कटघोरा	टेंडगरा	जुगुलबा	2	2	2	0	0	0	0	
57	कोरबा	कटघोरा	टेंडगरा	धुरियापारा	2	2	2	0	0	0	0	
58	कोरबा	कटघोरा	टेंडगरा	स्टाफीडुमु	2	1	1	0	0	0	0	
59	कोरबा	कटघोरा	कोतिहामुड़ा	कोतिहामुड़ा	6	3	3	0	0	0	0	
60	कोरबा	कटघोरा	कोतिहामुड़ा	सतीपारा	2	1	1	0	0	0	0	
61	कोरबा	कटघोरा	कोतिहामुड़ा	स्कूलडीह	2	1	1	0	0	0	0	
62	कोरबा	कटघोरा	कोतिहामुड़ा	दुगुलबा	2	1	1	0	0	0	0	
63	कोरबा	कटघोरा	गुजरती	खालहीपारा	1	1	1	0	0	0	1	
64	कोरबा	कटघोरा	बसंतपुर	बसंतपुर	7	1	1	0	0	0	0	
65	कोरबा	कटघोरा	बसंतपुर	कुचवारा	4	1	1	0	0	0	0	
66	कोरबा	कटघोरा	रान	रान	11	1	1	0	0	0	0	
67	कोरबा	कटघोरा	रान	अमलीपारा	3	2	2	0	0	0	0	
68	कोरबा	कटघोरा	डोंगरी	डोंगरी	6	2	2	0	1	0	0	
69	कोरबा	कटघोरा	डोंगरी	डोंगरी-II	6	1	1	0	0	0	0	
70	कोरबा	कटघोरा	डोंगरी	हरिजनटोला	9	1	1	0	0	0	0	
71	कोरबा	कटघोरा	डोंगरी	बहरापारा	5	1	1	0	0	0	0	

1631

क्रमांक	जिला	विकासखण्ड का नाम	प्रभावित ग्राम का नाम	प्रभावित बसाहट का नाम	कुल स्त्रोतों की संख्या	फ्लोराईड से प्रभावित स्त्रोतों की संख्या	विभाग द्वारा की गई कार्यवाही					रिमार्क
							बंद किये गये फ्लोराईड स्त्रोत की संख्या	स्थापित FMP की संख्या	स्थल जल प्रदाय योजनाओं से जल प्रदाय किये जाने वाले प्रभावित ग्रामों की संख्या	सोलर पम्प के माध्यम से जल प्रदाय किये जाने वाले प्रभावित बसाहट की संख्या	नलजल प्रदाय योजनाओं से जल प्रदाय किये जाने वाले प्रभावित ग्रामों की संख्या	
1	2	3	4	5	6	7	8	9	10	11	12	13
72	कोरबा	कटघोरा	गोड़ीमुड़ा	सड़कपारा	1	1	1	0	0	0	0	
73	कोरबा	कटघोरा	जैजस	जैजस	4	1	1	0	0	0	0	
74	कोरबा	कटघोरा	पसाईपुर	पसाईपारा	8	2	2	0	0	0	0	
75	कोरबा	कटघोरा	खरईपुर	दतराईपारा	2	1	1	0	0	0	0	
76	कोरबा	कटघोरा	मांगपुर	गौंगसभाटा	2	1	1	0	0	0	0	
77	कोरबा	कटघोरा	झीरी	झीरी	6	2	1	1	0	0	0	
78	कोरबा	कटघोरा	झीरी	खारनाला	2	1	1	0	0	0	0	
79	कोरबा	कटघोरा	रमसीला	रमसीला	6	3	3	0	0	1	0	
80	कोरबा	कटघोरा	धनपास	धनपास	7	3	2	1	0	1	0	
81	कोरबा	कटघोरा	धनपास	रतिहाडभाटा	4	1	1	0	0	1	0	
82	कोरबा	कटघोरा	धनपास	सतनवीपारा-I	2	2	1	1	0	1	0	
83	कोरबा	कटघोरा	धनपास	सतनवीपारा-II	1	1	1	0	0	1	0	
84	कोरबा	कटघोरा	धनपास	जमसाडुंग	5	3	3	0	0	0	0	
85	कोरबा	कटघोरा	गढ़वागौंता	गढ़वागौंता	6	1	1	0	0	0	0	
86	कोरबा	कटघोरा	नवागांवकला	नवागांवकला	4	1	1	0	0	0	0	
87	कोरबा	कटघोरा	पथुरागांवकला	पथुरागांवकला	3	1	1	0	0	0	0	
88	कोरबा	कटघोरा	बंधवा	नवापारा	1	1	1	0	0	0	0	
89	कोरबा	कटघोरा	डिंडोलभाटा	डिंडोलभाटा	9	1	1	0	0	0	0	
90	कोरबा	कटघोरा	किसुट	किसुट	9	1	1	0	0	0	0	
91	कोरबा	कटघोरा	किसुट	खालपारा	3	1	1	0	0	0	0	
92	कोरबा	कटघोरा	डोंडकाछारी	डोंडकाछारी	2	1	1	0	0	1	0	
93	कोरबा	कटघोरा	पसाकछार	पसाकछार	4	2	2	0	0	0	0	
94	कोरबा	कटघोरा	मलपहरी	मलपहरी	2	1	0	1	0	1	0	
95	कोरबा	कटघोरा	बिसनपुर	बिसनपुर	7	3	3	0	0	0	0	
96	कोरबा	कटघोरा	सलीता	भालमपारा	6	1	1	0	0	0	1	
97	कोरबा	कटघोरा	सलीता	सलीता	12	1	1	0	0	0	0	
98	कोरबा	कटघोरा	गोहाजीह	बिजलीपारा	6	1	1	0	0	0	0	
99	कोरबा	कटघोरा	कसरेंगा	कसरेंगा	4	1	1	0	0	1	0	
100	कोरबा	कटघोरा	कसरेंगा	गुड़ाभाठा	5	2	1	1	0	1	0	
101	कोरबा	कटघोरा	कसरेंगा	बैगिनकछार	5	1	1	0	0	0	0	
102	कोरबा	कटघोरा	दुकरा	दुकरा	3	1	0	1	0	1	0	
103	कोरबा	कटघोरा	दुकरा	गुड़ाभाठा	4	2	1	1	0	1	0	
104	कोरबा	कटघोरा	पुरेनसार	पुरेनसार	5	1	1	0	0	0	0	
105	कोरबा	कटघोरा	लोतलोरा	खरपारा	5	1	1	0	0	0	0	
106	कोरबा	कटघोरा	लोतलोरा	लोतलोरा	9	1	1	0	0	0	0	
107	कोरबा	पाली	रंगोली	धनुहारनाला	2	1	1	0	0	0	0	
108	कोरबा	पाली	उजला	माझीपारा	2	1	0	1	0	1	0	
109	कोरबा	पाली	उजला	गिरतबिंदिया	2	1	0	1	0	1	0	
110	कोरबा	पाली	उजला	सोनपारा	3	2	1	1	0	1	0	
111	कोरबा	पाली	पैकी	पैकी	21	1	0	1	0	1	0	

क्र.	जिला	विकासखण्ड का नाम	प्रभावित ग्राम का नाम	प्रभावित बसाहट का नाम	कुल स्त्रोतों की संख्या	फ्लोराईड से प्रभावित स्त्रोतों की संख्या	विभाग द्वारा की गई कार्यवाही					टिप्पणी
							बंद किये गये फ्लोराईड स्त्रोत की संख्या	स्थापित FRP की संख्या	स्वजल जल प्रदाय योजनाओं से जल प्रदाय किये जाने वाले प्रभावित ग्रामों की संख्या	सौलर पम्प के माध्यम से जल प्रदाय किये जाने वाले प्रभावित बसाहट की संख्या	गंगाजल प्रदाय योजनाओं से जल प्रदाय किये जाने वाले प्रभावित ग्रामों की संख्या	
1	2	3	4	5	6	7	8	9	10	11	12	13
112	कोरबा	पाली	लिटियाखार	लिटियाखार	16	1	1	0	0	0	0	
113	कोरबा	पाली	लिटियाखार	सोनानीपारा	5	5	4	1	0	1	0	
114	कोरबा	पाली	लिटियाखार	लखनपारा	3	1	1	0	0	0	0	
115	कोरबा	पाली	लिटियाखार	जमनीपाल	4	1	0	1	0	1	0	
116	कोरबा	पाली	अमरीकछार	अमरीकछार	18	4	3	1	0	1	0	
117	कोरबा	पाली	जोरहाडबरी	जोरहाडबरी	14	1	1	0	0	0	1	
118	कोरबा	पाली	हरदीबाजार	हरदीबाजार	34	1	1	0	0	1	1	
119	कोरबा	पाली	बम्हनीडीपा	बम्हनीडीपा	9	5	4	1	0	1	0	
120	कोरबा	पाली	बम्हनीडीपा	डिडोरापठा	4	2	1	1	0	1	0	
121	कोरबा	पाली	मुड़ागांव	मुड़ागांव	11	1	1	0	0	0	0	
122	कोरबा	पाली	मुड़ागांव	अमृतधारा	4	1	1	0	0	0	0	
123	कोरबा	पाली	गेवरा	मुड़ामारा	5	1	0	1	0	1	0	
124	कोरबा	पाली	गेवरा	सुर्दीपारा	4	3	3	0	0	1	0	
125	कोरबा	पाली	गेवरा	ओड़ियापारा	2	1	1	0	0	1	0	
126	कोरबा	पाली	गेवरा	आवासपारा	7	3	2	1	0	1	0	
127	कोरबा	पाली	उतरदा	रेलडबरी	5	1	1	0	0	0	0	
128	कोरबा	पाली	उतरदा	समसमपारा	19	1	1	0	0	0	0	
129	कोरबा	पाली	बोईदा	आवासपारा	2	1	1	0	0	1	1	
130	कोरबा	पाली	बदेवाली	भदराघारी	4	3	3	0	0	0	0	
131	कोरबा	पाली	बदेवाली	बुदीपारा	2	2	2	0	0	0	0	
132	कोरबा	पाली	लमुना	लमुना	2	2	1	1	0	0	0	
133	कोरबा	पाली	लमुना	पाठापारा	3	3	3	0	0	0	0	
134	कोरबा	पाली	लमुना	भौंराघारा	2	1	1	0	0	0	0	
135	कोरबा	पाली	लमुना	आवासपारा	1	1	0	1	0	0	0	
136	कोरबा	पाली	ठाकुरबना	ठाकुरबना	5	2	2	0	0	0	0	
137	कोरबा	पाली	ठाकुरबना	रिंजनाबारी	2	2	2	0	0	0	0	
138	कोरबा	पाली	ठाकुरबना	डिडोरियम	2	2	1	1	0	1	0	
139	कोरबा	पाली	मेलघाटिकला	मेलघाटिकला	2	1	1	0	0	0	0	
140	कोरबा	पाली	मेलघाटिकला	गौहरपानी	3	3	3	0	0	0	0	
141	कोरबा	पाली	मेलघाटिकला	खैरपाली	2	2	2	0	0	0	0	
142	कोरबा	पाली	नावापारा	नावापारा	6	2	2	0	0	0	0	
143	कोरबा	पाली	नावापारा	लतरीपारा	5	3	2	1	0	0	0	
144	कोरबा	पाली	नावापारा	पुरहापारा	4	3	3	0	0	0	0	
145	कोरबा	पाली	मदनपुर	सिंघापुरी	7	4	3	1	0	0	1	
146	कोरबा	पाली	मदनपुर	कुरूरूमाल	3	1	0	1	0	0	0	
147	कोरबा	पाली	मदनपुर	डकनीपारा	2	1	1	0	0	0	0	
148	कोरबा	पाली	पैतमा	पैतमा	18	5	2	3	0	1	1	
149	कोरबा	पाली	पैतमा	छपलीपारा	9	1	1	0	0	0	0	
150	कोरबा	पाली	पैतमा	बसेरापारा	2	1	0	1	0	1	0	
151	कोरबा	पाली	चोरभट्ठा	बंजारीपारा	6	5	5	0	0	0	0	

क्र.	जिला	विकासखण्ड का नाम	प्रभावित ग्राम का नाम	प्रभावित बसाहट का नाम	कुल स्त्रोतों की संख्या	फ्लोराईड से प्रभावित स्त्रोतों की संख्या	विभाग द्वारा की गई कार्यवाही					रिमार्क
							बंद किये गये फ्लोराईड स्त्रोत की संख्या	स्थापित RWP की संख्या	स्थल जल प्रदाय योजनाओं से जल प्रदाय किये जाने वाले प्रभावित ग्रामों की संख्या	सौलर पम्प के माध्यम से जल प्रदाय किये जाने वाले प्रभावित बसाहट की संख्या	नलजल प्रदाय योजनाओं से जल प्रदाय किये जाने वाले प्रभावित ग्रामों की संख्या	
1	2	3	4	5	6	7	8	9	10	11	12	13
152	कोरबा	पाली	अलीपाठ	अलीपाठ	9	5	5	0	1	0	0	
153	कोरबा	पाली	भण्डारखोल	भण्डारखोल	9	1	1	0	0	0	0	
154	कोरबा	पाली	भण्डारखोल	भीखापारा	5	2	2	0	0	0	0	
155	कोरबा	पाली	भण्डारखोल	गुडमार	4	4	4	0	0	0	0	
156	कोरबा	पाली	भण्डारखोल	धनुहारपारा	2	1	1	0	0	0	0	
157	कोरबा	पाली	छाबीबाडी	छाबीबाडी	3	1	1	0	0	0	0	
158	कोरबा	पाली	छाबीबाडी	बिरगवा	1	1	1	0	0	0	0	
159	कोरबा	पाली	कपोट	कपोट	12	6	6	0	0	0	1	
160	कोरबा	पाली	कपोट	बेलडीह	4	2	2	0	0	0	0	
161	कोरबा	पाली	कपोट	नयापारा	4	3	3	0	0	0	0	
162	कोरबा	पाली	कपोट	दमनाकुण्डा	3	1	1	0	0	0	0	
163	कोरबा	पाली	कपोट	तेन्दुभाल	2	1	1	0	0	0	0	
164	कोरबा	पाली	कपोट	सोनवरीडीह	9	2	1	1	0	1	0	
165	कोरबा	पाली	कपोट	सलिहापारा	2	2	2	0	0	0	0	
166	कोरबा	पाली	सेन्दरीपानी	रकसपारा	4	1	1	0	0	0	0	
167	कोरबा	पाली	कुसरकछार	कछारपारा	3	2	2	0	0	0	1	
168	कोरबा	पाली	भेड़कछार	भेड़कछार	6	5	5	0	0	0	0	
169	कोरबा	पाली	पटपत	पटपत	8	1	1	0	0	0	0	
170	कोरबा	पाली	पटपत	बखईपारा	4	2	2	0	0	0	0	
171	कोरबा	पाली	पटपत	बदमीडा	4	1	1	0	0	0	0	
172	कोरबा	पाली	पटपत	बलकीपारा	3	1	1	0	0	0	0	
173	कोरबा	पाली	पटपत	दाहीडुग्गु	3	1	1	0	0	0	0	
174	कोरबा	पाली	पोटापानी	पोटापानी	8	2	2	0	0	0	0	
175	कोरबा	पाली	पोटापानी	परिसनहापारा	2	1	1	0	0	0	0	
176	कोरबा	पाली	पोटापानी	बरडुग्गु	2	1	1	0	0	0	0	
177	कोरबा	पाली	पोटापानी	सोनईपुर	2	2	1	1	0	1	0	
178	कोरबा	पाली	सिंघपुर	कर्तनारा	6	2	2	0	0	1	1	
179	कोरबा	पाली	सरईसिंगार	सरईसिंगार	9	1	1	0	0	1	0	
180	कोरबा	पाली	खेपा	खेपा	8	2	2	0	0	0	0	
181	कोरबा	पाली	खेपा	डुमुपारा–II	2	1	1	0	0	1	0	
182	कोरबा	पाली	खेपा	डुमुपारा–III	3	2	2	0	0	0	0	
183	कोरबा	पाली	डुमुपारा	डुमुपारा–II	3	1	0	1	0	1	0	
184	कोरबा	पोड़ीउपरोड़ा	लैंगा	लैंगा	20	1	1	0	0	0	0	
185	कोरबा	पोड़ीउपरोड़ा	तनीमोर	पुनपुटटीपारा	3	1	1	0	0	0	0	
186	कोरबा	पोड़ीउपरोड़ा	पुलबुल	पुलबुल	6	1	1	0	0	0	0	
187	कोरबा	पोड़ीउपरोड़ा	पुलबुल	अहीरपारा	2	1	0	1	0	1	0	
188	कोरबा	पोड़ीउपरोड़ा	पुलबुल	धनुहारपारा	3	1	1	0	0	0	0	
189	कोरबा	पोड़ीउपरोड़ा	बारीनवागांव	धानपुर	3	1	1	0	0	0	0	
190	कोरबा	पोड़ीउपरोड़ा	सरिसमाड़ा	बगदुवी	1	1	1	0	0	0	0	

-99-

क्र	जिला	विकासखण्ड का नाम	प्रभावित ग्राम का नाम	प्रभावित बसाहट का नाम	कुल स्त्रोतों की संख्या	फ्लोराईड से प्रभावित स्त्रोतों की संख्या	विभाग द्वारा की गई कार्यवाही					रिमार्क
							बंद किये गये फ्लोराईड स्त्रोत की संख्या	स्थापित FMP की संख्या	स्थल जल प्रदाय योजनाओं से जल प्रदाय किये जाने वाले प्रभावित ग्रामों की संख्या	सोलर पम्प के माध्यम से जल प्रदाय किये जाने वाले प्रभावित बसाहट की संख्या	नलजल प्रदाय योजनाओं से जल प्रदाय किये जाने वाले प्रभावित ग्रामों की संख्या	
1	2	3	4	5	6	7	8	9	10	11	12	13
191	कोरबा	पोड़ीउपरोड़ा	नवागढ़ा	नवागढ़	9	3	3	0	0	0	0	
192	कोरबा	पोड़ीउपरोड़ा	आमटिकरा	आमटिकरा	17	4	0	4	0	1	0	
193	कोरबा	पोड़ीउपरोड़ा	हरदीबहार	हरदीबहार	3	2	2	0	0	0	0	
194	कोरबा	पोड़ीउपरोड़ा	अटारी	अटारी	9	4	4	0	0	0	0	
195	कोरबा	पोड़ीउपरोड़ा	कोरकी	खजुराघाट	3	2	1	1	0	0	0	
196	कोरबा	पोड़ीउपरोड़ा	कोरकी	बजरंगघाट	4	1	0	1	0	0	0	
197	कोरबा	पोड़ीउपरोड़ा	कोरकी	मौहारघाट	2	2	1	1	0	1	0	
198	कोरबा	पोड़ीउपरोड़ा	कोरकी	इंदिरानगरघाट	2	1	1	0	0	1	0	
199	कोरबा	पोड़ीउपरोड़ा	कोरकी	बस स्टाक	2	1	1	0	0	1	0	
200	कोरबा	पोड़ीउपरोड़ा	कोरकी	डोरवीपारा	2	1	1	0	0	1	0	
201	कोरबा	पोड़ीउपरोड़ा	कोरकी	खुरपारा	4	1	1	0	0	0	0	
202	कोरबा	पोड़ीउपरोड़ा	सेमरा	बमपाटोरा	3	1	1	0	0	1	0	
203	कोरबा	पोड़ीउपरोड़ा	सेमरा	सेमरा	7	3	3	0	0	0	0	
204	कोरबा	पोड़ीउपरोड़ा	सेमरा	बैरागघाट	3	3	3	0	0	0	0	
205	कोरबा	पोड़ीउपरोड़ा	सेमरा	जुनाटोला	5	3	2	1	0	1	0	
206	कोरबा	पोड़ीउपरोड़ा	बेलिहारपाली	बेलिहारपाली	7	2	1	1	0	1	0	
207	कोरबा	पोड़ीउपरोड़ा	पुटीपलना	लालमाटी	1	1	1	0	0	0	0	
208	कोरबा	पोड़ीउपरोड़ा	सहोली	नाकाघाट	5	1	0	1	0	1	0	
209	कोरबा	पोड़ीउपरोड़ा	खतिरखाम	खतिरा	15	1	0	1	0	1	0	
210	कोरबा	पोड़ीउपरोड़ा	खतिरखाम	घोघनघाट	3	2	0	2	0	1	0	
211	कोरबा	पोड़ीउपरोड़ा	बर्रा	बर्रा	9	5	5	0	0	0	0	
212	कोरबा	पोड़ीउपरोड़ा	उमरेना	उमरेना	13	1	1	0	0	0	0	
213	कोरबा	पोड़ीउपरोड़ा	भौंराघाट	भौंराघाट	2	1	0	1	0	1	0	
214	कोरबा	पोड़ीउपरोड़ा	बिझरा	पण्डीघाट	1	1	0	1	0	1	0	
215	कोरबा	पोड़ीउपरोड़ा	बिझरा	बिझरीघाट	1	1	1	0	0	0	0	
216	कोरबा	पोड़ीउपरोड़ा	बिझरा	बौराघाट	5	1	1	0	0	1	0	
217	कोरबा	पोड़ीउपरोड़ा	बिझरा	लोहारघाट	4	2	1	1	0	0	0	
218	कोरबा	पोड़ीउपरोड़ा	बिझरा	पड़वेमाली	4	1	1	0	0	0	0	
219	कोरबा	पोड़ीउपरोड़ा	दमउडुमरा	पण्डीपारा	4	1	1	0	0	0	0	
220	कोरबा	पोड़ीउपरोड़ा	गोटिया	टिकरापारा	1	1	0	1	0	1	0	
221	कोरबा	पोड़ीउपरोड़ा	लमना	लमना	10	1	1	0	0	0	0	
222	कोरबा	पोड़ीउपरोड़ा	लमना	कम्पोटिकरा	5	1	1	0	0	1	0	
223	कोरबा	पोड़ीउपरोड़ा	लमना	भर्रीटिकरा	2	1	1	0	0	0	0	
224	कोरबा	पोड़ीउपरोड़ा	फुलसर	फुलसर	7	3	0	3	0	1	0	
225	कोरबा	पोड़ीउपरोड़ा	फुलसर	पदतराईपारा	2	2	1	1	0	1	0	
226	कोरबा	पोड़ीउपरोड़ा	फुलसर	अलगपिपरा	1	1	1	0	0	1	0	
227	कोरबा	पोड़ीउपरोड़ा	फुलसर	गोटिकाचारा	3	1	0	1	0	1	0	
228	कोरबा	पोड़ीउपरोड़ा	चाड़ी	छापरघाट	3	1	1	0	0	1	0	
229	कोरबा	पोड़ीउपरोड़ा	बांगी	पलटिकाचारा	2	2	2	0	0	0	0	

क्रमांक	जिला	विकासखण्ड का नाम	प्रभावित ग्राम का नाम	प्रभावित बसाहट का नाम	कुल स्त्रोतों की संख्या	फ्लोराईड से प्रभावित स्त्रोतों की संख्या	विभाग द्वारा की गई कार्यवाही					रिमार्क
							बंद किये गये फ्लोराईड स्त्रोत की संख्या	स्थापित FRP की संख्या	सरल जल प्रदाय योजनाओं से जल प्रदाय किये जाने वाले प्रभावित ग्रामों की संख्या	रोटेटर पम्प के माध्यम से जल प्रदाय किये जाने वाले प्रभावित बसाहट की संख्या	नलजल प्रदाय योजनाओं से जल प्रदाय किये जाने वाले प्रभावित ग्रामों की संख्या	
1	2	3	4	5	6	7	8	9	10	11	12	13
230	कोरबा	पोड़ीउपरोड़ा	पाथा	पाथा	4	2	2	0	0	0	0	
231	कोरबा	पोड़ीउपरोड़ा	पाथा	डोंगहरी	1	1	1	0	0	0	0	
232	कोरबा	पोड़ीउपरोड़ा	बोड़ामाल	बोड़ामाल	5	2	2	0	0	0	0	
233	कोरबा	पोड़ीउपरोड़ा	दर्रीघाट	दर्रीघाट	6	1	1	0	0	0	0	
234	कोरबा	पोड़ीउपरोड़ा	घुटुआ	आमाघाट	2	2	1	1	0	1	0	
235	कोरबा	पोड़ीउपरोड़ा	बरबसपुर	बरबसपुर	11	1	1	0	0	0	0	
236	कोरबा	पोड़ीउपरोड़ा	पोड़ीउपरोड़ा	पोड़ीउपरोड़ा	14	1	1	0	0	1	0	
237	कोरबा	पोड़ीउपरोड़ा	पचरा	पचरा	9	1	1	0	0	0	0	
238	कोरबा	पोड़ीउपरोड़ा	पचरा	गड़ाडोड़ा	6	3	3	0	0	0	0	
239	कोरबा	पोड़ीउपरोड़ा	करगामार	छापेपारा	4	1	1	0	0	0	0	
240	कोरबा	पोड़ीउपरोड़ा	अमहरा	अमहरा	3	2	2	0	0	0	0	
241	कोरबा	पोड़ीउपरोड़ा	अमहरा	कटोरीडाड	2	2	2	0	0	0	0	
242	कोरबा	पोड़ीउपरोड़ा	अमहरा	बैगाडाड	1	1	1	0	0	0	0	
243	कोरबा	पोड़ीउपरोड़ा	अमहरा	दुरपाखंड	2	2	2	0	0	0	0	
244	कोरबा	पोड़ीउपरोड़ा	लरीमजरी	बनखेता	2	1	1	0	0	0	0	
245	कोरबा	पोड़ीउपरोड़ा	पुरैनिया	झलियामुड़ा	4	1	1	0	0	0	0	
246	कोरबा	पोड़ीउपरोड़ा	पुरैनिया	कोरबापारा	5	1	0	1	0	0	0	
247	कोरबा	पोड़ीउपरोड़ा	पाथ	पथियाखार	3	2	1	1	0	1	0	
248	कोरबा	पोड़ीउपरोड़ा	पुचनीडाड	पोथरीपाट	4	2	2	0	0	0	0	
249	कोरबा	पोड़ीउपरोड़ा	बनखेता	बनखेता	5	1	1	0	0	0	0	
250	कोरबा	पोड़ीउपरोड़ा	बनखेता	लसनीपारा	2	1	1	0	0	0	0	
251	कोरबा	पोड़ीउपरोड़ा	पोड़ीगोरसाई	खोगरमाता	1	1	1	0	0	0	0	
252	कोरबा	पोड़ीउपरोड़ा	पोड़ीगोरसाई	दुधुपारा	2	1	0	1	0	1	0	
253	कोरबा	पोड़ीउपरोड़ा	पोसमुड़ा	पोसमुड़ा	3	1	0	1	0	0	0	
254	कोरबा	पोड़ीउपरोड़ा	पोड़ीखुर्द	टुरीमार	12	1	0	1	0	0	0	
255	कोरबा	पोड़ीउपरोड़ा	पोड़ीखुर्द	डोंगाखार	2	1	0	1	0	1	0	
256	कोरबा	पोड़ीउपरोड़ा	पोड़ीखुर्द	टुरीमार-2	1	1	0	1	0	1	0	
257	कोरबा	पोड़ीउपरोड़ा	अमलीखुण्डा	अमलीखुण्डा	9	1	1	0	0	1	0	
258	कोरबा	पोड़ीउपरोड़ा	कटोरीनगोई	कटोरीनगोई	7	1	1	0	0	0	0	
259	कोरबा	पोड़ीउपरोड़ा	कापनकापारा	कापनकापारा	3	3	3	0	0	1	0	
260	कोरबा	पोड़ीउपरोड़ा	परसा	परसा	12	3	3	0	0	1	0	
261	कोरबा	पोड़ीउपरोड़ा	परसा	सड़कपारा	3	3	2	1	0	1	0	
262	कोरबा	पोड़ीउपरोड़ा	परसा	खदवापारा	3	1	0	1	0	0	0	
263	कोरबा	पोड़ीउपरोड़ा	जलके	तिलईकुण्डी	7	1	1	0	0	1	0	
264	कोरबा	पोड़ीउपरोड़ा	जलके	जमतीपारा	2	1	0	1	0	1	0	
265	कोरबा	पोड़ीउपरोड़ा	जलके	बलवाहा	4	1	1	0	0	0	0	
266	कोरबा	पोड़ीउपरोड़ा	जलके	माटीपारा	1	1	0	1	0	0	0	
267	कोरबा	पोड़ीउपरोड़ा	कोसमपुर	कोसमपुर	6	1	1	0	0	0	0	
268	कोरबा	पोड़ीउपरोड़ा	कोसमपुर	झरियापारा	5	1	1	0	0	0	0	

क्र	जिला	विकासखण्ड का नाम	प्रभावित ग्राम का नाम	प्रभावित बसाहट का नाम	कुल स्त्रोतों की संख्या	फ्लोराईड से प्रभावित स्त्रोतों की संख्या	विभाग द्वारा की गई कार्यवाही					रिमार्क
							बंद किये गये फ्लोराईड स्त्रोत की संख्या	स्थापित FRP की संख्या	स्थल जल प्रदाय योजनाओं से जल प्रदाय किये जाने वाले प्रभावित ग्रामों की संख्या	सौलर पम्प के माध्यम से जल प्रदाय किये जाने वाले प्रभावित बसाहट की संख्या	जलजल प्रदाय योजनाओं से जल प्रदाय किये जाने वाले प्रभावित ग्रामों की संख्या	
1	2	3	4	5	6	7	8	9	10	11	12	13
269	कोरबा	पोड़ीउपरोड़ा	लमना	भालुडांगरा	2	1	1	0	0	1	0	
270	कोरबा	पोड़ीउपरोड़ा	लमना	गोरेलाडांड	6	2	0	2	0	1	0	
271	कोरबा	पोड़ीउपरोड़ा	आमाडोबरा	कोंदाटोला	3	1	1	0	0	0	0	
272	कोरबा	पोड़ीउपरोड़ा	सिरकी	सिरकी	1	1	0	1	0	1	0	
273	कोरबा	पोड़ीउपरोड़ा	बेल	बेल	9	3	3	0	0	0	0	
274	कोरबा	पोड़ीउपरोड़ा	बेल	उतरदा	4	4	4	0	0	0	0	
275	कोरबा	पोड़ीउपरोड़ा	बेल	बरहाडांड	2	1	0	1	0	0	0	
276	कोरबा	पोड़ीउपरोड़ा	बेल	धनरीगढ़ई	1	1	1	0	0	0	0	
277	कोरबा	पोड़ीउपरोड़ा	पोड़ीकला	पोड़ीकला	11	7	5	2	0	1	0	
278	कोरबा	पोड़ीउपरोड़ा	पोड़ीकला	तुपाखरा	5	2	1	1	0	1	0	
279	कोरबा	पोड़ीउपरोड़ा	पोड़ीकला	पुहना	5	1	1	0	0	0	0	
280	कोरबा	पोड़ीउपरोड़ा	सैला	सैला	8	2	1	1	0	1	0	
281	कोरबा	पोड़ीउपरोड़ा	सैला	दमउआमरा	1	1	1	0	0	0	0	
282	कोरबा	पोड़ीउपरोड़ा	कुलहरिया	कुलहरिया	8	1	1	0	0	0	0	
283	कोरबा	पोड़ीउपरोड़ा	मलदा	मलदा	11	5	5	0	0	0	0	
284	कोरबा	पोड़ीउपरोड़ा	मलदा	मगजीह	5	1	1	0	0	0	0	
285	कोरबा	पोड़ीउपरोड़ा	मलदा	लाक्षीपारा	3	2	2	0	0	0	0	
286	कोरबा	पोड़ीउपरोड़ा	लाद	सरईटिकरा	3	1	0	1	0	1	0	
287	कोरबा	पोड़ीउपरोड़ा	अम्बार	बुदेली	2	2	1	1	0	1	0	
288	कोरबा	पोड़ीउपरोड़ा	गेण्डई	गेण्डई	13	3	3	0	0	0	0	
289	कोरबा	पोड़ीउपरोड़ा	गेण्डई	बगदरीडाड	1	1	1	0	0	0	0	
290	कोरबा	पोड़ीउपरोड़ा	गेण्डई	कोतदटोला	3	2	2	0	0	0	0	
291	कोरबा	पोड़ीउपरोड़ा	गुहुरा	गुहुरा	13	4	3	1	0	1	0	
292	कोरबा	पोड़ीउपरोड़ा	गुहुरा	सड़कपारा	3	1	1	0	0	1	0	
293	कोरबा	पोड़ीउपरोड़ा	सुखरीडांड	सुखरीडांड	3	1	1	0	0	0	0	
294	कोरबा	पोड़ीउपरोड़ा	लरमा	लरमा	5	1	1	0	0	0	0	
295	कोरबा	पोड़ीउपरोड़ा	लरमा	माड़ीपारा	3	1	0	1	0	1	0	
296	कोरबा	पोड़ीउपरोड़ा	लरमा	इदिगआमरा	1	1	1	0	0	0	0	
297	कोरबा	पोड़ीउपरोड़ा	लमलई	बलहोडहा	4	1	1	0	0	0	0	
298	कोरबा	पोड़ीउपरोड़ा	पिपरिया	लीपाखपरा	8	1	1	0	0	0	0	
299	कोरबा	पोड़ीउपरोड़ा	पिपरिया	पखरापारा	4	2	2	0	0	1	0	
300	कोरबा	पोड़ीउपरोड़ा	ओडगार	ओडगार	9	1	1	0	0	0	0	
301	कोरबा	पोड़ीउपरोड़ा	ओडगार	पहाड़पारा	2	1	1	0	0	0	0	
302	कोरबा	पोड़ीउपरोड़ा	ओडगार	लालखोरी	4	4	4	0	0	0	0	
303	कोरबा	पोड़ीउपरोड़ा	कुसहीसानी	बुदियाटोला	4	1	1	0	0	0	0	
304	कोरबा	पोड़ीउपरोड़ा	दुलसापुर	दुलसापुर	10	2	2	0	0	0	0	
305	कोरबा	पोड़ीउपरोड़ा	दुलसापुर	लोधनसाई	1	1	1	0	0	0	0	
306	कोरबा	पोड़ीउपरोड़ा	दुलसापुर	दर्रीपुरा	4	1	0	1	0	1	0	
307	कोरबा	पोड़ीउपरोड़ा	पाली	पिपरभुड्डा	5	2	2	0	0	0	0	

	जिला	विकासखण्ड का नाम	प्रभावित ग्राम का नाम	प्रभावित बसाहट का नाम	कुल स्त्रोतों की संख्या	फ्लोराईड से प्रभावित स्त्रोतों की संख्या	विभाग द्वारा की गई कार्यवाही					रिमार्क
							बंद किये गये फ्लोराईड स्त्रोत की संख्या	स्थापित RRP की संख्या	स्वजल जल प्रदाय योजनाओं से जल प्रदाय किये जाने वाले प्रभावित ग्रामों की संख्या	सोलर पम्प के माध्यम से जल प्रदाय किये जाने वाले प्रभावित बसाहट की संख्या	नलजल प्रदाय योजनाओं से जल प्रदाय किये जाने वाले प्रभावित ग्रामों की संख्या	
1	2	3	4	5	6	7	8	9	10	11	12	13
308	कोरबा	पोंडीउपरोड़ा	बिनपुरी	बिनपुरी	13	2	1	1	0	0	0	
309	कोरबा	पोंडीउपरोड़ा	बिनपुरी	पिंडुलटम	2	1	1	0	0	1	0	
310	कोरबा	पोंडीउपरोड़ा	बिनपुरी	नवागपारा	2	1	0	1	0	1	0	
311	कोरबा	पोंडीउपरोड़ा	पेंडरवानी	खालपाट	1	1	1	0	0	0	0	
312	कोरबा	पोंडीउपरोड़ा	खोडरी	लहंगा बहरा	2	1	0	1	0	1	0	
313	कोरबा	पोंडीउपरोड़ा	मिरिगा	मिरिगा	8	1	1	0	0	0	0	
314	कोरबा	पोंडीउपरोड़ा	मिरिगा	पटेजपाट	3	1	1	0	0	0	0	
315	कोरबा	पोंडीउपरोड़ा	बनिया	बनिया	6	1	1	0	0	0	0	
316	कोरबा	पोंडीउपरोड़ा	बनिया	दधिपारा	1	1	0	1	0	1	0	
317	कोरबा	पोंडीउपरोड़ा	बनिया	लखाईटिकरा	1	1	1	0	0	0	0	
318	कोरबा	पोंडीउपरोड़ा	बनिया	ईमलीटिकरा	2	1	1	0	0	0	0	
319	कोरबा	पोंडीउपरोड़ा	बनिया	तिहाईपारा	1	1	0	1	0	1	0	
320	कोरबा	पोंडीउपरोड़ा	धजाक	पकरीपाट	2	1	0	1	0	1	0	
		योग :-	169	320	1677	511	411	100	3	118	11	
1	रायगढ़	घरघोड़ा	बटुराकछार	मुरझवरती	16	5	2	3	0	0	1	
2	रायगढ़	घरघोड़ा	कया	गाडाबहरी	3	1	0	1	0	0	0	
3	रायगढ़	घरघोड़ा	दनौट	आतारपारा	4	1	0	1	0	1	0	
4	रायगढ़	जैतूगा	घवरपुर	पकरीपारा	3	1	0	1	0	0	0	
5	रायगढ़	जैतूगा	विराईडार	मुरझवरती	5	2	1	1	0	0	0	
6	रायगढ़	जैतूगा	विराईडार	नदीडीपा	2	1	0	1	0	1	0	
7	रायगढ़	तमनार	सारंडे	सिदारपारा	3	1	0	1	0	0	1	
8	रायगढ़	तमनार	मुरझगाव	मुरझवरती	16	11	9	2	0	0		
9	रायगढ़	तमनार	मुरझगाव	झेराडीपा	3	2	1	1	0	0	1	
10	रायगढ़	तमनार	मुरझगाव	उरावपारा	5	1	1	0	0	0		
11	रायगढ़	तमनार	सराईटोला	सराईटोला	19	14	12	2	0	0	1	
12	रायगढ़	तमनार	पाता	पाता	16	9	8	1	0	0	1	
13	रायगढ़	तमनार	पाता	बाधापाली	12	1	1	0	0	0		
		योग :-	9	13	109	50	35	15	0	2	5	
1	रायगढ़- बिलाईगढ़	खरगढ़	कनकबीरा	आनंदबाती	1	1	1	0	0	0	0	
2	रायगढ़- बिलाईगढ़	खरगढ़	कनकबीरा	जीपपारा हाई स्कूल	1	1	0	1	0	0	0	
3	रायगढ़- बिलाईगढ़	खरगढ़	कटाउपाली-ब	प्राथमिक शाला	1	1	0	1	0	0	1	
		योग :-	2	3	3	3	1	2	0	0	1	
1	रायगढ़	अधिकपुर	कनै	बजरडांड	3	1	0	1	0	0	0	
2	रायगढ़	अधिकपुर	सुन्दरपुर	हरिजनपारा	4	1	0	1	0	0	0	

क्र	जिला	विकासखण्ड का नाम	प्रभावित ग्राम का नाम	प्रभावित बसाहट का नाम	कुल स्त्रोतों की संख्या	फ्लोराईड से प्रभावित स्त्रोतों की संख्या	विभाग द्वारा की गई कार्यवाही					रिमार्क
							बंद किये गये फ्लोराईड स्त्रोत की संख्या	स्थापित RWP की संख्या	स्थल जल प्रदाय योजनाओं से जल प्रदाय किये जाने वाले प्रभावित ग्रामों की संख्या	सोलर पम्प के माध्यम से जल प्रदाय किये जाने वाले प्रभावित बसाहट की संख्या	नलजल प्रदाय योजनाओं से जल प्रदाय किये जाने वाले प्रभावित ग्रामों की संख्या	
2	3	4	5	6	7	8	9	10	11	12	13	
3	सरगुजा	अम्बिकापुर	सुरजपुर	पश्चिमपारा	4	1	0	1	0	0	0	
4	सरगुजा	अम्बिकापुर	नानदमाली	स्कूलपारा	3	1	0	1	0	0	0	
5	सरगुजा	अम्बिकापुर	नानदमाली	बाकियापारा	6	2	0	2	0	0	0	
6	सरगुजा	अम्बिकापुर	नानदमाली	पहाड़ीपारा	4	2	0	2	0	0	0	
7	सरगुजा	अम्बिकापुर	नानदमाली	बघपारा	2	1	1	0	0	0	0	
8	सरगुजा	अम्बिकापुर	फतेहपुर	मिंयापारा	5	1	0	1	1	0	0	
9	सरगुजा	अम्बिकापुर	फतेहपुर	भगहापारा	8	1	0	1	0	0	0	
10	सरगुजा	अम्बिकापुर	मुड़ेगा	खालपारा	5	1	0	1	0	0	0	
11	सरगुजा	अम्बिकापुर	मुड़ेगा	मुड़ापारा	2	1	0	1	0	0	0	
12	सरगुजा	अम्बिकापुर	रजदुरीखुर्द	सरईपारा	5	1	0	1	1	0	0	
13	सरगुजा	अम्बिकापुर	खैरवार	अमेरादुमु	5	1	0	1	0	0	0	
14	सरगुजा	अम्बिकापुर	खैरवार	जरीदाहरिया	4	1	0	1	0	0	0	
15	सरगुजा	अम्बिकापुर	खैरवार	खालपारा	5	1	0	1	0	0	0	
16	सरगुजा	अम्बिकापुर	भगौली	उदयपारा	4	1	0	1	0	0	0	
17	सरगुजा	अम्बिकापुर	सोनपुरखुर्द	खालपारा	3	1	0	1	0	0	0	
18	सरगुजा	अम्बिकापुर	जरनडा	खालपारा	6	1	0	1	0	0	1	
19	सरगुजा	अम्बिकापुर	बालीपुर	भगहापारा	3	1	0	1	1	0	0	
20	सरगुजा	अम्बिकापुर	बड़ादमाली	बैगापारा	4	1	0	1	0	0	0	
21	सरगुजा	अम्बिकापुर	बड़ादमाली	पठीहापारी	3	2	1	1	0	0	0	
22	सरगुजा	अम्बिकापुर	लमपुरकली	मझापारा	6	1	0	1	0	0	0	
23	सरगुजा	अम्बिकापुर	इन्दरपुर	उदयपारा	4	1	0	1	0	0	0	
24	सरगुजा	अम्बिकापुर	इन्दरपुर	पंडिहापारा	5	1	0	1	0	0	0	
25	सरगुजा	अम्बिकापुर	लमना	पटेलपारा	6	1	1	0	0	0	0	
26	सरगुजा	अम्बिकापुर	बलगवा	बलगवा	3	2	2	0	0	1	0	
27	सरगुजा	अम्बिकापुर	कुरेलपुर	खालपारा	2	1	1	0	0	0	0	
28	सरगुजा	अम्बिकापुर	मोहनपुर	बैगापारा	2	1	1	0	0	0	0	
29	सरगुजा	अम्बिकापुर	मोहनपुर	लोहारीगली	2	1	1	0	0	0	0	
30	सरगुजा	अम्बिकापुर	सिंघपटना	खालपारा	2	1	1	0	0	0	0	
31	सरगुजा	अम्बिकापुर	नवानगर	पुरहिहाड़	2	1	1	0	0	0	0	
32	सरगुजा	अम्बिकापुर	कजरी	मझापारा	5	1	0	1	0	0	1	
33	सरगुजा	लखनपुर	तुनतुरी	खालपारा	3	1	0	1	0	0	0	
34	सरगुजा	लखनपुर	गणेशपुर	खालपारा	2	2	1	1	0	0	0	
35	सरगुजा	लखनपुर	गणेशपुर	गाईपारा	1	1	0	1	0	0	0	
36	सरगुजा	लखनपुर	लखनपुर	खालपारा	3	1	0	1	0	0	0	
37	सरगुजा	लखनपुर	पुकमुटरा	खालपारा	7	1	0	1	0	0	0	
38	सरगुजा	लखनपुर	पुकमुटरा	खालपारा	7	2	1	1	0	0	0	
39	सरगुजा	लखनपुर	पुकमुटरा	बरगवाहारा	4	1	0	1	0	0	0	
40	सरगुजा	लखनपुर	खम्हरी	खालपारा	5	1	0	1	1	1	0	
41	सरगुजा	लखनपुर	सोनपरा	जुनगपारा	3	2	1	1	1	0	0	

	जिला	विकासखण्ड का नाम	प्रभावित ग्राम का नाम	प्रभावित बसाहट का नाम	कुल स्त्रोतों की संख्या	फ्लोराईड से प्रभावित स्त्रोतों की संख्या	विभाग द्वारा की गई कार्यवाही					रिमार्क
							बंद किये गये फ्लोराईड स्त्रोत की संख्या	स्थापित FMP की संख्या	स्थल जल प्रदाय योजनाओं से जल प्रदाय किये जाने वाले प्रभावित ग्रामों की संख्या	सोलर पम्प के माध्यम से जल प्रदाय किये जाने वाले प्रभावित बसाहट की संख्या	नलजल प्रदाय योजनाओं से जल प्रदाय किये जाने वाले प्रभावित ग्रामों की संख्या	
1	2	3	4	5	6	7	8	9	10	11	12	13
42	सरगुजा	लखनपुर	सोंदरा	खालसापारा ग्राम	3	2	0	2	0	0	0	
43	सरगुजा	लखनपुर	सोंदरा	खालसापारा	4	2	1	1	0	0	0	
44	सरगुजा	लखनपुर	सोंदरा	खालसापारा	5	2	1	1	0	0	0	
45	सरगुजा	लखनपुर	सोंदरा	मिशनखिलापारा	4	2	1	1	0	0	0	
46	सरगुजा	लखनपुर	मुकुन्दपुर	खालसापारा	5	1	0	1	0	0	0	
47	सरगुजा	लखनपुर	मुकुन्दपुर	स्कूलपारा	5	2	0	2	0	0	0	
48	सरगुजा	लखनपुर	खुशु	बंगपारा	6	2	0	2	1	0	0	
49	सरगुजा	लखनपुर	खुशु	गढ़िमाईटिकरा	4	2	0	2	0	0	0	
50	सरगुजा	लखनपुर	खुशु	शंकरपारा	6	1	0	1	0	0	0	
51	सरगुजा	लखनपुर	अमदला	खालसापारा	3	1	0	1	0	0	0	
52	सरगुजा	लखनपुर	मेरखोलिया	मंझियापारा	3	1	0	1	0	0	0	
53	सरगुजा	लखनपुर	गोरेखापीपर	बलराजपारा	4	2	1	1	0	0	0	
54	सरगुजा	लखनपुर	गोरेखापीपर	खालसापारा	3	1	0	1	0	0	0	
55	सरगुजा	लखनपुर	पुटा	खालसापारा	4	1	0	1	0	0	0	
56	सरगुजा	लखनपुर	पुटा	गंडिलपारा	3	1	0	1	0	0	0	
57	सरगुजा	लखनपुर	जमपुर	रजवटियापारा	4	2	1	1	0	0	0	
58	सरगुजा	लखनपुर	किलीलाना	खालसापारा	4	3	1	2	0	0	0	
59	सरगुजा	लुण्ड्रा	करेरूम	खालसापारा	5	1	0	1	0	1	0	
60	सरगुजा	लुण्ड्रा	आलगवा	अहीरपारा	3	1	0	1	0	0	0	
61	सरगुजा	लुण्ड्रा	उदयडीह	खालसापारा	3	1	0	1	0	0	0	
62	सरगुजा	लुण्ड्रा	अजोरी	डिरोपारा	9	1	0	1	0	0	0	
63	सरगुजा	लुण्ड्रा	अजोरी	खालसापारा	4	1	1	0	1	0	0	
64	सरगुजा	लुण्ड्रा	पैरसा	सरकारपारा	4	1	0	1	0	0	0	
65	सरगुजा	लुण्ड्रा	दुन्दु	खालसापारा	6	1	0	1	0	0	0	
66	सरगुजा	लुण्ड्रा	बुलगा	सरईपारा	7	1	0	1	0	0	0	
67	सरगुजा	लुण्ड्रा	अजिरमा	मझापारा	8	6	1	5	0	0	0	
68	सरगुजा	लुण्ड्रा	अजिरमा	डूमरपारा	3	2	1	1	0	0	0	
69	सरगुजा	लुण्ड्रा	पिरमा	सेमरपारा	4	3	1	2	0	0	0	
70	सरगुजा	लुण्ड्रा	लुण्ड्रा	मझापारा	3	1	0	1	0	0	0	
71	सरगुजा	लुण्ड्रा	सतनपुर	आमपारा	5	1	0	1	0	0	0	
72	सरगुजा	बतौली	बासेन	खालसापारा	8	1	0	1	0	0	0	
73	सरगुजा	बतौली	बिरिंगकोना	लरवाकोना	3	1	0	1	0	0	0	
74	सरगुजा	बतौली	नयाबांध	लोगाकोना	3	1	0	1	0	0	0	
75	सरगुजा	बतौली	बिजुनपुर	सिविलपारा	2	1	1	0	0	0	0	
76	सरगुजा	बतौली	तोलहिया	बसेपुटकोना खास	4	1	0	1	1	0	0	
77	सरगुजा	बतौली	तोलहिया	पुटुकोना	4	1	0	1	0	1	0	
78	सरगुजा	मैनपाट	डोगबुडा	खोजनापारा	4	1	1	0	0	0	0	
79	सरगुजा	मैनपाट	जजगा	खालसापारा	9	1	0	1	0	0	0	
80	सरगुजा	मैनपाट	जामडोबी	पुटुखापारा	3	1	1	0	0	0	0	
81	सरगुजा	मैनपाट	अमाआरो	घटटाखापारा	4	1	1	0	0	0		

-72-

क्र.	जिला	विकासखण्ड का नाम	प्रभावित ग्राम का नाम	प्रभावित बसाहट का नाम	कुल स्त्रोतों की संख्या	फ्लोराईड से प्रभावित स्त्रोतों की संख्या	विभाग द्वारा की गई कार्यवाही					रिमार्क
							बंद किये गये फ्लोराईड स्त्रोत की संख्या	स्थापित FRP की संख्या	स्थल जल प्रदाय योजनाओं से जल प्रदाय किये जाने वाले प्रभावित ग्रामों की संख्या	सोलर पम्प के माध्यम से जल प्रदाय किये जाने वाले प्रभावित बसाहट की संख्या	गलजल प्रदाय योजनाओं से जल प्रदाय किये जाने वाले प्रभावित ग्रामों की संख्या	
1	2	3	4	5	6	7	8	9	10	11	12	13
82	सलूम्बर	कैलाशपुरी	कदमाल	खारोलाव	13	2	2	0	0	0		
83	सलूम्बर	कैलाशपुरी	कदमाल	टिकाखेरा	2	1	1	0	0	0	0	
84	सलूम्बर	कैलाशपुरी	कोटडाखेरा	सदियाखोड़ी	5	2	1	1	0	0	0	
85	सलूम्बर	कैलाशपुरी	उदयकोना	आमाखेरा	3	1	1	0	0	0	1	
86	सलूम्बर	कैलाशपुरी	उदयकोना	बैपाखेरा	3	1	1	0	0	0		
87	सलूम्बर	कैलाशपुरी	उदयकोना	कालेडाखेरा	2	1	1	0	0	0	0	
88	सलूम्बर	कैलाशपुरी	रामलेरा	जामडारिया	3	1	1	0	0	0	0	
89	सलूम्बर	कैलाशपुरी	पैनपुर	खारापारा	3	1	0	1	0	0	0	
90	सलूम्बर	सीतापुर	मुतुरणा	खारोलाव	15	1	1	0	0	0	1	
91	सलूम्बर	सीतापुर	कुनेरिया	लेन्दूखाना	4	1	0	1	0	0	0	
92	सलूम्बर	सीतापुर	कुनेरिया	गाडाईपारा	4	1	0	1	0	0	0	
93	सलूम्बर	सीतापुर	कुनेरिया	कदमाल	4	1	0	1	0	0	0	
94	सलूम्बर	सीतापुर	कुनेरिया	मैनाखाना	4	1	0	1	0	0	0	
95	सलूम्बर	सीतापुर	तिरिपिरणा	जोकीडाव	3	1	0	1	0	0	0	
96	सलूम्बर	सीतापुर	देवगढ	बरडाखा	3	1	1	0	0	0	0	
97	सलूम्बर	सीतापुर	देवगढ	कुम्हारखाना	3	2	1	1	0	0	0	
98	सलूम्बर	सीतापुर	देवगढ	नगलाडाव	2	1	1	0	0	0	0	
99	सलूम्बर	सीतापुर	देवगढ	माछाखाना	4	1	1	0	0	0	1	
100	सलूम्बर	सीतापुर	देवगढ	मोरडामाला	3	2	1	1	0	0	0	
101	सलूम्बर	सीतापुर	देवगढ	पण्डरीपाणी	4	2	1	1	0	0	0	
102	सलूम्बर	सीतापुर	देवगढ	सेमरमाला	3	2	1	1	0	0	0	
103	सलूम्बर	उदयपुर	खुंधापुर	खारोलाव	5	1	0	1	0	0	0	
104	सलूम्बर	उदयपुर	कोटरी	अमरापारा	4	2	1	1	0	0	0	
105	सलूम्बर	उदयपुर	कोटरी	खारापारा	3	1	0	1	0	0	0	
106	सलूम्बर	उदयपुर	कोटरी	अमेरापारा	3	1	0	1	0	0	0	
107	सलूम्बर	उदयपुर	दाबा	खारापारा	4	1	0	1	0	0	0	
108	सलूम्बर	उदयपुर	दाबा	घटेरापारा	2	1	1	0	0	0	0	
109	सलूम्बर	उदयपुर	सोमेरा	पीपलपारा	5	1	0	1	0	0	0	
110	सलूम्बर	उदयपुर	सोमेरा	खारापारा	8	2	0	2	0	0	0	
111	सलूम्बर	उदयपुर	पुहरणा	खारापारा	4	1	1	0	0	0	0	
112	सलूम्बर	उदयपुर	सुहरणा	पण्डोरापारा	5	2	0	2	0	0	0	
113	सलूम्बर	उदयपुर	डाबलेल	जूनापारा	5	1	0	1	0	0	0	
114	सलूम्बर	उदयपुर	डाबलेल	खारापारा	22	2	0	2	0	0	0	
115	सलूम्बर	उदयपुर	डाबलेल	मोहनपारा	5	2	0	2	0	0	0	
116	सलूम्बर	उदयपुर	डाबलेल	इन्दौरा	7	2	0	2	0	0	0	
117	सलूम्बर	उदयपुर	डाबलेल	बजारपारा	2	1	1	0	0	0	0	
118	सलूम्बर	उदयपुर	फूलपुरी	खारापारा	6	4	2	2	0	0	0	
119	सलूम्बर	उदयपुर	फूलपुरी	अमेरापारा	4	2	1	1	0	0	0	
120	सलूम्बर	उदयपुर	फूलपुरी	बैपारापारा	4	3	1	2	0	0	0	
121	सलूम्बर	उदयपुर	गुमाना	कटारोरिया पारा	6	3	0	3	0	1	0	

क्र.	जिला	विकासखण्ड का नाम	प्रभावित ग्राम का नाम	प्रभावित मकान का नाम	कुल मकानों की संख्या	प्रभावित मकानों की संख्या	किसान द्वारा की गई कार्यवाही					टिप्पणी
							जो किसी गये कार्यवाही मकान की संख्या	मकानों मकान की संख्या	मकान जहां प्रदान सीमाओं से जहां प्रदान किये जाने वाले प्रभावित ग्रामों की संख्या	सीमा एवं के मकान से जहां प्रदान किये जाने वाले प्रभावित मकानों की संख्या	पालकम प्रदान सीमाओं से जहां प्रदान किये जाने वाले प्रभावित ग्रामों की संख्या	
1	2	3	4	5	6	7	8	9	10	11	12	13
122	[illegible]	[illegible]	[illegible]	[illegible]	4	2	0	2	0	0	0	
123	[illegible]	[illegible]	[illegible]	[illegible]	4	3	1	2	0	0	0	
124	[illegible]	[illegible]	[illegible]	[illegible]	10	2	0	2	0	0	0	
125	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1	0	0	0	0	
126	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1	0	0	0	0	
127	[illegible]	[illegible]	[illegible]	[illegible]	4	2	0	2	0	0	0	
128	[illegible]	[illegible]	[illegible]	[illegible]	6	3	0	3	0	1	0	
129	[illegible]	[illegible]	[illegible]	[illegible]	2	1	1	0	0	0	0	
130	[illegible]	[illegible]	[illegible]	[illegible]	2	1	1	0	0	0	0	
131	[illegible]	[illegible]	[illegible]	[illegible]	1	1	0	1	0	0	0	
132	[illegible]	[illegible]	[illegible]	[illegible]	7	3	0	3	0	0	0	
133	[illegible]	[illegible]	[illegible]	[illegible]	3	2	1	1	0	0	1	
134	[illegible]	[illegible]	[illegible]	[illegible]	8	1	0	1	0	0	0	
135	[illegible]	[illegible]	[illegible]	[illegible]	2	1	1	0	0	0	0	
136	[illegible]	[illegible]	[illegible]	[illegible]	7	4	3	1	0	0	0	
137	[illegible]	[illegible]	[illegible]	[illegible]	3	1	1	0	0	0	0	
138	[illegible]	[illegible]	[illegible]	[illegible]	2	1	1	0	0	0	0	
139	[illegible]	[illegible]	[illegible]	[illegible]	1	1	1	0	0	0	0	
140	[illegible]	[illegible]	[illegible]	[illegible]	2	1	1	0	0	0	0	
141	[illegible]	[illegible]	[illegible]	[illegible]	2	1	1	0	0	0	0	
				योग...	427	200	64	136	0	4	7	
1	[illegible]	[illegible]	[illegible]	[illegible]	3	1	0	1	0	0	1	
2	[illegible]	[illegible]	[illegible]	[illegible]	4	1	0	1	0	0	1	
3	[illegible]	[illegible]	[illegible]	[illegible]	7	1	0	1	0	1	0	
4	[illegible]	[illegible]	[illegible]	[illegible]	4	1	0	1	0	0	1	
5	[illegible]	[illegible]	[illegible]	[illegible]	4	1	0	1	0	0	1	
6	[illegible]	[illegible]	[illegible]	[illegible]	5	1	0	1	0	0	1	
7	[illegible]	[illegible]	[illegible]	[illegible]	5	1	1	0	0	0	0	
8	[illegible]	[illegible]	[illegible]	[illegible]	2	1	0	1	0	0	1	
9	[illegible]	[illegible]	[illegible]	[illegible]	4	1	0	1	0	0	1	
10	[illegible]	[illegible]	[illegible]	[illegible]	3	1	0	1	0	0		
11	[illegible]	[illegible]	[illegible]	[illegible]	3	1	0	1	0	0	1	
12	[illegible]	[illegible]	[illegible]	[illegible]	3	1	0	1	0	0		
13	[illegible]	[illegible]	[illegible]	[illegible]	4	1	0	1	0	0		
14	[illegible]	[illegible]	[illegible]	[illegible]	4	1	0	1	0	0	1	
15	[illegible]	[illegible]	[illegible]	[illegible]	3	1	0	1	0	0		
16	[illegible]	[illegible]	[illegible]	[illegible]	3	1	0	1	0	0		
17	[illegible]	[illegible]	[illegible]	[illegible]	4	1	0	1	0	0	1	
18	[illegible]	[illegible]	[illegible]	[illegible]	3	1	0	1	0	0		
19	[illegible]	[illegible]	[illegible]	[illegible]	3	1	0	1	0	0		
20	[illegible]	[illegible]	[illegible]	[illegible]	4	1	0	1	0	0		
21	[illegible]	[illegible]	[illegible]	[illegible]	4	1	0	1	0	0		

क्र	जिला	विकासखण्ड का नाम	प्रभावित ग्राम का नाम	प्रभावित बसाहट का नाम	कुल स्त्रोतों की संख्या	फ्लोराईड से प्रभावित स्त्रोतों की संख्या	विभाग द्वारा की गई कार्यवाही					रिमार्क
							बंद किये गये फ्लोराईड स्त्रोत की संख्या	स्थापित FRP की संख्या	स्थल जल प्रदाय योजनाओं से जल प्रदाय किये जाने वाले प्रभावित वार्डों की संख्या	सोलर पम्प के माध्यम से जल प्रदाय किये जाने वाले प्रभावित बसाहट की संख्या	नलजल प्रदाय योजनाओं से जल प्रदाय किये जाने वाले प्रभावित वार्डों की संख्या	
1	2	3	4	5	6	7	8	9	10	11	12	13
22	बलरामपुर	रामचन्द्रपुर	बरवाही	पूरबपारा	3	1	0	1	0	0	1	
23	बलरामपुर	रामचन्द्रपुर	बरवाही	यादवपारा	3	1	0	1	0	0		
24	बलरामपुर	रामचन्द्रपुर	बरवाही	खालपारा	4	1	0	1	0	0		
25	बलरामपुर	रामचन्द्रपुर	बरवाही	लोहारपारा	4	1	0	1	0	0		
26	बलरामपुर	रामचन्द्रपुर	बरवाही	बजारपारा	3	1	0	1	0	0		
27	बलरामपुर	रामचन्द्रपुर	बरवाही	कोंवारपारा	4	1	0	1	0	0		
28	बलरामपुर	रामचन्द्रपुर	बरवाडीह	पकरटोला	4	1	0	1	0	0	1	
29	बलरामपुर	रामचन्द्रपुर	बरवाडीह	खालपारा	4	1	0	1	0	0		
30	बलरामपुर	रामचन्द्रपुर	बरवाडीह	बजारपारा	5	1	0	1	0	0		
31	बलरामपुर	रामचन्द्रपुर	बरवाडीह	पंडोपारा	4	1	0	1	0	0		
32	बलरामपुर	रामचन्द्रपुर	डुडगा	कुम्हारपारा	7	1	0	1	0	1	0	
33	बलरामपुर	रामचन्द्रपुर	डुडगा	पहाड़टोला	8	1	0	1	0	1	0	
34	बलरामपुर	रामचन्द्रपुर	बनवनपुर	कोड़ाकुपारा	6	1	0	1	0	0	1	
35	बलरामपुर	रामचन्द्रपुर	बनवनपुर	खालपारा	5	1	0	1	0	0		
36	बलरामपुर	रामचन्द्रपुर	लोधमा	बीचपारा	7	1	0	1	0	0	1	
37	बलरामपुर	रामचन्द्रपुर	लोधमा	पूरबपारा / उत्तरपारा	6	1	0	1	0	0		
38	बलरामपुर	रामचन्द्रपुर	बराडनगर	खालपारा	17	1	0	1	0	1	0	
39	बलरामपुर	रामचन्द्रपुर	तेतरडीह	उत्तरटोला	2	1	0	1	0	1	0	
40	बलरामपुर	रामचन्द्रपुर	तेतरडीह	खालपारा	2	1	0	1	0	1	0	
41	बलरामपुर	रामचन्द्रपुर	तेतरडीह	मगरदहा	3	1	0	1	0	1	0	
42	बलरामपुर	रामचन्द्रपुर	तेतरडीह	स्कूलपारा	2	1	0	1	0	1	0	
43	बलरामपुर	रामचन्द्रपुर	तेतरडीह	बीचटोला	2	1	0	1	0	1	0	
44	बलरामपुर	रामचन्द्रपुर	तेतरडीह	डाहुपारा	3	1	0	1	0	1	0	
45	बलरामपुर	रामचन्द्रपुर	तेतरडीह	मगरदहा	2	1	0	1	0	1	0	
46	बलरामपुर	रामचन्द्रपुर	तेतरडीह	पूरबपारा	2	1	0	1	0	1	0	
47	बलरामपुर	रामचन्द्रपुर	बगरा	हरिजनटोला	2	1	0	1	0	1	0	
48	बलरामपुर	रामचन्द्रपुर	बगरा	खालपारा	3	1	0	1	0	1	0	
49	बलरामपुर	रामचन्द्रपुर	बगरा	कोड़ाकुपारा	4	1	0	1	0	1	0	
50	बलरामपुर	रामचन्द्रपुर	बगरा	लोहारपारा	2	1	0	1	0	1	0	
51	बलरामपुर	रामचन्द्रपुर	बगरा	मझुआपारा	3	1	0	1	0	1	0	
52	बलरामपुर	रामचन्द्रपुर	बगरा	मंदीरपारा	3	1	0	1	0	1	0	
53	बलरामपुर	रामचन्द्रपुर	बगरा	स्कूलपारा	2	1	0	1	0	1	0	
54	बलरामपुर	रामचन्द्रपुर	बगरा	दक्षिणटोला	4	1	0	1	0	1	0	
55	बलरामपुर	रामचन्द्रपुर	बगरा	उरवडीह	2	1	0	1	0	1	0	
56	बलरामपुर	रामचन्द्रपुर	बगरा	मिशनपारा	2	1	0	1	0	1	0	
57	बलरामपुर	रामचन्द्रपुर	बगरा	आश्रमटोला	2	1	0	1	0	1	0	
58	बलरामपुर	रामचन्द्रपुर	बगरा	दादरटोला	2	1	0	1	0	1	0	
59	बलरामपुर	रामचन्द्रपुर	टीकीटोरी	पूरबटोला	8	1	1	0	0	0	0	
60	बलरामपुर	जाकुकनगर	अमलडा	गड़ीमिशनपारा	8	1	0	1	0	0	1	
61	बलरामपुर	जाकुकनगर	अमलडा	हरिजनपारा	7	1	0	1	0	0	1	
62	बलरामपुर	जाकुकनगर	बेलडीहा	खालपारा	11	1	0	1	0	0	1	
63	बलरामपुर	जाकुकनगर	डोंगरी	खालपारा	8	1	0	1	0	0	1	

#	जिला	विकासखण्ड का नाम	प्रभावित ग्राम का नाम	प्रभावित बसाहट का नाम	कुल स्त्रोतों की संख्या	फ्लोराईड से प्रभावित स्त्रोतों की संख्या	विभाग द्वारा की गई कार्यवाही					रेमार्क
							बंद किये गये फ्लोराईड स्त्रोत की संख्या	स्थापित FRP की संख्या	स्थल जल प्रदाय योजनाओं से जल प्रदाय किये जाने वाले प्रभावित ग्रामों की संख्या	सोलर पम्प के माध्यम से जल प्रदाय किये जाने वाले प्रभावित बसाहट की संख्या	नलजल प्रदाय योजनाओं से जल प्रदाय किये जाने वाले प्रभावित ग्रामों की संख्या	
1	2	3	4	5	6	7	8	9	10	11	12	13
64	[illegible]पुर	[illegible]कनगर	गोधनपुर	खापरा	9	1	0	1	0	0	1	
				योग:-	325	64	2	62	0	24	19	
1	सूरजपुर	प्रेमनगर	रगोटी	स्कूलपारा	8	1	0	1	0	0	0	
2	सूरजपुर	प्रेमनगर	रगोटी	स्कूलपारा-1	6	1	1	0	0	0	0	
3	सूरजपुर	प्रेमनगर	रगोटी	तेलवारपारा	3	1	1	0	0	0	0	
4	सूरजपुर	प्रेमनगर	धूनगढ़ी	तीलरीकापारा	9	1	1	0	0	0	0	
5	सूरजपुर	प्रेमनगर	बिलासिनी	डोंड़कापारा	3	1	1	0	0	0	0	
6	सूरजपुर	प्रेमनगर	जुर	सरईपारा	4	1	1	0	0	0	0	
7	सूरजपुर	प्रेमनगर	कटिदा	गोड़पारा	4	1	1	0	0	0	0	
8	सूरजपुर	प्रेमनगर	मलगा	नियापारा	5	1	1	0	0	0	0	
9	सूरजपुर	प्रेमनगर	बसिरा	बासापारा	4	1	1	0	0	0	0	
10	सूरजपुर	प्रेमनगर	परसौना	डारीमाटी	4	1	1	0	0	0	0	
11	सूरजपुर	ओड़गी	फेदा	भण्डारपारा	21	1	0	1	0	0	0	
12	सूरजपुर	ओड़गी	पैसरा	खारापारा	16	1	1	0	0	0	0	
13	सूरजपुर	ओड़गी	सेमरा	खारापारा	5	1	1	0	0	0	0	
14	सूरजपुर	ओड़गी	दैमठी	खारापारा	6	2	0	2	0	0	0	
15	सूरजपुर	ओड़गी	दैमठी	केवटपारा	4	1	1	0	0	0	0	
16	सूरजपुर	ओड़गी	खाड़खमर	केवटपारा	4	1	1	0	0	0	0	
17	सूरजपुर	प्रतापपुर	सिंघरा	राईसो	3	1	0	1	0	0	0	
18	सूरजपुर	प्रतापपुर	गोटगाव	खास	3	1	0	1	0	0	0	
19	सूरजपुर	प्रतापपुर	[illegible]पारा	गोड़पारा	3	1	0	1	0	0	0	
20	सूरजपुर	प्रतापपुर	कसरी	चुटनपारा	3	1	0	1	0	0	0	
21	सूरजपुर	प्रतापपुर	सकनपुर	सरईपारा	4	1	0	1	0	0	0	
22	सूरजपुर	प्रतापपुर	नवागीह	बंजरपारा	3	1	0	1	0	0	0	
23	सूरजपुर	प्रतापपुर	नवागीह	कोड़ाडूंगरपारा	5	1	0	1	0	0	0	
24	सूरजपुर	प्रतापपुर	आनन्दपोन	नियापारा	3	1	1	0	0	0	0	
25	सूरजपुर	प्रेमनगर	भगवानपुर	छेरीमचान	3	1	0	1	0	1	0	
26	सूरजपुर	प्रेमनगर	भगवानपुर	दसौंपारा	3	1	0	1	0	1	0	
27	सूरजपुर	प्रेमनगर	भगवानपुर	धनकोलपारा	3	1	0	1	0	1	0	
28	सूरजपुर	प्रेमनगर	भगवानपुर	कोसमपारा	5	1	0	1	0	1	0	
29	सूरजपुर	प्रेमनगर	भगवानपुर	पटेलपारा	3	1	0	1	0	1	0	
30	सूरजपुर	प्रेमनगर	भगवानपुर	उसवपारा	3	1	0	1	0	1	0	
31	सूरजपुर	प्रेमनगर	दुर्गापुर	धवईटिकरा	4	1	1	0	0	0	0	
32	सूरजपुर	प्रेमनगर	दुर्गापुर	जूनाकटई	5	1	1	0	0	0	0	
33	सूरजपुर	प्रेमनगर	दुर्गापुर	बौरीडलपुर	8	1	1	0	0	0	0	
34	सूरजपुर	प्रेमनगर	दुर्गापुर	खापरापारा	4	1	1	0	0	0	0	
35	सूरजपुर	प्रेमनगर	दुर्गापुर	पाण्डेकटेल	3	1	1	0	0	0	0	
36	सूरजपुर	प्रेमनगर	फूलकोना	गाड़ापारा	5	1	1	0	0	0	0	
37	सूरजपुर	प्रेमनगर	कनकपुर	जूनापारा	3	1	1	0	0	0	0	
38	सूरजपुर	प्रेमनगर	कालीपुर	परजीरिंगापारा	3	1	1	0	0	0	0	

क्र.	जिला	विकासखण्ड का नाम	प्रभावित ग्राम का नाम	प्रभावित बसावट का नाम	कुल स्त्रोतों की संख्या	फ्लोराईड से प्रभावित स्त्रोतों की संख्या	विभाग द्वारा की गई कार्यवाही					रिमार्क
							बंद किये गये फ्लोराईड स्त्रोत की संख्या	स्थापित FRP की संख्या	स्थल जल प्रदाय योजनाओं से जल प्रदाय किये जाने वाले प्रभावित ग्रामों की संख्या	सोलर पम्प के माध्यम से जल प्रदाय किये जाने वाले प्रभावित बसावट की संख्या	नलजल प्रदाय योजनाओं से जल प्रदाय किये जाने वाले प्रभावित ग्रामों की संख्या	
1	2	3	4	5	6	7	8	9	10	11	12	13
39	सूरजपुर	प्रेमनगर	खजुरी	गवटियापारा	4	1	1	0	0	0	0	
40	सूरजपुर	प्रेमनगर	सरसवाल	पण्डोपारा	3	1	1	0	0	0	0	
41	सूरजपुर	प्रेमनगर	बलदेवनगर	गवटियापारा	4	1	1	0	0	0	0	
42	सूरजपुर	प्रेमनगर	किस्साखाल	गवटियापारा	3	1	1	0	0	0	0	
43	सूरजपुर	रामानुजनगर	परसापारा	पश्चिमपारा	3	1	1	0	0	0	0	
44	सूरजपुर	रामानुजनगर	हनुमानगढ	बनगोतापारा	2	1	1	0	0	0	0	
45	सूरजपुर	रामानुजनगर	हनुमानगढ	खालपारा	8	2	0	2	0	0	0	
46	सूरजपुर	रामानुजनगर	हनुमानगढ	मझापारा	5	1	1	0	0	0	0	
47	सूरजपुर	रामानुजनगर	पोंडिकापुर	बड़कापारा	2	1	1	0	0	0	0	
48	सूरजपुर	रामानुजनगर	पदमपुर	बैन्दोपारा	5	1	1	0	0	0	0	
49	सूरजपुर	सूरजपुर	बेलदिकली	हरिजनपारा	1	1	1	0	0	0	1	
50	सूरजपुर	सूरजपुर	मलदपुर	सैनीपारा	3	1	1	0	0	0	0	
51	सूरजपुर	सूरजपुर	मलदपुर	गवापारा	3	1	1	0	0	0	0	
52	सूरजपुर	सूरजपुर	डुमरिया	बरहामपारा	3	1	1	0	0	0	0	
53	सूरजपुर	सूरजपुर	नरेशपुर	जुनापारा	4	1	1	0	0	0	0	
54	सूरजपुर	सूरजपुर	गोपालपुर	बारीपारा	3	1	1	0	0	0	0	
55	सूरजपुर	सूरजपुर	तिलदीकला	खालपारा	5	1	1	0	0	0	1	
56	सूरजपुर	सूरजपुर	सरस्वतीपुर	गोंड़पारा	3	1	1	0	0	0	0	
57	सूरजपुर	सूरजपुर	सरस्वतीपुर	डांडापारा	3	1	1	0	0	0	0	
58	सूरजपुर	सूरजपुर	रामपुर	सड़कापारा	2	1	1	0	0	0	0	
59	सूरजपुर	सूरजपुर	कनीयाडीह	देवालपारा	2	1	1	0	0	0	0	
60	सूरजपुर	सूरजपुर	कनीयाडीह	खालपारा	5	1	1	0	0	0	0	
61	सूरजपुर	सूरजपुर	कनीयाडीह	डांडापारा	3	1	1	0	0	0	0	
62	सूरजपुर	सूरजपुर	परसापारा	इमलीपारा	3	1	1	0	0	0	0	
63	सूरजपुर	सूरजपुर	परसापारा	छापापारा	2	1	1	0	0	0	0	
64	सूरजपुर	सूरजपुर	परसापारा	आमापारा	3	1	1	0	0	0	0	
65	सूरजपुर	सूरजपुर	रामनगर	पैगोरीपारा	3	1	1	0	0	0	0	
				योग:-	**282**	**67**	**48**	**19**	**0**	**6**	**2**	
1	कोरिया	बैकुण्ठपुर	अमरपुर	स्कूलपारा	4	1	0	1	0	1	0	
2	कोरिया	बैकुण्ठपुर	मदवारी	हरिजनपारा	3	1	0	1	0	1	0	
3	कोरिया	बैकुण्ठपुर	मदवारी	मटेरियापारा	5	1	0	1	0	1	0	
4	कोरिया	बैकुण्ठपुर	जमपुर	पठानपारा	2	1	0	1	0	1	0	
5	कोरिया	बैकुण्ठपुर	नाला	कलापारा	4	1	0	1	0	1	0	
6	कोरिया	बैकुण्ठपुर	नाला	स्कूलपारा	3	1	0	1	0	1	0	
7	कोरिया	बैकुण्ठपुर	परसपुर	खालपारा	4	1	0	1	0	1	0	
8	कोरिया	बैकुण्ठपुर	रोकनपाट	वार्ड न. 14	5	1	0	1	0	1	0	

क्र.	जिला	विकासखण्ड का नाम	उपलब्ध ग्राम का नाम	उपलब्ध बंगलादेश का नाम	कुल स्वीकृत की संख्या	पंजीकृत से उपलब्ध स्वीकृत की संख्या	विभाग द्वारा की गई कार्यवाही					टिप्पणी
							कट किये गये पंजीकृत स्वीकृत की संख्या	स्वीकृत [illegible] की संख्या	स्वयं उक्त प्रदान योजनाओं में जल प्रदाय किये जाने वाले उपलब्ध शासी की संख्या	सौलर पम्प के माध्यम से जल प्रदाय किये जाने वाले उपलब्ध बंगलादेश की संख्या	गहराजल प्रदाय योजनाओं से जल प्रदाय किये जाने वाले उपलब्ध शासी की संख्या	
1	2	3	4	5	6	7	8	9	10	11	12	13
9	बलिया	बैरियापुर	जेवरी	जेवरी	1	1	0	1	0	0	1	
10	बलिया	बैरियापुर	बलवा	गौरिकला	4	1	0	1	0	0	1	
				योग:-	39	10	0	10	0	0	2	
1	एन.सी.सी.	सहजपुर	बरहा	सहजपुर	1	1	0	1	0	0	1	
2	एन.सी.सी.	सहजपुर	गोरखपुर	सहजपुर	4	1	0	1	0	1	0	
3	एन.सी.सी.	सहजपुर	बैरिया	सहजपुर	3	1	0	1	0	1	0	
4	एन.सी.सी.	सहजपुर	अहिरौली	हरिवंशपुर	4	1	0	1	0	1	0	
5	एन.सी.सी.	सोनेपुर	उजियारपुर	सोनेपुर	7	1	0	1	0	1	0	
6	एन.सी.सी.	सोनेपुर	उजियारपुर	सोनेपुर	3	1	0	1	0	1	0	
7	एन.सी.सी.	सोनेपुर	सलेमपुर	हरिवंशपुर	4	1	0	1	0	1	0	
8	एन.सी.सी.	सोनेपुर	सलेमपुर	बरहा सिविलपुर	6	1	0	1	0	1	0	
				योग:-	34	8	0	8	0	6	1	
1	बलिया	बलिया	बलिया	सोनवानपुर	9	6	0	0	1	0	0	प्रदाय शासी के 12 शासी में योजनाओं एवं जल प्रदाय सौलर से जल प्रदाय किया जा रहा है।
2	बलिया	बलिया	बलिया	उजरीपुर	9	5	4	1		0	0	
3	बलिया	बलिया	बलिया	अहिरौली	6	4	3	1	0	2	0	
4	बलिया	बलिया	उजरीपुर	बलवा	4	2	2	0	0	0	0	
5	बलिया	बलिया	दुबहुल	पहाड़पुर	12	4	4	0	0	0	0	
6	बलिया	बलिया	दुबहुल	सोनवा	8	4	4	0	0	1	0	
7	बलिया	बलिया	रामपाल	रसूलपार/ खालपार	4	1	1	0	0	0	0	
8	बलिया	बलिया	रामपाल	अहिरपार	1	1	1	0	0	0	0	
9	बलिया	बलिया	रामपाल	खालिया	2	2	2	0	0	0	0	
10	बलिया	बलिया	रामपाल	हेवारा	2	1	1	0	0	0	0	
11	बलिया	बलिया	रामपाल	बाकलपार	2	1	1	0	0	0	0	
12	बलिया	बलिया	रामपाल	कुलपार	3	2	2	0	0	0	0	
13	बलिया	बलिया	रामपाल	भदरीपार	2	1	1	0	0	0	0	
14	बलिया	बलिया	रामपाल	चरीपार	3	2	2	0	0	0	0	
15	बलिया	बलिया	रामपाल	चकदीपार	4	2	2	0	0	1	0	
16	बलिया	बलिया	रामपाल	दुलरीपार	2	1	1	0	0	0	0	
17	बलिया	बलिया	नन्दपुर	पालपार	3	1	1	0	0	0	1	
18	बलिया	बलिया	नन्दपुर	गरीपार	6	4	4	0	0	0		
19	बलिया	बलिया	नन्दपुर	खालपार अगरबत्ती	4	1	1	0	0	0		
20	बलिया	बलिया	बेलवारन	हेरियापार	5	2	2	0	0	0	1	
21	बलिया	बलिया	बेलवारन	सेवरापार	1	1	1	0	0	0		
22	बलिया	बलिया	बेलवारन	बलवापार	2	2	2	0	0	1		
23	बलिया	बलिया	बेलवारन	खालपार	2	2	2	0	0	0		

क्र	जिला	विकासखण्ड का नाम	प्रभावित ग्राम का नाम	प्रभावित बसाहट का नाम	कुल स्त्रोतों की संख्या	फ्लोराईड से प्रभावित स्त्रोतों की संख्या	विभाग द्वारा की गई कार्यवाही					रिमार्क
							बंद किये गये फ्लोराईड स्त्रोत की संख्या	स्थापित RRP की संख्या	स्थल जल प्रदाय योजनाओं से जल प्रदाय किये जाने वाले प्रभावित ग्रामों की संख्या	सोलर पम्प के माध्यम से जल प्रदाय किये जाने वाले प्रभावित बसाहट की संख्या	नलजल प्रदाय योजनाओं से जल प्रदाय किये जाने वाले प्रभावित ग्रामों की संख्या	
1	2	3	4	5	6	7	8	9	10	11	12	13
24	बस्तर	बस्तर	कुम्हली	मुण्डागुड़ा नं./प्र. शाला	2	1	1	0	0	0	0	
25	बस्तर	बस्तर	कुम्हली	मुण्डागुड़ा/बोरकेपदा	1	1	1	0	0	0	0	
26	बस्तर	बस्तर	कुम्हली	मुण्डागुड़ा/काटाछेपदा	1	1	1	0	0	0	0	
27	बस्तर	बस्तर	कुम्हली	सिम्बुपदर (नं./प्र. शाला)	2	1	1	0	0	0	0	
28	बस्तर	बस्तर	कुम्हली	डेगपारा आंगनबाड़ी	2	1	1	0	0	0	0	
29	बस्तर	बस्तर	कुम्हली	मुण्डागुड़ा आंगनबाड़ी	2	1	1	0	0	0	0	
30	बस्तर	बस्तर	सालेभाटा-1	डेगपारा	7	4	4	0	0	0	0	
31	बस्तर	बस्तर	सालेभाटा-1	कासारखुटी	2	1	1	0	0	0	0	
32	बस्तर	बस्तर	सालेभाटा-1	आकाश नगर	2	1	1	0	0	0	0	
33	बस्तर	बस्तर	खुरासण्ड	पुजारीपारा	8	2	2	0	0	1	0	
34	बस्तर	बस्तर	खड़का	बीचापारा	3	1	1	0	0	0	0	
35	बस्तर	बस्तर	खड़का	लोहारपारा	4	2	2	0	0	0	0	
36	बस्तर	बस्तर	विश्रामपुरी	नयापारा	3	2	2	0	0	0	0	
37	बस्तर	बस्तर	विश्रामपुरी	सालेभाटा/बंजारापारा	3	2	2	0	0	1	0	
38	बस्तर	बस्तर	चपका	तिरथपारा	2	1	1	0	0	0	1	
39	बस्तर	बस्तर	भानपुरी	मावलीगुड़ा	4	2	2	0	0	0	0	
40	बस्तर	बस्तर	कुरारपाल	कलीपारा	3	1	1	0	0	1	0	
41	बस्तर	बस्तर	कुरारपाल	मालुगुड़ा	6	1	1	0	0	0	0	
42	बस्तर	बकावण्ड	जैबेल	सालेगुड़ा	4	2	2	0	0	0	0	
43	बस्तर	बकावण्ड	जैबेल	काडाकाटा	8	4	3	1	0	0	0	
44	बस्तर	बकावण्ड	जैबेल	एकतागुड़ा	2	1	1	0	0	0	0	
45	बस्तर	बकावण्ड	जैबेल	डोंगरियापारा	2	1	1	0	0	0	0	
46	बस्तर	बकावण्ड	जैबेल	सोसावटी पारा	4	3	3	0	0	0	0	
47	बस्तर	बकावण्ड	जैबेल	लोहण्डीबेड़ा	2	1	1	0	0	0	0	
48	बस्तर	बकावण्ड	जैबेल	तेन्दुगुड़ा	2	1	1	0	0	0	0	
49	बस्तर	बकावण्ड	डिलमिली	मुख्यबस्ती/माटीदेव	12	4	4	0	0	0	1	
50	बस्तर	बकावण्ड	डिलमिली	खारसपारा/माहदापारा	19	13	13	0	1	0	0	
51	बस्तर	बकावण्ड	बागराय	खारसपारा	6	5	5	0	1	0	0	
52	बस्तर	बकावण्ड	बंगलाडोंगरी	मुख्यबस्ती	12	3	2	1	0	0	0	
53	बस्तर	बकावण्ड	कोलावल	लाड़ीपारा	3	1	1	0	0	0	0	
54	बस्तर	बकावण्ड	कोलावल	कोण्डुगुड़ा	3	1	1	0	0	0	0	
55	बस्तर	बकावण्ड	नारेंगा	तेन्दुगुड़ा	3	1	1	0	0	0	0	
56	बस्तर	बकावण्ड	नारेंगा	टुण्डरीगुड़ा	3	1	1	0	0	0	0	
57	बस्तर	बकावण्ड	बड़ेजिरागांव	छिन्दीगुड़ा	2	1	1	0	0	0	0	
58	बस्तर	बकावण्ड	बड़ेजिरागांव	आहनपारा	2	1	1	0	0	0	0	

-80-

क्र.	जिला	विकासखण्ड का नाम	ग्रामीण थाना का नाम	ग्रामीण बसावट का नाम	कुल दर्शनी की संख्या	पर्यटकों से ग्रामीण दर्शनी की संख्या	विभाग द्वारा दी गई जानकारी				
							कंट किये गये पर्यटकों दर्शन की संख्या	ग्रामीण स्वच्छ की संख्या	ग्रामीण उद्योग योजनाओं में उद्योग किये जाने वाले ग्रामीण दर्शनी की संख्या	ग्रामीण पर्यटन की गतिविधि के उद्योग किये जाने वाले ग्रामीण बसावट की संख्या	ग्रामीण उद्योग योजनाओं में उद्योग किये जाने वाले ग्रामीण दर्शनी की संख्या
1	2	3	4	5	6	7	8	9	10	11	12
59	बसाड़	बसाड़ापाड़	बड़ोदियाखाल	बाघापाड़ा	3	1	1	0	0	0	0
60	बसाड़	बसाड़ापाड़	सतोरा	गोलगुड़ा	4	3	3	0	0	0	0
61	बसाड़	बसाड़ापाड़	सतोरा	सिंदोलगुड़ा	2	1	1	0	0	0	0
62	बसाड़	बसाड़ापाड़	सतोरा	कुमलेड़ा	2	1	1	0	0	0	0
63	बसाड़	बसाड़ापाड़	सतोरा	पुजारीपाड़ा	3	1	1	0	0	0	0
64	बसाड़	बसाड़ापाड़	सतोरा	पलासगुड़ा	1	1	1	0	0	0	0
65	बसाड़	बसाड़ापाड़	सतोरा	पीपलगुड़ा	2	1	1	0	0	0	0
66	बसाड़	बसाड़ापाड़	सतोरा	गेंदगुड़ा	3	2	2	0	0	0	0
67	बसाड़	बसाड़ापाड़	सतोरा	भवरीगुड़ा	1	1	0	1	0	0	0
68	बसाड़	बसाड़ापाड़	सिन्दगाल	खालवाड़ी	16	2	2	0	0	0	1
69	बसाड़	बसाड़ापाड़	सिन्दगाल	भवरीगुड़ा	8	4	4	0	0	0	0
70	बसाड़	बसाड़ापाड़	पौलमाल	खालमाल-1	3	1	1	0	0	0	0
71	बसाड़	बसाड़ापाड़	पौलमाल	खालमाल-2	2	1	1	0	0	0	0
72	बसाड़	बसाड़ापाड़	पौल-पाल	बसाड़ापाड़	4	2	2	0	0	0	0
73	बसाड़	डहरा	सिन्दगाल	पैदाल जालगुड़ा	2	1	1	0	0	0	0
74	बसाड़	डहरा	सिन्दगाल	कोटेरगाल	4	1	1	0	0	1	0
75	बसाड़	डहरा	गोलेमेली कोटेरगाल	प्राथमिकशाला	2	1	1	0	0	0	0
76	बसाड़	डहरा	गोलेमेली कोटेरगाल	माध्यमिक शाला	2	1	1	0	0	0	0
77	बसाड़	डहरा	सिंगपुर	पुजारागाल (पोल सिंगपुर)	2	1	1	0	0	0	0
78	बसाड़	डहरा	सिंगपुर	आदीवासी (पक्का पोल)	2	1	1	0	0	0	0
79	बसाड़	डहरा	कोडरीजगर	पटेलपाल	2	1	1	0	0	0	0
80	बसाड़	बसाड़ापाड़	बारापाल	पालमाल	2	2	2	0	0	0	0
81	बसाड़	बसाड़ापाड़	बड़ेदेवपाल	पटेलपाल	1	1	1	0	0	0	1
82	बसाड़	बसाड़ापाड़	कडेमालगुड़ा-1	कोंडागाल	4	1	1	0	0	0	0
				कुल	340	158	153	5	3	5	6
1	डीलागुड़ा	पोलालाडापाल	गुलमेटा	पेंडीगुड़ा पारा	10	1	1	0	0	0	1
2	डीलागुड़ा	पोलालाडापाल	गुलमेटा	पेंडीगुड़ा पारा		1	1	0	0	0	
3	डीलागुड़ा	पोलालाडापाल	गुलमेटा	पेंडीगुड़ा पारा		1	1	0	0	0	
4	डीलागुड़ा	पोलालाडापाल	गुलमेटा	पेंडीगुड़ा पारा		1	1	0	0	0	
5	डीलागुड़ा	पोलालाडापाल	गुलमेटा	पेंडीगुड़ा पारा		1	1	0	0	0	
6	डीलागुड़ा	पोलालाडापाल	गुलमेटा	पेंडीगुड़ा पारा		1	1	0	0	0	
7	डीलागुड़ा	पोलालाडापाल	गुलमेटा	पटेल पारा	4	1	1	0	0	0	
8	डीलागुड़ा	पोलालाडापाल	पेंडागुड़ा	मझल पारा	3	1	1	0	0	0	1
9	डीलागुड़ा	पोलालाडापाल	पेंडागुड़ी	बरिक पारा	4	1	1	0	0	0	1
10	डीलागुड़ा	पोलालाडापाल	पेंडागुड़ी	पोंडुर पारा	4	1	1	0	0	0	

क्र	जिला	विकासखण्ड का नाम	प्रभावित ग्राम का नाम	प्रभावित बसाहट का नाम	कुल स्त्रोतों की संख्या	फ्लोराईड से प्रभावित स्त्रोतों की संख्या	विभाग द्वारा की गई कार्यवाही					टिप्पणी
							बंद किये गये फ्लोराईड स्त्रोत की संख्या	स्थापित FRP की संख्या	स्थल जल प्रदाय योजनाओं से जल प्रदाय किये जाने वाले प्रभावित ग्रामों की संख्या	सोलर पम्प के माध्यम से जल प्रदाय किये जाने वाले प्रभावित बसाहट की संख्या	नलजल प्रदाय योजनाओं से जल प्रदाय किये जाने वाले प्रभावित ग्रामों की संख्या	
1	2	3	4	5	6	7	8	9	10	11	12	13
				कुल	27	10	10	9	0	0	3	
1	कोण्डागांव	कोण्डागांव	करंजी	माता मंदिर/कालीपारा	4	2	0	2	1	1	0	
2	कोण्डागांव	कोण्डागांव	बाखरा	भूतरी डोंगरीपारा	4	2	0	2	1	0	0	
3	कोण्डागांव	कोण्डागांव	कुकड़ागारकापाल	नयापारा	8	2	2	0	0	0	1	
4	कोण्डागांव	कोण्डागांव	कुकड़ागारकापाल	गारकापाल पारा	3	1	0	1	0	0		
5	कोण्डागांव	कोण्डागांव	कोकोडी	स्कुल पारा/प्लाटपारा	5	2	0	2	0	0	0	
6	कोण्डागांव	कोण्डागांव	कोकोडी	दरसुली पारा/टेंगनापखना	5	2	0	2	0	0	0	
7	कोण्डागांव	कोण्डागांव	भगदेना	सड़क पारा	4	2	0	2	0	0	0	
8	कोण्डागांव	कोण्डागांव	बड़े भिरण्डा	पटेल पारा / मांझीपारा	3	2	0	2	0	0	0	
9	कोण्डागांव	कोण्डागांव	घोड़ागांव	स्कूलपारा 1	2	1	0	1	0	0		
10	कोण्डागांव	कोण्डागांव	घोड़ागांव	बिल बहार/मांझीपारा	2	1	0	1	0	0		
11	कोण्डागांव	कोण्डागांव	घोड़ागांव	लखरी बहार/बघेपारा	2	1	0	1	0	0		
12	कोण्डागांव	कोण्डागांव	घोड़ागांव	मुण्डीपारा 2/बघेपारा	2	1	0	1	0	0		
13	कोण्डागांव	कोण्डागांव	घोड़ागांव	सड़कपारा 2/जयावाडीपारा	2	1	0	1	0	0		
14	कोण्डागांव	कोण्डागांव	घोड़ागांव	आवासपारा/नयापारा 2	2	1	0	1	0	0		
15	कोण्डागांव	कोण्डागांव	घोड़ागांव	आवासपारा 3	3	2	1	1	0	0		
16	कोण्डागांव	कोण्डागांव	घोड़ागांव	प्रा.शा., मा.शा., ज्ञा.ज्यो.शाला	4	4	2	2	0	0	1	
17	कोण्डागांव	कोण्डागांव	घोड़ागांव	बघेपारा 2	5	2	1	1	0	0		
18	कोण्डागांव	कोण्डागांव	घोड़ागांव	डेगपारा	2	1	0	1	0	0		
19	कोण्डागांव	कोण्डागांव	घोड़ागांव	टोन्ड्रोपारा	2	1	0	1	0	0		
20	कोण्डागांव	कोण्डागांव	घोड़ागांव	स्कूलपारा पुसना	2	1	0	1	0	0		
21	कोण्डागांव	कोण्डागांव	घोड़ागांव	आवास पारा (प्रा.शा.मुण्डीपारा)	2	1	1	0	0	0		
22	कोण्डागांव	कोण्डागांव	घोड़ागांव	आवास पारा 2 /टांकडीह	3	2	1	1	0	0		
23	कोण्डागांव	कोण्डागांव	घोड़ागांव	डोंगरी पारा/भालुगुड़ा	2	1	0	1	0	0		
24	कोण्डागांव	कोण्डागांव	घोड़ागांव	छात्रावास	2	1	1	0	0	0		
25	कोण्डागांव	कोण्डागांव	घोड़ागांव	नयापारा/आवासपारा	2	1	1	0	0	0		
26	कोण्डागांव	कोण्डागांव	माकड़ी	पंचायत/फरसापदर	2	1	0	1	0	0		
27	कोण्डागांव	कोण्डागांव	माकड़ी	शि.ग्रा.शाखा	2	1	0	1	0	0		
28	कोण्डागांव	कोण्डागांव	माकड़ी	पटेलपारा/छात्रावास	1	1	0	1	0	0		
29	कोण्डागांव	कोण्डागांव	माकड़ी	खैरपेड़ा पारा	2	1	0	1	0	0		
30	कोण्डागांव	कोण्डागांव	माकड़ी	सड़क पारा	2	1	0	1	0	0	1	
31	कोण्डागांव	कोण्डागांव	माकड़ी	गारीपारा	2	1	1	0	0	0		
32	कोण्डागांव	कोण्डागांव	माकड़ी	आवास प्लाट(फरसापदर)	3	1	0	1	0	0		

-181-

क्र	जिला	विकासखण्ड का नाम	प्रभावित ग्राम का नाम	प्रभावित बसाहट का नाम	कुल स्त्रोतों की संख्या	फ्लोराईड से प्रभावित स्त्रोतों की संख्या	विभाग द्वारा की गई कार्यवाही					रिमार्क
							बंद किये गये फ्लोराईड स्त्रोत की संख्या	स्थापित FRP की संख्या	स्थानीय जल प्रदाय योजनाओं से जल प्रदाय किये जाने वाले प्रभावित ग्रामों की संख्या	सोलर पम्प के माध्यम से जल प्रदाय किये जाने वाले प्रभावित बसाहट की संख्या	नलजल प्रदाय योजनाओं से जल प्रदाय किये जाने वाले प्रभावित ग्रामों की संख्या	
1	2	3	4	5	6	7	8	9	10	11	12	13
33	कोण्डागांव	कोण्डागांव	माकड़ी	ऊपर पारा	2	1	1	0	0	0		
34	कोण्डागांव	कोण्डागांव	पुसावण्ड	बोड़ी पारा	1	1	1	0	0	0	0	
35	कोण्डागांव	माकड़ी	बिजोली	भुजियापदर	1	1	0	1	0	0	0	
36	कोण्डागांव	माकड़ी	बिजोली	मन्तीपारा / डोंगरीपारा	2	1	0	1	0	0	0	
37	कोण्डागांव	माकड़ी	चिन्नारी	बावनडी पारा	2	1	0	1	0	0	0	
38	कोण्डागांव	माकड़ी	अनंतपुर	खास पारा	2	1	1	0	0	0	0	
39	कोण्डागांव	माकड़ी	बड़े धोड़लोझ	मंदिर पारा / गौरे / सड़क	4	3	0	3	0	0	0	
40	कोण्डागांव	माकड़ी	बण्डई	खालेपारा	2	1	1	0	0	0	0	
41	कोण्डागांव	माकड़ी	छोटेरालना	सड़क पारा	4	1	0	1	0	0	0	
42	कोण्डागांव	माकड़ी	पेउरचाल	बेलगांव पारा 1	4	1	1	0	0	0	0	
43	कोण्डागांव	माकड़ी	ओंजारगांव	स्कूलपारा	4	2	1	1	0	0	0	
44	कोण्डागांव	माकड़ी	ओण्डरी	डोंगरी पारा	2	1	0	1	0	1	0	
45	कोण्डागांव	माकड़ी	मगेदा	राउतपारा	2	1	1	0	0	0	0	
46	कोण्डागांव	माकड़ी	छोटेन्डा	खासपारा / स्कूलपारा	4	1	0	1	0	0	1	
47	कोण्डागांव	माकड़ी	हीरापुर	मांझीपारा (खासपारा)	2	1	0	1	0	0	1	
48	कोण्डागांव	माकड़ी	बेलोन्दी	किड़ीमिंधापारा	2	1	0	1	1	0	0	
49	कोण्डागांव	माकड़ी	बेलगांव	सड़कपारा / प्रा.शा.	2	1	0	1	0	1	0	
50	कोण्डागांव	माकड़ी	बेलगांव	सड़कपारा / हा.स्कूल	2	1	0	1	0	0	0	
51	कोण्डागांव	माकड़ी	बीजापुर	हाईस्कूल	1	1	0	1	0	0	1	
52	कोण्डागांव	माकड़ी	बीजापुर	डोंगरीपारा / स्कूलपारा	1	1	0	1	0	0		
53	कोण्डागांव	केशकाल	बालनीमारी	राउतपारा	2	1	0	1	0	0	0	
54	कोण्डागांव	केशकाल	उपरबदेली	उपरपारा	3	1	1	0	0	0	0	
55	कोण्डागांव	केशकाल	आदनबेड़ा	खासपारा	4	1	1	0	0	0	0	
56	कोण्डागांव	बड़ेराजपुर	किनका	स्कूलपारा	8	1	0	1	0	0	0	
57	कोण्डागांव	बड़ेराजपुर	धामनपुरी	स्कूलपारा	9	1	0	1	1	0	0	
58	कोण्डागांव	बड़ेराजपुर	हरकेल	लड़ईबेड़ापारा	8	1	0	1	0	0	0	
59	कोण्डागांव	बड़ेराजपुर	हरकेल	पटेलपारा	8	2	1	1	0	0	0	
				कुल	179	76	21	55	4	3	6	
1	कांकेर	कांकेर	डुमाली	बड़ेपारा / आंगनबाड़ी	22	1	0	1	0	0	1	
2	कांकेर	कांकेर	डुमाली	गरार डुमाली		1	0	1	0	1	0	
3	कांकेर	कांकेर	इछापुर	नयापारा 1	15	1	0	1	0	1	1	
4	कांकेर	कांकेर	माकड़ीसिंगराय	आवासपारा	16	1	0	1	0	1	0	

क्र	जिला	विकासखण्ड का नाम	प्रभावित ग्राम का नाम	प्रभावित बसाहट का नाम	कुल स्त्रोतों की संख्या	फ्लोराईड से प्रभावित स्त्रोतो की संख्या	विभाग द्वारा की गई कार्यवाही					टिपणी
							बंद किये गये फ्लोराईड स्त्रोत की संख्या	स्थापित FRP की संख्या	स्थल जल प्रदाय योजनाओं से जल प्रदाय किये जाने वाले प्रभावित ग्रामों की संख्या	सोलर पम्प के माध्यम से जल प्रदाय किये जाने वाले प्रभावित बसाहट की संख्या	नलजल प्रदाय योजनाओं से जल प्रदाय किये जाने वाले प्रभावित ग्रामों की संख्या	
1	2	3	4	5	6	7	8	9	10	11	12	13
5	कांकेर	नरहरपुर	डुमरपानी	बारदापारा/ बघापारा	22	1	0	1	0	1	1	
6	कांकेर	नरहरपुर	डुमरपानी	डुमरपानी पंचायत		1	0	1	0		0	
7	कांकेर	नरहरपुर	डुमरपानी	आवासपारा		1	0	1	0		0	
8	कांकेर	नरहरपुर	डुमरपानी	मालूकमेनापारा (रामनगर)		1	0	1	0		0	
9	कांकेर	नरहरपुर	डुमरपानी	नया आवास		1	0	1	0		0	
10	कांकेर	नरहरपुर	डुमरपानी	रौताघरा/ आगनबाड़ीपारा		1	0	1	0		0	
11	कांकेर	नरहरपुर	डुमरपानी	शितलीन घर के पास (खालपारा)		1	0	1	0		0	
12	कांकेर	नरहरपुर	धानबोदी	खालपारा 2/ शितलापारा	18	1	0	1	0	0	1	
13	कांकेर	नरहरपुर	धानबोदी	आवासपारा		1	0	1	0	0	0	
14	कांकेर	नरहरपुर	धानबोदी	खालपारा		1	0	1	0	0	0	
15	कांकेर	नरहरपुर	बासनवाही	विड़कापारा	18	1	0	1	0	0	1	
16	कांकेर	नरहरपुर	बासनवाही	कोटलभट्टी		1	0	1	0	0	0	
17	कांकेर	नरहरपुर	बासनवाही	अलबेलापारा		1	0	1	0	0	0	
18	कांकेर	नरहरपुर	बासनवाही	शिव मंदिर के सामने		1	1	0	0	0	0	
19	कांकेर	नरहरपुर	बिरनपुर	शीतलापारा	15	1	0	1	0	0	1	
20	कांकेर	नरहरपुर	बिरनपुर	स्कूलपारा (गातपारा)		1	0	1	0	0	0	
21	कांकेर	नरहरपुर	गहरीनबाधा	बघापारा	9	1	0	1	0	0	0	
22	कांकेर	नरहरपुर	गहरीनबाधा	आवासपारा		1	0	1	0	0	0	
23	कांकेर	नरहरपुर	गहरीनबाधा	प्रा0 शा0		1	0	1	0	0	0	
24	कांकेर	नरहरपुर	गहरीनबाधा	बढ़ेपारा		1	0	1	0	0	0	
25	कांकेर	नरहरपुर	घोटियाबाही	रजक मण्डावी घर के पास	12	1	0	1	0	1	1	
26	कांकेर	नरहरपुर	घोटियाबाही	रजक मण्डावी घर के पास		1	0	1	0		0	
27	कांकेर	नरहरपुर	घोटियाबाही	राजलाल वट्टी घर के पास		1	0	1	0		0	
28	कांकेर	नरहरपुर	घोटियाबाही	राजलाल वट्टी घर के पास		1	0	1	0		0	
29	कांकेर	नरहरपुर	घोटियाबाही	आवासपारा		1	1	0	0		0	
30	कांकेर	नरहरपुर	शामतरा	नयापारा I	18	1	0	1	0	0	1	
31	कांकेर	नरहरपुर	शामतरा	नयापारा II		1	0	1	0	0	0	
32	कांकेर	नरहरपुर	शामतरा	पारधीपारा		1	0	1	0	0	0	
33	कांकेर	नरहरपुर	शामतरा	जेगरीपारा		1	0	1	0	0	0	
34	कांकेर	नरहरपुर	शामतरा	लखापारा		1	0	1	0	0	0	
35	कांकेर	नरहरपुर	शामतरा	ग्राम पंचायत के पास		1	0	1	0	0	0	
36	कांकेर	नरहरपुर	अमनपुर	हाई स्कूल के पास	9	1	0	1	0	0	1	

क्र.	जिला	विधानसभा का नाम	प्रभावित ग्राम का नाम	प्रभावित मकान का नाम	कुल स्क्रीनों की संख्या	फ्लोराइड से प्रभावित स्क्रीनों की संख्या	विभाग द्वारा की गई कार्यवाही					रिमार्क
							बंद किये गये फ्लोराइड स्क्रीन की संख्या	स्क्रीनिंग कार्य की संख्या	संबंधित ग्राम की जिन प्रभावित योजनाओं से जल प्रदाय किये जाने वाले प्रभावित मजरों की संख्या	संबंधित ग्राम के माध्यम से जल प्रदाय किये जाने वाले प्रभावित मकानों की संख्या	फ्लोराइड प्रभावित योजनाओं से जल प्रदाय किये जाने वाले प्रभावित ग्रामों की संख्या	
1	2	3	4	5	6	7	8	9	10	11	12	13
37	बांसवाड़ा	गढ़बोर	पुनावा	प्राथ शाला	20	1	0	1	0	1	1	
38	बांसवाड़ा	गढ़बोर	पुनावा	सामुदायिक भवन	18	1	0	1	0	0	1	
39	बांसवाड़ा	गढ़बोर	सांईपुरा	पंचायतघर	10	1	0	1	0	0	1	
40	बांसवाड़ा	गढ़बोर	सांईपुरा	आंगनवाड़ी		1	0	1	0	0	0	
41	बांसवाड़ा	गढ़बोर	सांईपुरा	हनुमानमंदिर		1	0	1	0	0	0	
42	बांसवाड़ा	गढ़बोर	सांईपुरा	औदीच्यवास		1	0	1	0	0	0	
43	बांसवाड़ा	गढ़बोर	सांईपुरा	पंचायतघर		1	0	1	0	0	0	
44	बांसवाड़ा	गढ़बोर	सांईपुरा	पटेलवास		1	0	1	0	0	0	
45	बांसवाड़ा	गढ़बोर	खजवाना	पानघट एवं के पास	5	1	1	0	0	0	0	
46	बांसवाड़ा	गढ़बोर	खजवाना	हनुमानजी मंदिर के पास		1	1	0	0	0	0	
47	बांसवाड़ा	गढ़बोर	डेकेलावाड़ा	डेकेलावाड़ापंचायत	5	1	1	0	0	0	0	
48	बांसवाड़ा	गढ़बोर	डेकेलावाड़ा	आंगनबाड़ी के पास		1	1	0	0	0	0	
49	बांसवाड़ा	गढ़बोर	उमैया	आंगनबाड़ी केन्द्र क्र. 1	11	1	1	0	0	0	0	
50	बांसवाड़ा	गढ़बोर	उमैया	मुख्यमंत्री पेयजल योजना के पास		1	1	0	0	0	0	
51	बांसवाड़ा	खादन	भानपुरी	सामुदायिक (Deep PH)	17	1	0	1	0	0	1	
52	बांसवाड़ा	खादन	भानपुरी	पंचायतघर		1	1	0	0	0	0	
53	बांसवाड़ा	खादन	भानपुरी	मुख्यमंत्री		1	0	1	0	0	0	
54	बांसवाड़ा	खादन	भानपुरी	आंगनबाड़ी		1	0	1	0	0	0	
55	बांसवाड़ा	खादन	गुजरोत	आंगनबाड़ी	13	1	0	1	0	0	0	
56	बांसवाड़ा	खादन	गुजरोत	गुरुद्वारा चौक		1	0	1	0	0	0	
57	बांसवाड़ा	खादन	गुजरोत	गौशाला		1	0	1	0	0	0	
58	बांसवाड़ा	खादन	गुजरोत	बीचवास		1	0	1	0	0	0	
59	बांसवाड़ा	खादन	कन्था	प्रीतमवास	24	1	0	1	0	0	1	
60	बांसवाड़ा	खादन	कन्था	सरपंच घर		1	0	1	0	0	0	
61	बांसवाड़ा	खादन	कन्था	आंगनबाड़ी		1	0	1	0	0	0	
62	बांसवाड़ा	खादन	गिलावर	पानघट के पास	30	1	0	1	0	0	1	
63	बांसवाड़ा	खादन	गिलावर	आंगनबाड़ी		1	0	1	0	0	0	
64	बांसवाड़ा	खादन	गिलावर	बालाजी घाट		1	0	1	0	0	0	

क्र	जिला	विकासखण्ड का नाम	प्रभावित ग्राम का नाम	प्रभावित बसाहट का नाम	कुल स्त्रोतों की संख्या	फ्लोराईड से प्रभावित स्त्रोतों की संख्या	विभाग द्वारा की गई कार्यवाही					रिमार्क
							बंद किये गये फ्लोराईड स्त्रोत की संख्या	स्थापित FRP की संख्या	स्थल जल प्रदाय योजनाओं से जल प्रदाय किये जाने वाले प्रभावित ग्रामों की संख्या	सोलर पम्प के माध्यम से जल प्रदाय किये जाने वाले प्रभावित बसाहट की संख्या	नलजल प्रदाय योजनाओं से जल प्रदाय किये जाने वाले प्रभावित ग्रामों की संख्या	
1	2	3	4	5	6	7	8	9	10	11	12	13
65	कांकेर	भानुप्रतापपुर	जेपरा	नया पारा	32	1	0	1	0	0	1	
66	कांकेर	भानुप्रतापपुर	जेपरा	खारपारा		2	0	2	0	0	0	
67	कांकेर	भानुप्रतापपुर	भोंडिया	ब्राम्हणपारा	30	1	0	1	0	0	0	
68	कांकेर	भानुप्रतापपुर	भोंडिया	स्कुलपारा		1	0	1	0	0	0	
69	कांकेर	भानुप्रतापपुर	टेमसेमेल	बाजारपारा	12	1	0	1	0	0	0	
70	कांकेर	दुर्गुकोन्दल	मोखा	खारपारा	11	1	0	1	0	0	0	
				कुल	410	71	8	63	0	7	16	
				संयोग	7559	1653	1012	641	61	294	160	

(डी. एन. सेन, उपायुक्त)
प्रमुख अभियंता
लोक स्वास्थ्य यांत्रिकी विभाग
छत्तीसगढ़, नया रायपुर

-58-

Annexure - III

केन्द्रीय भूमि जल बोर्ड /CENTRAL GROUND WATER BOARD
राज्य एकक कार्यालय /STATE UNIT OFFICE-DELHI
जल संसाधन, नदी विकास एवं जल संरक्षण विभाग/ DEPARTMENT OF WR, RD & GR
भारत सरकार , नई दिल्ली/ GOVERNMENT OF INDIA, NEW DELHI

CGWB/ND/SUO/NGT728/2023-964

Date: 29.02.2024
29 FEB 2024

To,
Member (Water Supply)
Delhi Jal Board
Varunalaya Phase-II, Delhi Jal Board Office
Jhandewalan, Karol Bagh, New Delhi-110005

Subject: Seeking information regarding the water supply in the areas affected by Arsenic and Fluoride contamination in ground water in the NCT of Delhi.

Sir,

Central Ground Water Board generates ground water quality data annually for the NCT of Delhi through its network of quality monitoring stations. The details of location wherein the Arsenic and Fluoride has been reported beyond the permissible limit in ground water of NCT Delhi for the Year 2022 is given in **Annexure.**

In reference to this, it is requested to kindly provide information whether water supply in the affected area is based on surface or ground water sources. And in case ground water sources are being utilized, what are treatment methods being employed to ensure the water is safe for human consumption.

These details may kindly be provided by 04.03.2024. The information is required to formulate a comprehensive response for NGT application no. 728/2023. Your prompt attention to this matter is highly appreciated.

29/2/24

S.K. Mohiddin
Head of Office
CGWB, SUO, New Delhi

पश्चिमी ब्लॉक-2, विंग-3, सैक्टर-1 आर. के. पुरम, नई दिल्ली-110066. दूरभाष: (011)-26175377, 26175316 ई मेल:- oicnd-cgwb@nic.in
West Block-2, Wing-3, Sector-1, R.K. Puram, New Delhi-110066. Ph. No. (011)-26175377, 26175316. E mail: oicnd-cgwb@nic.in

Annexure

Distribution of Fluoride beyond permissible limit in the NCT of Delhi (as per Year 2022)

S. No	District	No. of samples analyzed	No. of location affected	Name of Location
1.	Central	5	1	Majnu Ka Tila
2.	North	18	4	Harcoli, Rohini sec-28, Khera Kalan, Haiderpur
3.	North West	15	5	Rohini Sec 11, Nizampur, Sainik Vihar, Rohini Sec-11, Sanjay Van
4.	South	8	1	Jamali Kamali
5.	South West	12	2	Jhuljhuli, Dwarka Sec 23 DDA Park
6.	West	9	2	Vikaspuri, Janakpuri

Distribution of Arsenic beyond permissible limit in the NCT of Delhi (as per Year 2022)

S. No	District	No. of samples analyzed	No. of location affected	Name of Location
1	Nazulland	3	1	Nizamuddin Bridge-2
2	South East	5	1	Nangli Rajpura
3	Central	5	1	Jagatpur

पश्चिमी ब्लॉक-2, विंग-3, सैक्टर-1 आर. के. पुरम, नई दिल्ली-110066. दूरभाष: (011)-26175377, 26175316 | ई मेल:- oiend-cgwb@nic.in
West Block-2, Wing-3, Sector-1, R.K. Puram, New Delhi-110066. Ph. No. (011)-26175377, 26175316. E-mail: oiend-cgwb@nic.in

Annexure - IV 947

BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL,
PRINCIPAL BENCH AT NEW DELHI.

O.A. No. 728/2023

IN THE MATTER OF;

COURT ON ITS OWN MOTION.

-----PETITIONER

Vs.

The State of Himachal Pradesh and others.

---RESPONDENTS

Index

Sr. No.	Particulars	Page No.
1.	**AFFIDAVIT OF MEMBER SECRETARY HPGWA-CUM-SUPERINTENDING ENGINEER, P&I (II)**	01-7
2.	**Annexure R-1:** Ground Water Sample Report regarding Fluoride	08-73
3.	**Annexure R-2:** Ground Water Sample Report regarding Arsenic.	74-150

Place: Respondent

Dated:

BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL,
PRINCIPAL BENCH AT NEW DELHI.

Original Application No.728/2023

In re of:-News Item appearing in Hindustan dated 30-11-2023 titled "Arsenic found in groundwater in 25 States, fluoride in 27 States; Govt."

AFFIDAVIT OF MEMBER SECRETARY HPGWA-CUM-SUPERINTENDING ENGINEER, P&I (II), TUTIKANDI SHIMLA-5 INDICATING STATUS OF FLUORIDE & ARSENIC LEVEL W.R.TO THE MONITRING SITES MENTIONED BY THE CENTRAL GROUND WATER BOARD IN HIMACHAL PRADESH.

MAY IT PLEASE YOUR LORDSHIP:-

I, Sumit Sood, S/o Sh. K. L. Sood, age about 53 years, presently working as Member Secretary HPGWA-cum- Superintending Engineer, P&I (II), Tutikandi, Shimla-5, H.P. do hereby solemnly declare and affirm on oath as under:

Preliminary Submissions:

1. That the above noted O.A. is pending adjudication before the Hon'ble NGT.

2. That the above noted O.A. was listed for hearing on 20-12-2023 when the Hon'ble NGT has impleaded the State of Himachal Pradesh through Chief Secretary to the GoHP as respondent amongst others wherein the Hon'ble NGT has passed the following orders and the relevant portion of which is reproduced as under:

"7. The issue raised in the present matter with regard to presence of arsenic and fluoride in ground water in such large number of State and District is very serious and required urgent preventive and protective steps by all concerned authorities.
8. Let Notices be issued to all the above respondents. Response may be filed by above respondent within one month after receipt of notice by email at judicial-ngt@gov.in preferably in the form of searchable PDF/OCR Support PDG and not in the form image PDF."

3. That it is respectfully submitted that pursuant to this Hon'ble NGT orders dated 20-12-2023 ibid, the replying respondent department conducted ground water sampling of water supply schemes and local sources in areas through concerned Executive Engineer Jal Shakti Division Nahan, Una, Haroli, Gagret, Fatehpur & Indora where Central Ground Water Board, NHR, Dharamshala from their monitoring stations had reported occurrence of **Fluoride at Trilopkpur in District Sirmour, Daulatpur, Babehr, Ishpur, Jankaur in District Una and Arsenic at Jagir & Ulheriyaan in District Kangra** above the acceptable limit.

4. That it is respectfully submitted that accordingly the concerned Executive Engineer Jal Shakti Vibhag has conducted ground water sampling through M/s. Eco Paryavaran Laboratories and Consultants Pvt. Ltd. Mohali, a NABL Accredited Laboratory at following 21 locations for Fluoride which are as under:

(a) LWSS Trilokpur (Tubewell), LWSS Kheri (Tap), LWSS Nahan Town (Tubewell), LWSS Kala Amb (Tubewell), LWSS Moginand (Tubewell), LWSS Bankabara (Tubewell), LWSS Khara (Tubewell), Moginand (Hand pump), Daulatpur Irrigation Pump House (Tap), Daulatpur Water Supply Scheme (Tap), Dangoh Irrigation Scheme (Tap), Babehr Parmar Basti (Handpump), Babehr Water Supply Scheme (Tap), Ishpur Mohalla Bharai (Tap), Ispur Govt. Sr. Sec. School (Tap), Ispur Mohalla Tanda (Tap), Ispur Mohalla Pathak (Tap), Rampur Water Supply Scheme (Tap), Rampur House No. 55 (Tap), Abada Barana Irrigation Scheme (Tap) & Sunehra

(Tap) where the said agency submitted report that in all the tests conducted for the ground water samples Fluoride is reported to be within the acceptable limit i.e.1.0 for Fluoride.

(b) Ground Water Sampling at following 25 locations for Arsenic i.e. Mand Milani Govt. Sr. Sec. School (Borewell), Majwan LWSS (Borewell), Ghandran LWSS (Borewell), Malkana LWSS (Borewell), Paral Govt. Sr. Sec. School (Handpump), Paral LWSS (Borewell), Barota LWSS (Borewell), Basantpur LWSS (Borewell), Khanpur LWSS (Borewell), Milwan LWSS (Borewell), Mohtali Old LWSS (Borewell), Mohtali New LWSS (Borewell), Surajpur Mohtali LWSS (Borewell), Uleherian (3 HP-Borewell), Uleherian (25 HP- Borewell), Ulehrian Radha Swami Satsang (Borewell), Jagir (Near Rajesh Electrical Shop Handpump), Mohalla Utkyal Near Shiv Temple (Handpump), Sathana near KCC Bank (Handpump),

Sathana Mohalla Dahu near House of Ram Kumar (Handpump), Sathana near Radha Swami Satsang (Handpump), Sathana Mohalla Changol near Shiv Temple (Handpump), Sathana Tubewell No. 36, Ray Sathana near Nursery (Borewell) & Jagir WSS (Public Tap) where the said agency submitted report that in all the tests conducted for the ground water samples Arsenic is reported to be within the acceptable limit i.e. 0.01 for Arsenic.

(c) It is pertinent to submit here that Ground water sampling for Fluoride was conducted at 8 locations in surroundings of monitoring station Trilokpur of CGWB in District Sirmour.

(d) Similarly, Ground water sampling for Fluoride was conducted at 13 locations in surroundings of monitoring stations Daulatpur, Babehr, Ishpur & Jankaur of CGWB in District Una.

(e) Furthermore, ground water sampling for Arsenic was conducted at 25 locations supra in surroundings

of monitoring stations Jagir & Uleherian of CGWB in District Kangra.

5. That it is respectfully submitted that in all the tests conducted for the ground water samples for Fluoride and Arsenic are reported to be within the acceptable limit i.e.1.0 for Fluoride and 0.01 for Arsenic, copies of reports for ground water sample for Fluoride & Arsenic are Annexed as Annexure-R-1 & R-2 for kind perusal of this Hon'ble Tribunal.

6. That it is respectfully submitted that regular water sampling at all the water supply schemes of Jal Shakti Vibhag is carried out annually as per standard water quality sampling protocol in the department all abs. Besides, regular ground water sampling in the pre and post monsoon period, henceforth for this and upcoming years shall be conducted at all the reported sites as a protective measure so that the water quality is monitored regularly.

It is therefore respectfully prayed that the aforesaid response to the order dated 20-12-2023 may kindly be taken into record, as such since the level of Fluoride & Arsenic is within the acceptable limit on the said sites, and even in the surrounding sites as per the sampling conducted by M/s. Eco Paryavaran Laboratories and Consultants Pvt. Ltd. Mohali, a NABL Accredited Laboratory, therefore, the instant O.A. is not maintainable against the respondent State, as such deserve dismissal qua the respondent State of Himachal Pradesh in the interest of justice.

DEPONENT.

VERIFICATION:

I, the above named deponent, do hereby solemnly declare that the contents as contained in above paras of this affidavit are true and correct to the best of my personal knowledge and information as derived from official records. No part of it is false and nothing material has been concealed therefrom.

Verified at Shimla on this 30th day of March, 2024.

DEPONENT

-96-

-8-

Annexure-R-1

Himachal Pradesh
Jal Shakti Vibhag

No.SE/JSCN/2023-24-11267-71
To

Dated:- 21/3/24

The Chairman HPGWA-cum-
Engineer-in-Chief,
Jal Shakti Vibhag,
Jal Shakti Bhawan, Shimla-5.

Subject:- Notice in Original application No 728/2023

It is with reference to your office letter No. JSV-Member SecyHPGWA-cum-SE P&I-II/2023-24-1136-1145 dated 05/02/2024 & even file letter NO 1325-1340 dated 12/02/2024 regarding subject cited above. In this regard it is submitted that as per standard water quality sampling protocol in the department, tests at departmental lab are regulary conducted for all water supply schemes and till date no report of occurrence of fluoride above permissible limit had been reported.

In compliance to your office letter regarding Notice by Hon'ble NGT, fresh water sampling of water supply schemes and local sources in areas where the CGWB had reported occurrence of fluoride from their monitoring station were conducted by Eco Paryavaran Laboratories and consultants Pvt Ltd Mohali. In all, for the one site reported by CGWB in village Trilokpur sampling for 8 locations was done in the surrounding area of the reported contaminated source and all the tests conducted by CGWB were conducted by M/s Eco Paryavaran Lab Mohali.

The report of the analysis of the water sampling by M/s Eco Paryavaran Lab Mohali is attached for your kind perusal. The report indicates that fluoride is below the acceptable limit of 1.0 ppm/mg/l at all the sites. In view of the water quality analysis report it is submitted that there is no occurrence of fluoride above the acceptable/permissible limits in the reported place in district Sirmour. It is further assured that regular water quality monitoring in the area will be ensured and if any occurrence is reported in future proper remedial measures will be taken as needed. Scheme wise latitude and longitiitude is also sent herewith as per annexure A attached for your informtion.

DA: As above

Superintending Engineer,
Jal Shakti Circle,Nahan,
Himachal Pradesh.

Copy to the Chief Engineer (SZ) Jal Shakti Vibhag, Jal Shakti Bhawan,Shimla-5 for information and further necessary action please
Copy to the Member Secretary HPGWA cum SE P&I-II, Jal Shakti Vibhag, Jal Shakti Bhawan, Shimla-5 for information and further necessary action please.
Copy to the Senior Hydrogeologist, Ground Water Organisation, JSV Una, for information please
Copy to the Executive Engineer JSV Division Nahan for information and direction to regularly monitor water quality in the area. w.r.t. his Letter no. 18196-99 dt 21/03/24

Superintending Engineer,
Jal Shakti Circle, Nahan
Himachal Pradesh.

FR
EE GWA

SE P&I-II
21/03/2024

Annexure A

Sr. No	Name of Schemes	Latitude	Longitude
1	LWSS trilokpur (Tube well)	30.322978	77.123096
2	LWSS Kheri (Tap)	30.524397	77.198789
3	LWSS Nahan Town (Tube well)	30.524406	77.199191
4	LWSS Kalaamb (Tube well)	30.499570	77.212345
5	LWSS Moginand (Tube well)	30.514268	77.239290
6	LWSS Bankabara (Tube well)	30.516628	77.142159
7	LWSS Khara (Tube well)	30.495382	77.212288
8	Patwar khana Hand pump village Moginand	30.514853	77.238654

Superintending Engineer,
Jal Shakti Circle,Nahan,

restoring eco balance

Eco Paryavaran Laboratories & Consultants Pvt. Ltd.

(Formerly known as Eco Laboratories & Consultants Pvt. Ltd.)

TEST REPORT

ULR No. : TC118162400000202F		Test Report No. :	NWAL060324NA001
Type of Sample : Water- Ground Water			
Customer Name	Assistant Engineer	Work Order No. & Date	JSSO/NHN/Test/2023/2408-09 Dt.: 04/03/2024
Address	Jal Shakti, Sub Division, Nahan, Himachal Pradesh	Customer reference No. (If any)	NA
		Date of Sampling	05/03/2024
Sampling Protocol	IS 17614 (Part 1), EL-MSP-7.3	Date of Sample Receipt	06/03/2024
Sample Collection Mode	Mr. Deepak (Eco Rep.)	Period of Analysis	06/03/2024 To 14/03/2024
Testing Location	Permanent Facility	Date of Reporting	14/03/2024
Sampling Location	Tubewell (LWSS Trilokpur)		
Sample Description	Clear, colourless liquid.		
Standard/Specification	NA		
Packing, Markings, Seal & Qty.	2 litre Plastic & 1 litre + 500ml Glass Bottle Marked D/05/G1		

RESULTS

I. Chemical Testing

1. Water (Ground Water)

S.No.	Test Parameter	Unit	Result	Detection Limit	Test Method
1	pH @ 25 °C	-	6.85	0.5	IS 3025 (Part 11)
2	Oil & Grease	mg/l	BDL		IS 3025 (Part 39)
3	Aluminium as Al	mg/l	BDL	0.001	USEPA 3015A
4	Ammonia as NH3-N	mg/l	BDL	5	IS 3025 (Part 34) Cl 2.5-Titrimetric Method
5	Copper as Cu	mg/l	BDL	0.001	USEPA 3015A
6	Fluoride as F	mg/l	0.35	0.1	IS 3025 (Part 60)
7	Iron as Fe	mg/l	0.002	0.001	USEPA 3015A
8	Manganese as Mn	mg/l	0.004	0.001	USEPA 3015A
9	Nitrate as NO3	mg/l	13	1	IS 3025 (Part 34) -Cl 3.3 Chromotropic Acid Method
10	Sulphate as SO4	mg/l	14	1	IS 3025 (Part 24) Cl 4.0 Turbidity Method
11	Chemical Oxygen Demand (COD)	mg/l	BDL	5	IS 3025 (Part 58)
12	Biochemical Oxygen Demand (BOD)	mg/l	BDL	2	IS 3025 (Part 44) BOD 3 Days at 27°C
13	Zinc as Zn	mg/l	0.079	0.001	USEPA 3015A
14	Lead as Pb	mg/l	BDL	0.001	USEPA 3015A
15	Nickel as Ni	mg/l	BDL	0.001	USEPA 3015A
16	Arsenic as As	mg/l	BDL	0.001	USEPA 3015A
17	Sodium as Na	mg/l	24.3	1	IS 3025 (Part 45)

Authorized Signatory-Biological

Authorized Signatory-Chemical

ECO BHAWAN E-207, Industrial Area, Phase VIII-B (Sector-74), Mohali (Punjab) 160071

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ULR No. : TC118182400000202 2F	Test Report No. : NWAL060324NA001
Type of Sample : Water- Ground Water	

II. Biological Testing

2. Water (Ground Water)

S.No.	Test Parameter	Unit	Result	Detection Limit	Test Method
1	Total Coliform	Present or Absent/100 ml	Absent	-	IS 15185
2	E. coli	Present or Absent/100 ml	Absent	-	IS 15185
3	Thermotolerant Coliform (F. coliforms)	Present or Absent/100 ml	Absent	-	APHA 24th Ed 9222D

Remarks : NA Latitude = 30.329978N; Longitude = 77.123096E

OTHER INFORMATION

Abbreviation : ULR: Unique Lab Report, BDL: Below Detection Level, NA: Not Applicable

Terms & Conditions : Please refer terms and conditions on backside of Test Report (Page-1)

End of Report

Lata Thakur
Authorized Signatory-Biological

Umesh Kumar
Authorized Signatory-Chemical

Water-EL-FMT-7.8.2-W

Eco Paryavaran Laboratories & Consultants Pvt. Ltd.

(Formerly known as Eco Laboratories & Consultants Pvt. Ltd.)

TEST REPORT

ULR No. : NA		Test Report No. :	NWAL060324NA001/A
Type of Sample : Water- Ground Water			
Customer Name	Assistant Engineer	Work Order No. & Date	ISSD/NHN/Test/2023/2408-09 Dt.: 04/03/2024
Address	Jal Shakti, Sub Division, Nahan, Himachal Pradesh	Customer reference No. (If any)	NA
		Date of Sampling	05/03/2024
Sampling Protocol	IS 17614 (Part 1), EL-MSP-7.3	Date of Sample Receipt	06/03/2024
Sample Collection Mode	Mr. Deepak (Eco Rep.)	Period of Analysis	06/03/2024 To 14/03/2024
Testing Location	Permanent Facility	Date of Reporting	14/03/2024
Sampling Loration	Tubewell (LWSS Trilokpur)		
Sample Description	Clear, colourless liquid		
Standard/Specification	NA		
Packing, Markings, Seal & Qty.	2 litre Plastic & 1 litre + 500ml Glass Bottle Marked D/05/G1		

RESULTS

I. Chemical Testing

1. Water (Ground Water)

S.No.	Test Parameter	Unit	Result	Detection Limit	Test Method
1	Potassium as K	mg/l	2.1	1	IS 3025 (Part 45)

Remarks : This report is the part of Test Report No. NWAL060324NA001

OTHER INFORMATION

Abbreviation : ULR: Unique Lab Report, BDL: Below Detection Level, NA: Not Applicable

Terms & Conditions : Please refer terms and conditions on backside of Test Report (Page-2)

End of Report

ECO GROUP

Umesh Kumar
Authorised Signatory-Chemical

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Eco Paryavaran Laboratories & Consultants Pvt. Ltd.
(Formerly known as Eco Laboratories & Consultants Pvt. Ltd.)

TEST REPORT

ULR No. : TC118182400000202 3F		Test Report No. :	NWAL060324NA001
Type of Sample : Water- Ground Water			
Customer Name	Assistant Engineer	Work Order No. & Date	JSSO/NHN/Test/2023/2408-09 Dt.- 04/03/2024
Address	Jal Shakti, Sub Division, Nahan, Himachal Pradesh	Customer reference No. (if any)	
		Date of Sampling	05/03/2024
Sampling Protocol	IS 17614 (Part 1), EL-MSP-7.3	Date of Sample Receipt	06/03/2024
Sample Collection Mode	Mr. Deepak (Eco Rep.)	Period of Analysis	06/03/2024 To 14/03/2024
Testing Location	Permanent Facility	Date of Reporting	14/03/2024
Sampling Location	From Tap (House No.137, Srivicharan House) Vill. Kheri		
Sample Description	Clear, colourless liquid.		
Standard/Specification	NA		
Packing, Markings, Seal & Qty.	2 Litre Plastic & 1 litre + 500ml Glass Bottle Marked D/05/G2		

RESULTS

I. Chemical Testing

1. Water (Ground Water)

S.No.	Test Parameter	Unit	Result	Detection Limit	Test Method
1	pH @ 25 °C	-	7.35	0.5	IS 3025 (Part 11)
2	Oil & Grease	mg/l	BDL		IS 3025 (Part 39)
3	Aluminium as Al	mg/l	0.1	0.001	USEPA 3015A
4	Ammonia as NH3-N	mg/l	BDL	5	IS 3025 (Part 34) Cl 2.5-Titrimetric Method
5	Copper as Cu	mg/l	BDL	0.001	USEPA 3015A
6	Fluoride as F	mg/l	0.40	0.1	IS 3025 (Part 60)
7	Iron as Fe	mg/l	0.005	0.001	USEPA 3015A
8	Manganese as Mn	mg/l	0.002	0.001	USEPA 3015A
9	Nitrate as NO3	mg/l	13	1	IS 3025 (Part 34) -Cl 3.3 Chromotropic Acid Method
10	Sulphate as SO4	mg/l	12	1	IS 3025 (Part 24) Cl 4.0 Turbidity Method
11	Chemical Oxygen Demand (COD)	mg/l	BDL	5	IS 3025 (Part 58)
12	Biochemical Oxygen Demand (BOD)	mg/l	BDL	2	IS 3025 (Part 44) BOD 3 Days at 27°C
13	Zinc as Zn	mg/l	0.015	0.001	USEPA 3015A
14	Lead as Pb	mg/l	BDL	0.001	USEPA 3015A
15	Nickel as Ni	mg/l	BDL	0.001	USEPA 3015A
16	Arsenic as As	mg/l	BDL	0.001	USEPA 3015A
17	Sodium as Na	mg/l	26.2	1	IS 3025 (Part 45)

Authorized Signatory-Biological

Authorized Signatory-Chemical

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-102-

-14-

ULR No. : TC118182400000202 3F	Test Report No. : NWAL060324NA002
Type of Sample : Water- Ground Water	

II. Biological Testing

2. Water (Ground Water)

S.No.	Test Parameter	Unit	Result	Detection Limit	Test Method
1	Total Coliform	Present or Absent/100 ml	Absent	-	IS 15185
2	E. coli	Present or Absent/100 ml	Absent	-	IS 15185
3	Thermotolerant Coliform (F. coliforms)	Present or Absent/100 ml	Absent	-	APHA 24th Ed 9222D

Remarks : NA Latitude=30.624397N; Longitude=77.198786

OTHER INFORMATION

Abbreviation : ULR: Unique Lab Report, BDL: Below Detection Level, NA: Not Applicable

Terms & Conditions : Please refer terms and conditions on backside of Test Report (Page-1)

End of Report

Laxmi Thakur
Authorized Signatory-Biological

Umesh Kumar
Authorized Signatory-Chemical

Sawan Laboratories & Consultants Pvt. Ltd. E-207 Phase VIII-B (sector-74) Mohali (Pb.) 160071

Eco Paryavaran Laboratories & Consultants Pvt. Ltd.
(Formerly known as Eco Laboratories & Consultants Pvt. Ltd.)

TEST REPORT

ULR No. : NA		Test Report No. :	NWAL060324NA002/A
Type of Sample : Water- Ground Water			
Customer Name	Assistant Engineer	Work Order No. & Date	ISSD/NHN/Test/2023/2408-09 Dt.: 04/03/2024
Address	Jal Shakti, Sub Division, Nahan, Himachal Pradesh	Customer reference No. (If any)	
		Date of Sampling	05/03/2024
Sampling Protocol	IS 17614 (Part 1), EL-MSP-7.3	Date of Sample Receipt	06/03/2024
Sample Collection Mode	Mr. Deepak (Eco Rep.)	Period of Analysis	06/03/2024 To 14/03/2024
Testing Location	Permanent Facility	Date of Reporting	14/03/2024
Sampling Location	From Tap (House No.137, Shivcharan House) Vill. Khei		
Sample Description	Clear, colourless liquid		
Standard/Specification	NA		
Packing, Markings, Seal & Qty.	2 litre Plastic & 1 litre + 500ml Glass Bottle Marked D/05/02		

RESULTS

I. Chemical Testing

1. Water (Ground Water)

S.No.	Test Parameter	Unit	Result	Detection Limit	Test Method
1	Potassium as K	mg/l	2.3	1	IS 3025 (Part 45)

Remarks : This report is the part of Test Report No. NWAL060324NA002.

OTHER INFORMATION

Abbreviation : ULR: Unique Lab Report, BDL: Below Detection Level, NA: Not Applicable

Terms & Conditions : Please refer terms and conditions on backside of Test Report (Page-1)

End of Report

Umesh Kumar
Authorized Signatory Chemist

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Eco Paryavaran Laboratories & Consultants Pvt. Ltd.
(Formerly known as Eco Laboratories & Consultants Pvt. Ltd.)

TEST REPORT

ULR No. : TC118182400000202 4F		Test Report No. :	NWAL060324NA003
Type of Sample : Water- Ground Water			
Customer Name	Assistant Engineer	Work Order No. & Date	JSSD/NHN/Test/2023/2408-09 Dt.: 04/03/2024
Address	Jal Shakti, Sub Division, Nahan, Himachal Pradesh	Customer reference No. (If any)	NA
		Date of Sampling	05/03/2024
Sampling Protocol	IS 17614 (Part 1), EL-MSP-7.3	Date of Sample Receipt	06/03/2024
Sample Collection Mode	Mr. Deepak (Eco Rep.)	Period of Analysis	06/03/2024 To 14/03/2024
Testing Location	Permanent Facility	Date of Reporting	14/03/2024
Sampling Location	Tubewell LWSS Nahan Town, Vill. Khen		
Sample Description	Clear, colourless liquid.		
Standard/Specification	NA		
Packing, Markings, Seal & Qty.	2 litre Plastic & 1 litre + 500ml Glass Bottle Marked D/05/G3		

RESULTS

I. Chemical Testing

1. Water (Ground Water)

S.No.	Test Parameter	Unit	Result	Detection Limit	Test Method
1	pH @ 25 °C	-	7.56	0.5	IS 3025 (Part 11)
2	Oil & Grease	mg/l	BDL		IS 3025 (Part 39)
3	Aluminium as Al	mg/l	0.002	0.001	USEPA 3015A
4	Ammonia as NH3-N	mg/l	BDL	5	IS 3025 (Part 34) Cl 2.5-Titrimetric Method
5	Copper as Cu	mg/l	0.266	0.001	USEPA 3015A
6	Fluoride as F	mg/l	0.35	0.1	IS 3025 (Part 60)
7	Iron as Fe	mg/l	0.002	0.001	USEPA 3015A
8	Manganese as Mn	mg/l	0.003	0.001	USEPA 3015A
9	Nitrate as NO3	mg/l	13	1	IS 3025 (Part 34) -Cl 3.3 Chromotropic Acid Method
10	Sulphate as SO4	mg/l	15	1	IS 3025 (Part 24) Cl 4.0 Turbidity Method
11	Chemical Oxygen Demand (COD)	mg/l	BDL	5	IS 3025 (Part 58)
12	Biochemical Oxygen Demand (BOD)	mg/l	BDL	2	IS 3025 (Part 44) BOD 3 Days at 27°C
13	Zinc as Zn	mg/l	0.012	0.001	USEPA 3015A
14	Lead as Pb	mg/l	BDL	0.001	USEPA 3015A
15	Nickel as Ni	mg/l	BDL	0.001	USEPA 3015A
16	Arsenic as As	mg/l	BDL	0.001	USEPA 3015A
17	Sodium as Na	mg/l	16.7	1	IS 3025 (Part 45)

Lata Thakur
Authorized Signatory-Biological

Umesh Kumar
Authorized Signatory-Chemical

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ULR No. : TC11818240000002024F	Test Report No. : NWAL060324NA003
Type of Sample : Water- Ground Water	

II. Biological Testing

2. Water (Ground Water)

S.No.	Test Parameter	Unit	Result	Detection Limit	Test Method
1	Total Coliform	Present or Absent/100 ml	Absent	-	IS 15185
2	E. coll	Present or Absent/100 ml	Absent	-	IS 15185
3	Thermotolerant Coliform (F. coliforms)	Present or Absent/100 ml	Absent	-	APHA 24th Ed 9222D

Remarks : NA Latitude = 30.524406N; Longitude = 77.199191E

OTHER INFORMATION

Abbreviation : ULR: Unique Lab Report, BDL: Below Detection Level, NA: Not Applicable

Terms & Conditions : Please refer terms and conditions on backside of Test Report (Page-1)

End of Report

Lata Thakur
Authorized Signatory-Biological

Umesh Kumar
Authorized Signatory-Chemical

Nirvaan Laboratories & Consultants Pvt. Ltd. E-207 Phase VIII-B (sector-74) Mohali (Pb.) 160071

Eco Paryavaran Laboratories & Consultants Pvt. Ltd.
(Formerly known as Eco Laboratories & Consultants Pvt. Ltd.)

TEST REPORT

ULR No. : NA		Test Report No. :	NWAL060324NA003/A
Type of Sample : Water-Ground Water			
Customer Name	Assistant Engineer	Work Order No. & Date	JSSD/NHN/Test/2023/2408-09 Dt.: 04/03/2024
Address	Jal Shakti, Sub Division, Nahan, Himachal Pradesh	Customer reference No. (If any)	NA
		Date of Sampling	05/03/2024
Sampling Protocol	IS 17614 (Part 1), EL-MSP-7.3	Date of Sample Receipt	06/03/2024
Sample Collection Mode	Mr. Deepak (Eco Rep.)	Period of Analysis	06/03/2024 To 14/03/2024
Testing Location	Permanent Facility	Date of Reporting	14/03/2024
Sampling Location	Tubewell LWSS Nahan Town, Vill. Kheri		
Sample Description	Clear, colourless liquid.		
Standard/Specification	NA		
Packing, Markings, Seal & Qty.	2 litre Plastic & 1 litre + 500ml Glass Bottle Marked D/05/G3		

RESULTS

I. Chemical Testing

1. Water (Ground Water)

S.No.	Test Parameter	Unit	Result	Detection Limit	Test Method
1	Potassium as K	mg/l	1.4	1	IS 3025 (Part 45)

Remarks : This report is the part of Test Report No. NWAL060324NA003.

OTHER INFORMATION

Abbreviation : ULR: Unique Lab Report, BDL: Below Detection Level, NA: Not Applicable

Terms & Conditions : Please refer terms and conditions on backside of Test Report (Page-3)

End of Report

Umesh Kumar
Authorized Signatory-Chemical

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Eco Paryavaran Laboratories & Consultants Pvt. Ltd.
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TEST REPORT

ULR No. : TC118182400000025F		Test Report No. :	NWAL060324NA004
Type of Sample : Water- Ground Water			
Customer Name	Assistant Engineer	Work Order No. & Date	JSSD/NHN/Test/2023/2408-09 Dt.: 04/03/2024
Address	Jal Shakti, Sub Division, Nahan, Himachal Pradesh	Customer reference No. (If any)	NA
		Date of Sampling	05/03/2024
Sampling Protocol	IS 17614 (Part 1), EL-MSP-7.3	Date of Sample Receipt	06/03/2024
Sample Collection Mode	Mr. Deepak (Eco Rep.)	Period of Analysis	06/03/2024 To 14/03/2024
Testing Location	Permanent Facility	Date of Reporting	14/03/2024
Sampling Location	Tubewell LWSS, Kala Amb		
Sample Description	Clear, colourless liquid		
Standard/Specification	NA		
Packing, Markings, Seal & Qty.	2 litre Plastic & 1 litre + 500ml Glass bottle Marked D/05/G4		

RESULTS

1. Chemical Testing

1. Water (Ground Water)

S.No.	Test Parameter	Unit	Result	Detection Limit	Test Method
1	pH @ 25 °C	-	7.61	0.5	IS 3025 (Part 11)
2	Oil & Grease	mg/l	BDL		IS 3025 (Part 39)
3	Aluminium as Al	mg/l	0.003	0.001	USEPA 3015A
4	Ammonia as NH3-N	mg/l	BDL	5	IS 3025 (Part 34) Cl 2.5-Titrimetric Method
5	Copper as Cu	mg/l	BDL	0.001	USEPA 3015A
6	Fluoride as F	mg/l	0.30	0.1	IS 3025 (Part 60)
7	Iron as Fe	mg/l	0.005	0.001	USEPA 3015A
8	Manganese as Mn	mg/l	0.002	0.001	USEPA 3015A
9	Nitrate as NO3	mg/l	11	1	IS 3025 (Part 34) -Cl 3.3 Chromotropic Acid Method
10	Sulphate as SO4	mg/l	58	1	IS 3025 (Part 24) Cl 4.0 Turbidity Method
11	Chemical Oxygen Demand (COD)	mg/l	BDL	5	IS 3025 (Part 58)
12	Biochemical Oxygen Demand (BOD)	mg/l	BDL	2	IS 3025 (Part 44) BOD 3 Days at 27°C
13	Zinc as Zn	mg/l	0.016	0.001	USEPA 3015A
14	Lead as Pb	mg/l	BDL	0.001	USEPA 3015A
15	Nickel as Ni	mg/l	BDL	0.001	USEPA 3015A
16	Arsenic as As	mg/l	BDL	0.001	USEPA 3015A
17	Sodium as Na	mg/l	16.6	1	IS 3025 (Part 45)

Authorized Signatory-Biological

Umesh Kumar
Authorized Signatory-Chemical

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-108-
— 20 —

ULR No. : TC118182400000202SF	Test Report No. : NWAL060324NA004
Type of Sample : Water- Ground Water	

II. Biological Testing

2. Water (Ground Water)

S.No.	Test Parameter	Unit	Result	Detection Limit	Test Method
1	Total Coliform	Present or Absent/100 ml	Absent	-	IS 15185
2	E. coli	Present or Absent/100 ml	Absent	-	IS 15185
3	Thermotolerant Coliform (F. coliforms)	Present or Absent/100 ml	Absent	-	APHA 24th Ed 9222D

Remarks : NA Latitude = 30.499570N; Longitude = 77.212345E

OTHER INFORMATION

Abbreviation : ULR: Unique Lab Report, BDL: Below Detection Level, NA: Not Applicable

Terms & Conditions : Please refer terms and conditions on backside of Test Report (Page-1)

End of Report

Lata Thakur
Authorized Signatory-Biological

Umesh Kumar
Authorized Signatory-Chemical

Eco Paryavaran Laboratories & Consultants Pvt. Ltd.
(Formerly known as Eco Laboratories & Consultants Pvt. Ltd.)

TEST REPORT

ULR No. : NA		**Test Report No. :**	NWAL060324NA004/A
Type of Sample : Water- Ground Water			
Customer Name	Assistant Engineer	**Work Order No. & Date**	JSSD/NHN/Test/2023/2408-09 Dt.: 04/03/2024
Address	Jal Shakti, Sub Division, Nahan, Himachal Pradesh	**Customer reference No. (if any)**	NA
		Date of Sampling	05/03/2024
Sampling Protocol	IS 17614 (Part 1), EL-MSP-7.1	**Date of Sample Receipt**	05/03/2024
Sample Collection Mode	Mr. Deepak (Eco Rep.)	**Period of Analysis**	06/03/2024 To 14/03/2024
Testing Location	Permanent Facility	**Date of Reporting**	14/03/2024
Sampling Location	Tubewell I WSS, Kala Amb		
Sample Description	Clear, colourless liquid.		
Standard/Specification	NA		
Packing, Markings, Seal & Qty.	2 litre Plastic & 1 litre + 500ml Glass Bottle Marked D/05/04		

RESULTS

I. Chemical Testing

1. Water (Ground Water)

S.No.	Test Parameter	Unit	Result	Detection Limit	Test Method
1	Potassium as K	mg/l	1.3	1	IS 3025 (Part 45)

Remarks : This report is the part of Test Report No. NWAL060324NA004.

OTHER INFORMATION

Abbreviation : ULR: Unique Lab Report, BDL: Below Detection Level, NA: Not Applicable

Terms & Conditions : Please refer terms and conditions on backside of Test Report (Page-1)

End of Report

Umesh Kumar
Authorized Signatory (Chemical)

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Eco Paryavaran Laboratories & Consultants Pvt. Ltd.

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TEST REPORT

ULR No. : TC118182400000202GF		Test Report No. :	NWAL060324NA005
Type of Sample : Water- Ground Water			
Customer Name	Assistant Engineer	Work Order No. & Date	ISSD/NHN/Test/2023/2408-09 Dt.: 04/03/2024
Address	Jal Shakti, Sub Division, Nahan, Himachal Pradesh	Customer reference No. (if any)	NA
		Date of Sampling	05/03/2024
Sampling Protocol	IS 17614 (Part 1), EL-MSP-7.3	Date of Sample Receipt	06/03/2024
Sample Collection Mode	Mr. Deepak (Eco Rep.)	Period of Analysis	06/03/2024 To 14/03/2024
Testing Location	Permanent Facility	Date of Reporting	14/03/2024
Sampling Location	Tubewell LWSS, Moginand		
Sample Description	Clear, colourless liquid		
Standard/Specification	NA		
Packing, Markings, Seal & Qty.	2 litre Plastic & 1 litre + 500ml Glass Bottle Marked D/05/GS		

RESULTS

I. Chemical Testing

1. Water (Ground Water)

S.No.	Test Parameter	Unit	Result	Detection Limit	Test Method
1	pH @ 25°C	-	7.86	0.5	IS 3025 (Part 11)
2	Oil & Grease	mg/l	BDL		IS 3025 (Part 39)
3	Aluminium as Al	mg/l	0.002	0.001	USEPA 3015A
4	Ammonia as NH3-N	mg/l	BDL	5	IS 3025 (Part 34) Cl 2.5-Titrimetric Method
5	Copper as Cu	mg/l	BDL	0.001	USEPA 3015A
6	Fluoride as F	mg/l	0.45	0.1	IS 3025 (Part 60)
7	Iron as Fe	mg/l	0.002	0.001	USEPA 3015A
8	Manganese as Mn	mg/l	BDL	0.001	USEPA 3015A
9	Nitrate as NO3	mg/l	19	1	IS 3025 (Part 34) -Cl 3.3 Chromotropic Acid Method
10	Sulphate as SO4	mg/l	27	1	IS 3025 (Part 24) Cl 4.0 Turbidity Method
11	Chemical Oxygen Demand (COD)	mg/l	BDL	5	IS 3025 (Part 58)
12	Biochemical Oxygen Demand (BOD)	mg/l	BDL	2	IS 3025 (Part 44) BOD 3 Days at 27°C
13	Zinc as Zn	mg/l	0.851	0.001	USEPA 3015A
14	Lead as Pb	mg/l	BDL	0.001	USEPA 3015A
15	Nickel as Ni	mg/l	BDL	0.001	USEPA 3015A
16	Arsenic as As	mg/l	BDL	0.001	USEPA 3015A
17	Sodium as Na	mg/l	14	1	IS 3025 (Part 45)

Authorized Signatory-Biological

Authorized Signatory-Chemical

ECO BHAVAN E-207, Industrial Area, Phase VIII-B (Sector-74), Mohali (Punjab) 160071

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970

-111-

— 23 —

ULR No. : TC118182400000202 6F	Test Report No. : NWAL060324NA005
Type of Sample : Water- Ground Water	

II. Biological Testing

2. Water (Ground Water)

S.No.	Test Parameter	Unit	Result	Detection Limit	Test Method
1	Total Coliform	Present or Absent/100 ml	Absent	-	IS 15185
2	E. coli	Present or Absent/100 ml	Absent	-	IS 15185
3	Thermotolerant Coliform (F. coliforms)	Present or Absent/100 ml	Absent	-	APHA 24th Ed 9222D

Remarks : NA Latitude = 30.514268N; Longitude = 77.239290E

OTHER INFORMATION

Abbreviation : ULR: Unique Lab Report, BDL: Below Detection Level, NA: Not Applicable

Terms & Conditions : Please refer terms and conditions on backside of Test Report (Page-1)

End of Report

Lata Thakur
Authorized Signatory-Biological

Umesh Kumar
Authorized Signatory-Chemical

Eco Paryavaran Laboratories & Consultants Pvt. Ltd.
(Formerly known as Eco Laboratories & Consultants Pvt. Ltd.)

TEST REPORT

ULR No. : NA		**Test Report No. :**	NWAL060324NA005/A
Type of Sample : Water- Ground Water			
Customer Name	Assistant Engineer	**Work Order No. & Date**	ISSD/NHN/Test/2023/2408-09 Dt:- 04/03/2024
Address	Jal Shakti, Sub Division, Nahan, Himachal Pradesh	**Customer reference No. (If any)**	NA
		Date of Sampling	05/03/2024
Sampling Protocol	IS 17614 (Part 1), EL-MSP-7.3	**Date of Sample Receipt**	06/03/2024
Sample Collection Mode	Mr. Deepak (Eco Rep.)	**Period of Analysis**	06/03/2024 To 14/03/2024
Testing Location	Permanent Facility	**Date of Reporting**	14/03/2024
Sampling Location	Tubewell LWSS, Mogmand		
Sample Description	Clear, colourless liquid.		
Standard/Specification	NA		
Packing, Markings, Seal & Qty.	2 litre Plastic & 1 litre + 500ml Glass Bottle Marked D/05/GS		

RESULTS

I. Chemical Testing

1. Water (Ground Water)

S.No.	Test Parameter	Unit	Result	Detection Limit	Test Method
1	Potassium as K	mg/l	1.1	1	IS 3025 (Part 45)

Remarks : This report is the part of Test Report No. NWAL060324NA005.

OTHER INFORMATION

Abbreviation : ULR: Unique Lab Report, BDL: Below Detection Level, NA: Not Applicable

Terms & Conditions : Please refer terms and conditions on backside of Test Report (Page-1)

End of Report

Authorized Signatory- Chemical

ECO BHAWAN E-207, Industrial Area, Phase VIII-B (Sector-74), Mohali (Punjab) 160071
0172-4616225 9781303109 contact@ecoparyavaran.org | md@ecoparyavaran.org www.ecoparyavaran.org

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TEST REPORT

ULR No. : TC118182400000202 7F		**Test Report No. :**	NWAL060324NA006
Type of Sample : Water- Ground Water			
Customer Name	Assistant Engineer	**Work Order No. & Date**	JSSD/NHN/Test/2023/2408-09 Dt.: 04/03/2024
Address	Jal Shakti, Sub Division, Nahan, Himachal Pradesh	**Customer reference No. (If any)**	NA
		Date of Sampling	05/03/2024
Sampling Protocol	IS 17614 (Part 1), EL-MSP-7.3	**Date of Sample Receipt**	06/03/2024
Sample Collection Mode	Mr. Deepak (Eco Rep.)	**Period of Analysis**	06/03/2024 To 14/03/2024
Testing Location	Permanent Facility	**Date of Reporting**	14/03/2024
Sampling Location	Tubewell LWSS, Bankabara		
Sample Description	Clear, colourless liquid.		
Standard/Specification	NA		
Packing, Markings, Seal & Qty.	2 litre Plastic & 1 litre + 500ml Glass Bottle Marked D/05/G6		

RESULTS

I. Chemical Testing

1. Water (Ground Water)

S.No.	Test Parameter	Unit	Result	Detection Limit	Test Method
1	pH @ 25 °C	-	8.32	0.5	IS 3025 (Part 11)
2	Oil & Grease	mg/l	BDL		IS 3025 (Part 39)
3	Aluminium as Al	mg/l	0.026	0.001	USEPA 3015A
4	Ammonia as NH3-N	mg/l	BDL	5	IS 3025 (Part 34) Cl 2.5-Titrimetric Method
5	Copper as Cu	mg/l	BDL	0.001	USEPA 3015A
6	Fluoride as F	mg/l	0.55	0.1	IS 3025 (Part 60)
7	Iron as Fe	mg/l	0.008	0.001	USEPA 3015A
8	Manganese as Mn	mg/l	0.011	0.001	USEPA 3015A
9	Nitrate as NO3	mg/l	6.7	1	IS 3025 (Part 34) -Cl 3.3 Chromotropic Acid Method
10	Sulphate as SO4	mg/l	18	1	IS 3025 (Part 24) Cl 4.0 Turbidity Method
11	Chemical Oxygen Demand (COD)	mg/l	BDL	5	IS 3025 (Part 58)
12	Biochemical Oxygen Demand (BOD)	mg/l	BDL	2	IS 3025 (Part 44) BOD 3 Days at 27°C
13	Zinc as Zn	mg/l	0.044	0.001	USEPA 3015A
14	Lead as Pb	mg/l	BDL	0.001	USEPA 3015A
15	Nickel as Ni	mg/l	BDL	0.001	USEPA 3015A
16	Arsenic as As	mg/l	0.002	0.001	USEPA 3015A
17	Sodium as Na	mg/l	181	1	IS 3025 (Part 45)

Lata Thakur
Authorized Signatory-Biological

Umesh Kumar
Authorized Signatory-Chemical

ECO BHAWAN E-207, Industrial Area, Phase VIII-B (Sector-74), Mohali (Punjab) 160071

0172-4616225 9781303109 contact@ecoparyavaran.org | md@ecoparyavaran.org www.ecoparyavaran.org

ULR No. : TC11818240000002027F	Test Report No. : NWAL060324NA006
Type of Sample : Water- Ground Water	

II. Biological Testing

2. Water (Ground Water)

S.No.	Test Parameter	Unit	Result	Detection Limit	Test Method
1	Total Coliform	Present or Absent/100 ml	Absent	-	IS 15185
2	E. coli	Present or Absent/100 ml	Absent	-	IS 15185
3	Thermotolerant Coliform (F. coliforms)	Present or Absent/100 ml	Absent	-	APHA 24th Ed 9222D

Remarks : NA Latitude = 30.516628N; Longitude = 77.142159E

OTHER INFORMATION

Abbreviation : ULR: Unique Lab Report, BDL: Below Detection Level, NA: Not Applicable

Terms & Conditions : Please refer terms and conditions on backside of Test Report (Page-1)

End of Report

Lata Thakur
Authorized Signatory-Biological

Umesh Kumar
Authorized Signatory-Chemical

E-207 Phase VIII-B (sector-74) Mohali (Pb.) 160071

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TEST REPORT

ULR No. : NA		**Test Report No. :**	NWAL060324NA006/A
Type of Sample : Water- Ground Water			
Customer Name	Assistant Engineer	**Work Order No. & Date**	JSSD/NHN/Test/2023/2408-09 Dt.: 04/03/2024
Address	Jal Shakti, Sub Division, Nahan, Himachal Pradesh	**Customer reference No. (If any)**	NA
		Date of Sampling	05/03/2024
Sampling Protocol	IS 17614 (Part 1), EL-MSP-7.3	**Date of Sample Receipt**	06/03/2024
Sample Collection Mode	Mr. Deepak (Eco Rep.)	**Period of Analysis**	06/03/2024 To 14/03/2024
Testing Location	Permanent Facility	**Date of Reporting**	14/03/2024
Sampling Location	Tubewell LWSS, Bankabara		
Sample Description	Clear, colourless liquid.		
Standard/Specification	NA		
Packing, Markings, Seal & Qty.	2 litre Plastic & 1 litre + 500ml Glass Bottle Marked D/05/G6		

RESULTS

I. Chemical Testing

1. Water (Ground Water)

S.No.	Test Parameter	Unit	Result	Detection Limit	Test Method
1	Potassium as K	mg/l	12	1	IS 3025 (Part 45)

Remarks : This report is the part of Test Report No. NWAL060324NA006.

OTHER INFORMATION

Abbreviation : ULR: Unique Lab Report, BDL: Below Detection Level, NA: Not Applicable

Terms & Conditions : Please refer terms and conditions on backside of Test Report (Page-1)

End of Report

Umesh Kumar
Authorized Signatory-Chemical

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TC-11818

TEST REPORT

ULR No. : TC118182400002028F		**Test Report No. :**	NWAL060324NA007
Type of Sample : Water- Ground Water			
Customer Name	Assistant Engineer	**Work Order No. & Date**	JSSD/NHN/Test/2023/2408-09 Dt.: 04/03/2024
Address	Jal Shakti, Sub Division, Nahan, Himachal Pradesh	**Customer reference No. (If any)**	NA
		Date of Sampling	05/03/2024
Sampling Protocol	IS 17614 (Part 1), EL-MSP-7.3	**Date of Sample Receipt**	06/03/2024
Sample Collection Mode	Mr. Deepak (Eco Rep.)	**Period of Analysis**	06/03/2024 To 14/03/2024
Testing Location	Permanent Facility	**Date of Reporting**	14/03/2024
Sampling Location	Tubewell LWSS, Khara		
Sample Description	Clear, colourless liquid.		
Standard/Specification	NA		
Packing, Markings, Seal & Qty.	2 litre Plastic & 1 litre + 500ml Glass Bottle Marked D/05/G7		

RESULTS

I. Chemical Testing

1. Water (Ground Water)

S.No.	Test Parameter	Unit	Result	Detection Limit	Test Method
1	pH @ 25 °C	-	6.78	0.5	IS 3025 (Part 11)
2	Oil & Grease	mg/l	BDL		IS 3025 (Part 39)
3	Aluminium as Al	mg/l	0.002	0.001	USEPA 3015A
4	Ammonia as NH3-N	mg/l	BDL	5	IS 3025 (Part 34) Cl 2.5-Titrimetric Method
5	Copper as Cu	mg/l	BDL	0.001	USEPA 3015A
6	Fluoride as F	mg/l	0.55	0.1	IS 3025 (Part 60)
7	Iron as Fe	mg/l	0.003	0.001	USEPA 3015A
8	Manganese as Mn	mg/l	0.002	0.001	USEPA 3015A
9	Nitrate as NO3	mg/l	16	1	IS 3025 (Part 34) -Cl 3.3 Chromotropic Acid Method
10	Sulphate as SO4	mg/l	36	1	IS 3025 (Part 24) Cl 4.0 Turbidity Method
11	Chemical Oxygen Demand (COD)	mg/l	8.0	5	IS 3025 (Part 58)
12	Biochemical Oxygen Demand (BOD)	mg/l	BDL	2	IS 3025 (Part 44) BOD 3 Days at 27°C
13	Zinc as Zn	mg/l	0.016	0.001	USEPA 3015A
14	Lead as Pb	mg/l	BDL	0.001	USEPA 3015A
15	Nickel as Ni	mg/l	BDL	0.001	USEPA 3015A
16	Arsenic as As	mg/l	BDL	0.001	USEPA 3015A
17	Sodium as Na	mg/l	26	1	IS 3025 (Part 45)

Lata Thakur
Authorized Signatory-Biological

Umesh Kumar
Authorized Signatory-Chemical

ECO BHAWAN E-207, Industrial Area, Phase VIII-B (Sector-74), Mohali (Punjab) 160071

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ULR No. : TC118182400000202BF	Test Report No. : NWAL060324NA007
Type of Sample : Water- Ground Water	

II. Biological Testing

2. Water (Ground Water)

S.No.	Test Parameter	Unit	Result	Detection Limit	Test Method
1	Total Coliform	Present or Absent/100 ml	Absent	-	IS 15185
2	E. coli	Present or Absent/100 ml	Absent	-	IS 15185
3	Thermotolerant Coliform (F. coliforms)	Present or Absent/100 ml	Absent	-	APHA 24th Ed 9222D

Remarks : NA Latitude = 30.495382N; Longitude = 77.212289E

OTHER INFORMATION

Abbreviation : ULR: Unique Lab Report, BDL: Below Detection Level, NA: Not Applicable

Terms & Conditions : Please refer terms and conditions on backside of Test Report (Page-1)

End of Report

Jatin Thakur
Authorized Signatory-Biological

Umesh Kumar
Authorized Signatory-Chemical

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TEST REPORT

ULR No. : NA		**Test Report No. :**	NWAL060324NA007/A
Type of Sample : Water- Ground Water			
Customer Name	Assistant Engineer	**Work Order No. & Date**	JSSD/NHN/Test/2023/2408-09 Dt.: 04/03/2024
Address	Jal Shakti, Sub Division, Nahan, Himachal Pradesh	**Customer reference No. (If any)**	NA
		Date of Sampling	05/03/2024
Sampling Protocol	IS 17614 (Part 1), EL-MSP-7.3	**Date of Sample Receipt**	06/03/2024
Sample Collection Mode	Mr. Deepak (Eco Rep.)	**Period of Analysis**	06/03/2024 To 14/03/2024
Testing Location	Permanent Facility	**Date of Reporting**	14/03/2024
Sampling Location	Tubewell LWSS, Khara		
Sample Description	Clear, colourless liquid.		
Standard/Specification	NA		
Packing, Markings, Seal & Qty.	2 litre Plastic & 1 litre + 500ml Glass Bottle Marked D/05/G7		

RESULTS

I. Chemical Testing

1. Water (Ground Water)

S.No.	Test Parameter	Unit	Result	Detection Limit	Test Method
1	Potassium as K	mg/l	2.4	1	IS 3025 (Part 45)

Remarks : This report is the part of Test Report No. NWAL060324NA007.

OTHER INFORMATION

Abbreviation : ULR: Unique Lab Report, BDL: Below Detection Level, NA: Not Applicable

Terms & Conditions : Please refer terms and conditions on backside of Test Report (Page-1)

End of Report

Umesh Kumar
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TC-11818

TEST REPORT

ULR No. : TC1181824000002049F		**Test Report No. :**	RWAL070324RE005
Type of Sample : Water- Ground Water			
Customer Name	Assistant Engineer	**Work Order No. & Date**	JSSD/NHN/TEST/2023/2408-09 Dt.: 04/03/2024
Address	Jal Shakti, Sub Division, Nahan, Himachal Pradesh	**Customer reference No. (If any)**	NA
		Date of Sampling	-
Sampling Protocol	NA	**Date of Sample Receipt**	07/03/2024
Sample Collection Mode	Sample Provided by Customer	**Period of Analysis**	07/03/2024 To 15/03/2024
Testing Location	Permanent Facility	**Date of Reporting**	15/03/2024
Sampling Location	NA		
Sample Description	Liquid with suspended and settleable particles.		
Standard/Specification	NA		
Packing, Markings, Seal & Qty.	2 litre Plastic Bottle Marked Ground Water- From Patwar Khana Handpump Vill. Moginand		

RESULTS

I. Chemical Testing

1. Water (Ground Water)

S.No.	Test Parameter	Unit	Result	Detection Limit	Test Method
1	pH @ 25 °C	-	8.07	0.5	IS 3025 (Part 11)
2	Oil & Grease	mg/l	BDL		IS 3025 (Part 39)
3	Aluminium as Al	mg/l	BDL	0.001	USEPA 3015A
4	Ammonia as NH3-N	mg/l	BDL	5	IS 3025 (Part 34) Cl 2.5-Titrimetric Method
5	Copper as Cu	mg/l	BDL	0.001	USEPA 3015A
6	Fluoride as F	mg/l	0.55	0.1	IS 3025 (Part 60)
7	Iron as Fe	mg/l	0.08	0.001	USEPA 3015A
8	Manganese as Mn	mg/l	0.06	0.001	USEPA 3015A
9	Nitrate as NO3	mg/l	BDL	1	IS 3025 (Part 34) -Cl 3.3 Chromotropic Acid Method
10	Sulphate as SO4	mg/l	19	1	IS 3025 (Part 24) Cl 4.0 Turbidity Method
11	Chemical Oxygen Demand (COD)	mg/l	10	5	IS 3025 (Part 58)
12	Biochemical Oxygen Demand (BOD)	mg/l	BDL	2	IS 3025 (Part 44) BOD 3 Days at 27°C
13	Zinc as Zn	mg/l	0.427	0.001	USEPA 3015A
14	Lead as Pb	mg/l	BDL	0.001	USEPA 3015A
15	Nickel as Ni	mg/l	BDL	0.001	USEPA 3015A
16	Arsenic as As	mg/l	BDL	0.001	USEPA 3015A
17	Sodium as Na	mg/l	177	1	IS 3025 (Part 45)

Lata Thakur
Authorized Signatory-Biological

Umesh Kumar
Authorized Signatory-Chemical

E-207, Industrial Area, Phase VIII-B (Sector-74), Mohali (Punjab) 160071

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ULR No. : TC1181824000002049F	Test Report No. : RWAL070324RE005
Type of Sample : Water- Ground Water	

II. Biological Testing

2. Water (Ground Water)

S.No.	Test Parameter	Unit	Result	Detection Limit	Test Method
1	Total Coliform	Present or Absent/100 ml	Absent*	-	IS 15185
2	E. coli	Present or Absent/100 ml	Absent*	-	IS 15185
3	Thermotolerant Coliform (F. coliforms)	Present or Absent/100 ml	Absent*	-	APHA 24th Ed 9222D

Remarks : *The result might be affected due to collection of sample in plastic bottle

Latitude = 30.514853N; Longitude = 77.238654E

OTHER INFORMATION

Abbreviation : ULR: Unique Lab Report, BDL: Below Detection Level, NA: Not Applicable

Terms & Conditions : Please refer terms and conditions on backside of Test Report (Page-1)

End of Report

Authorized Signatory-Biological

Authorized Signatory-Chemical

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TEST REPORT

ULR No. : NA		**Test Report No. :**	RWAL070324RE005/A
Type of Sample : Water- Ground Water			
Customer Name	Assistant Engineer	**Work Order No. & Date**	JSSD/NHN/TEST/2023/2408-09 Dt.: 04/03/2024
Address	Jal Shakti, Sub Division, Nahan, Himachal Pradesh	**Customer reference No. (If any)**	NA
		Date of Sampling	-
Sampling Protocol	NA	**Date of Sample Receipt**	07/03/2024
Sample Collection Mode	Sample Provided by Customer	**Period of Analysis**	07/03/2024 To 15/03/2024
Testing Location	Permanent Facility	**Date of Reporting**	15/03/2024
Sampling Location	NA		
Sample Description	Liquid with suspended and settleable particles.		
Standard/Specification	NA		
Packing, Markings, Seal & Qty.	2 litre Plastic Bottle Marked Ground Water- From Patwar Khana Handpump Vill. Moginand		

RESULTS

I. Chemical Testing

1. Water (Ground Water)

S.No.	Test Parameter	Unit	Result	Detection Limit	Test Method
1	Potassium as K	mg/l	12	1	IS 3025 (Part 45)

Remarks : This test report is the part of Test Report No.RWAL070324RE005

OTHER INFORMATION

Abbreviation : ULR: Unique Lab Report, BDL: Below Detection Level, NA: Not Applicable

Terms & Conditions : Please refer terms and conditions on backside of Test Report (Page-1)

End of Report

ECO GROUP

Umesh Kumar
Authorized Signatory-Chemical

Himachal Pradesh
Jal Shakti Vibhag

No.SE-JSCU-WA-II/GWO/2023-24- 18129-34 Dated:- 22-02-2024

To

The Chairman HPGWA-cum-
Engineer-in-Chief,
Jal Shakti Vibhag,
Jal Shakti Bhawan, Shimla-5.

Subject:- Notice in Original application No 728/2023

It is with reference to your office letter No. JSV-Member SecyHPGWA-cum-SE P&I-II/2023-24-1136-1145 dated 05/02/2024 & even file letter NO 1325-1340 dated 12/02/2024 regarding subject cited above. In this regard it is submitted that as per standard water quality sampling protocol in the department, tests at departmental lab are regulary conducted for all water supply schemes and till date no report of occurrence of fluoride above permissible limit had been reported.

In compliance to your office letter regarding Notice by Hon'ble NGT, fresh water sampling of water supply schemes and local sources in areas where the CGWB had reported occurrence of fluoride from their monitoring station were conducted by Eco Paryavaran Laboratories and consultants Pvt Ltd Mohali. In all, for the four sites reported by CGWB viz; Daulatpur, Babehr, Ispur and Jankaur sampling for 13 locations was done and all the tests conducted by CGWB were conducted by M/s ECo Paryavaran Lab Mohali.

The report of the analysis of the water sampling by M/s ECo Paryavaran Lab Mohali is attached for your kind perusal. The report indicates that fluoride is below the acceptable limit of 1.0 ppm/mg/l at all the sites. In view of the water quality analysis report it is submitted that there is no occurrence of fluoride above the acceptable/permissible limits in the reported places in district Una. It is further assured that regular water quality monitoring in the area will be ensured and if any occurrence is reported in future proper remedial measures will be taken as needed.

DA: As above

Superintending Engineer,
Jal Shakti Circle,Una (HP)

Copy to the Member Secretary HPGWA cum SE P&I-II, Jal Shakti Vibhag, Jal Shakti Bhawan, Shimla-5 for information and further necessary action please.

Copy to the Executive Engineer JSV Division Una No-1, Haroli, Gagret for information and direction to regularly monitor water quality in the area.

Superintending Engineer,
Jal Shakti Circle,Una (HP)

FR
EE/GWA

SE P&I-II
23/02/2024

for n/a
JE (GWA)
23/02/24

Hydrogeologist (GWA) 23/2/24

982

-123-
35

Eco Paryavaran Laboratories & Consultants Pvt. Ltd.

(Formerly known as Eco Laboratories & Consultants Pvt. Ltd.)

TEST REPORT

ULR No. :	TC118IE240000010D6F	Test Report No. :	NWALQ70224NA032
Type of Sample : Water- Drinking Water			
Customer Name	Assistant Engineer	Work Order No. & Date	JSV-SDO/WSS/2023-24-3725-30 Dt.: 06/02/2024
Address	Jal Shakti Sub Division, Daulatpur, Distt. Una, HP	Customer reference No. (If any)	NA
		Date of Sampling	07/02/2024
Sampling Protocol	IS 17614 (Part 1), EL-MSP-7.1	Date of Sample Receipt	07/02/2024
Sample Collection Mode	Sampling by laboratory	Period of Analysis	07/02/2024 To 14/02/2024
Testing Location	Permanent Facility	Date of Reporting	14/02/2024
Sampling Location	From Tap- Irrigation Pump House Talwara Road Daulatpur		
Sample Description	Clear, colourless liquid.		
Standard/Specification	IS 10500 : 2012		
Packing, Markings, Seal & Qty.	2 litre Plastic Bottle Marked A/07/05		

RESULTS

I. Chemical Testing

1. Water (Drinking Water)

S.No.	Test Parameter	Unit	Result	Acceptable Limit	Permissible Limit in Absence of Alternate Source	Detection Limit	Test Method
1	pH @ 25 °C	-	7.31	6.5-8.5	No relaxation	0.5	IS 3025 (Part 11)
2	Calcium as Ca	mg/l	37	75	200	1	IS 3025 (Part 40)
3	Chloride as Cl	mg/l	7	250	1000	1	IS 3025 (Part 32)
4	Copper as Cu	mg/l	BDL	0.05	1.5	0.001	USEPA 3015A
5	Fluoride as F	mg/l	0.21	1.0	1.5	0.1	IS 3025 (Part 60)
6	Iron as Fe	mg/l	BDL	1.0	No relaxation	0.001	USEPA 3015A
7	Magnesium as Mg	mg/l	32	30	100	1	IS 3025 (Part 46)
8	Manganese as Mn	mg/l	0.007	0.1	0.3	0.001	USEPA 3015A
9	Nitrate as NO3	mg/l	25	45	No relaxation	1	APHA 23rd Ed 4500 B UV Screening Method
10	Selenium as Se	mg/l	BDL	0.01	No relaxation	0.001	USEPA 3015A
11	Sulphate as SO4	mg/l	2.6	200	400	1	IS 3025 (Part 24) Cl 4.0- Turbidity Method
12	Total Hardness as CaCO3	mg/l	224	200	600	1	IS 3025 (Part 21)
13	Zinc as Zn	mg/l	0.17	5.0	15	0.001	USEPA 3015A
14	Cadmium as Cd	mg/l	BDL	0.003	No relaxation	0.001	USEPA 3015A
15	Lead as Pb	mg/l	BDL	0.01	No relaxation	0.001	USEPA 3015A

Umesh Kumar
Authorized Signatory-Chemical

Water ID-FMT-7.8.2-W

ECO BHAWAN E-207, Industrial Area, Phase VIII-B (Sector-74), Mohali (Punjab) 160071
0172-4616225 9781303109 contact@ecoparyavaran.org | md@ecoparyavaran.org www.ecoparyavaran.org

TC-11818

ULR No. : TC1181824000001096F					Test Report No. : NWAL070224NA032		
Type of Sample : Water- Drinking Water							
16	Nickel as Ni	mg/l	BDL	0.02	No relaxation	0.001	USEPA 3015A
17	Arsenic as As	mg/l	BDL	0.01	No relaxation	0.001	USEPA 3015A
18	Chromium as Cr	mg/l	BDL	0.05	No relaxation	0.001	USEPA 3015A
19	Uranium as U	mg/l	0.007	0.03	No relaxation	0.001	USEPA 3015A
20	Potassium as K	mg/l	BDL	-	-	1	IS 3025 (Part 45)
21	Sodium as Na	mg/l	31	-	-	1	IS 3025 (Part 45)

Remarks : Latitude=31.4622260N; Longitude=76.0123600E

OTHER INFORMATION

Abbreviation : ULR: Unique Lab Report, BDL: Below Detection Level, NA: Not Applicable

Terms & Conditions : Please refer terms and conditions on backside of Test Report (Page-1)

End of Report

Eco Environ Laboratories Pvt. Ltd. • B-207 Phase VIII-II (Sector-74) Mohali (Pb.) 160071

Umesh Kumar
Authorized Signatory-Chemical

Eco Paryavaran Laboratories & Consultants Pvt. Ltd.

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TEST REPORT

ULR No. : NA		Test Report No. :	NWAL070224NA032/A
Type of Sample : Water- Drinking Water			
Customer Name	Assistant Engineer	Work Order No. & Date	JSV-SDO/WSS/2023-24-3729-30 Dt.: 06/02/2024
Address	Jal Shakti, Sub Division, Daulatpur, Distt. Una, HP	Customer reference No. (If any)	NA
		Date of Sampling	07/02/2024
Sampling Protocol	IS 17614 (Part 1), EL-MSP-7.3	Date of Sample Receipt	07/02/2024
Sample Collection Mode	Sampling by laboratory	Period of Analysis	07/02/2024 To 14/02/2024
Testing Location	Permanent Facility	Date of Reporting	14/02/2024
Sampling Location	From Tap- Irrigation Pump House Talwara Road Daulatpur		
Sample Description	Clear, colourless liquid.		
Standard/Specification	IS 10500 : 2012		
Packing, Markings, Seal & Qty.	2 litre Plastic Bottle Marked A/07/05		

RESULTS

I. Chemical Testing

1. Water (Drinking Water)

S.No.	Test Parameter	Unit	Result	Acceptable Limit	Permissible Limit in Absence of Alternate Source	Detection Limit	Test Method
1	Conductivity	µmho/cm	468	-	-	1	IS 3025 (Part 14)
2	Bicarbonate as HCO3	mg/l	352	-	-	1	IS:3025 (Part-23)
3	Carbonate as CO3	mg/l	BDL	-	-	1	IS:3025 (Part-23)
4	Silica as SiO2	mg/l	20	-	-	1	APHA23rd ed 4500D-Hetropoly Blue Method

Remarks : Latitude=31.4522260N; Longitude=76.0123600E

This test report is the part of Test Report No.NWAL070224NA032

OTHER INFORMATION

Abbreviation : ULR: Unique Lab Report, BDL: Below Detection Level, NA: Not Applicable

Terms & Conditions : Please refer terms and conditions on backside of Test Report (Page-1)

End of Report

Umesh Kumar

Authorized Signatory-Chemical

ECO BHAWAN E-207, Industrial Area, Phase VIII-B (Sector-74), Mohali (Punjab) 160071

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Eco Paryavaran Laboratories & Consultants Pvt. Ltd.
(Formerly known as Eco Laboratories & Consultants Pvt. Ltd.)

TEST REPORT

ULR No. : TC118182400000109 7F		Test Report No. :	NWAL070224NA033
Type of Sample : Water- Drinking Water			
Customer Name	Assistant Engineer	Work Order No. & Date	JSV-SDO/WSS/2023-24-3723-30 Dt.: 06/02/2024
Address	Jal Shakti, Sub Division, Daulatpur, Distt. Una, HP	Customer reference No. (If any)	NA
		Date of Sampling	07/02/2024
Sampling Protocol	IS 17614 (Part 1), EL-MSP-7.3	Date of Sample Receipt	07/02/2024
Sample Collection Mode	Sampling by laboratory	Period of Analysis	07/02/2024 To 14/02/2024
Testing Location	Permanent Facility	Date of Reporting	14/02/2024
Sampling Location	From Tap- Water Supply Scheme Daulatpur		
Sample Description	Clear, colourless liquid.		
Standard/Specification	IS 10500 : 2012		
Packing, Markings, Seal & Qty.	2 litre Plastic Bottle Marked A/07/06		

RESULTS

I. Chemical Testing

1. Water (Drinking Water)

S.No.	Test Parameter	Unit	Result	Acceptable Limit	Permissible Limit in Absence of Alternate Source	Detection Limit	Test Method
1	pH @ 25 °C	-	7.62	6.5-8.5	No relaxation	0.5	IS 3025 (Part 11)
2	Calcium as Ca	mg/l	64	75	200	1	IS 3025 (Part 40)
3	Chloride as Cl	mg/l	7.0	250	1000	1	IS 3025 (Part 32)
4	Copper as Cu	mg/l	BDL	0.05	1.5	0.001	USEPA 3015A
5	Fluoride as F	mg/l	0.11	1.0	1.5	0.1	IS 3025 (Part 60)
6	Iron as Fe	mg/l	BDL	1.0	No relaxation	0.001	USEPA 3015A
7	Magnesium as Mg	mg/l	19	30	100	1	IS 3025 (Part 46)
8	Manganese as Mn	mg/l	0.004	0.1	0.3	0.001	USEPA 3015A
9	Nitrate as NO3	mg/l	13	45	No relaxation	1	APHA 23rd Ed 4500 B UV Screening Method
10	Selenium as Se	mg/l	BDL	0.01	No relaxation	0.001	USEPA 3015A
11	Sulphate as SO4	mg/l	BDL	200	400	1	IS 3025 (Part 24) Cl 4.0 Turbidity Method
12	Total Hardness as CaCO3	mg/l	240	200	600	1	IS 3025 (Part 21)
13	Zinc as Zn	mg/l	0.004	5.0	15	0.001	USEPA 3015A
14	Cadmium as Cd	mg/l	BDL	0.003	No relaxation	0.001	USEPA 3015A
15	Lead as Pb	mg/l	BDL	0.01	No relaxation	0.001	USEPA 3015A

Authorized Signatory-Chemical

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ULR No. : TC11818240000001097F					Test Report No. : NWAL070224NA033		
Type of Sample : Water- Drinking Water							
16	Nickel as Ni	mg/l	BDL	0.02	No relaxation	0.001	USEPA 3015A
17	Arsenic as As	mg/l	BDL	0.01	No relaxation	0.001	USEPA 3015A
18	Chromium as Cr	mg/l	BDL	0.05	No relaxation	0.001	USEPA 3015A
19	Uranium as U	mg/l	0.004	0.03	No relaxation	0.001	USEPA 3015A
20	Potassium as K	mg/l	BDL	-	-	1	IS 3025 (Part 45)
21	Sodium as Na	mg/l	24	-	-	1	IS 3025 (Part 45)

Remarks : Latitude=31.47354180N; Longitude=75.59512940E

OTHER INFORMATION

Abbreviation : ULR: Unique Lab Report, BDL: Below Detection Level, NA: Not Applicable

Terms & Conditions : Please refer terms and conditions on backside of Test Report (Page-1)

End of Report

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Umesh Kumar
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TEST REPORT

ULR No. : NA		Test Report No. :	NWAL0/0224NA033/A
Type of Sample : Water- Drinking Water			
Customer Name	Assistant Engineer	Work Order No. & Date	JSV-SDO/WSS/2023-24-3729-30 Dt.: 06/02/2024
Address	Jal Shakti, Sub Division, Daulatpur, Distt. Una, HP	Customer reference No: (If any)	NA
		Date of Sampling	07/02/2024
Sampling Protocol	IS 17614 (Part 1), EL-MSP-7.3	Date of Sample Receipt	07/02/2024
Sample Collection Mode	Sampling by laboratory	Period of Analysis	07/02/2024 To 14/02/2024
Testing Location	Permanent Facility	Date of Reporting	14/02/2024
Sampling Location	From Tap- Water Supply Scheme Daulatpur		
Sample Description	Clear, colourless liquid.		
Standard/Specification	IS 10500 : 2012		
Packing, Markings, Seal & Qty.	2 Ltr. Plastic Bottle Marked A/07/05		

RESULTS

I. Chemical Testing

1. Water (Drinking Water)

S.No.	Test Parameter	Unit	Result	Acceptable Limit	Permissible Limit in Absence of Alternate Source	Detection Limit	Test Method
1	Conductivity	µmho/cm	428	-	-	1	IS 3025 (Part 14)
2	Bicarbonate as HCO3	mg/l	316	-	-	1	IS:3025 (Part-23)
3	Carbonate as CO3	mg/l	BDL	-	-	1	IS:3025 (Part-23)
4	Silica as SiO2	mg/l	20	-	-	1	APHA23rd Ed 4500D-Hetropoly Blue Method

Remarks : Latitude=31.47354180N; Longitude=75.59513940E

This test report is the part of Test Report No NWAL070224NA033

OTHER INFORMATION

Abbreviation : ULR: Unique Lab Report, BDL: Below Detection Level, NA: Not Applicable

Terms & Conditions : Please refer terms and conditions on backside of Test Report (Page-1)

End of Report

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Page No. 1/1

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Eco Paryavaran Laboratories & Consultants Pvt. Ltd.

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TEST REPORT

ULR No. :	TC11R1824000001098F	Test Report No. :	NWAL070224NA034
Type of Sample :	Water- Drinking Water		
Customer Name	Assistant Engineer	Work Order No. & Date	JSV-SDO/WSS/2023-24-3729-30 Dt.: 06/02/2024
Address	Jal Shakti, Sub Division, Daulatpur, Distt. Una, HP	Customer reference No. (If any)	NA
		Date of Sampling	07/02/2024
Sampling Protocol	IS 17614 (Part 1), EL-MSP-7.3	Date of Sample Receipt	07/02/2024
Sample Collection Mode	Sampling by laboratory	Period of Analysis	07/02/2024 To 14/02/2024
Testing Location	Permanent Facility	Date of Reporting	14/02/2024
Sampling Location	From Tap- Irrigation Scheme Dangoh		
Sample Description	Clear, colourless liquid.		
Standard/Specification	IS 10500 : 2012		
Packing, Markings, Seal & Qty.	2 litre Plastic Bottle Marked A/07/07		

RESULTS

I. Chemical Testing

1. Water (Drinking Water)

S.No.	Test Parameter	Unit	Result	Acceptable Limit	Permissible Limit in Absence of Alternate Source	Detection Limit	Test Method
1	pH @ 25 °C	-	7.53	6.5-8.5	No relaxation	0.5	IS 3025 (Part 11)
2	Calcium as Ca	mg/l	50	75	200	1	IS 3025 (Part 40)
3	Chloride as Cl	mg/l	5.0	250	1000	1	IS 3025 (Part 32)
4	Copper as Cu	mg/l	BDL	0.05	1.5	0.001	USEPA 3015A
5	Fluoride as F	mg/l	0.14	1.0	1.5	0.1	IS 3025 (Part 60)
6	Iron as Fe	mg/l	BDL	1.0	No relaxation	0.001	USEPA 3015A
7	Magnesium as Mg	mg/l	26	30	100	1	IS 3025 (Part 46)
8	Manganese as Mn	mg/l	0.002	0.1	0.3	0.001	USEPA 3015A
9	Nitrate as NO3	mg/l	11	45	No relaxation	1	APHA 23rd Ed 4500 B UV Screening Method
10	Selenium as Se	mg/l	BDL	0.01	No relaxation	0.001	USEPA 3015A
11	Sulphate as SO4	mg/l	BDL	200	400	1	IS 3025 (Part 24) Cl 4.0 Turbidity Method
12	Total Hardness as CaCO3	mg/l	232	200	600	1	IS 3025 (Part 21)
13	Zinc as Zn	mg/l	0.025	5.0	15	0.001	USEPA 3015A
14	Cadmium as Cd	mg/l	BDL	0.003	No relaxation	0.001	USEPA 3015A
15	Lead as Pb	mg/l	BDL	0.01	No relaxation	0.001	USEPA 3015A

Authorised Signatory-Chemical

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-130-
-42-

ULR No. : TC11818240000001098F					Test Report No. : NWAL070224NA034		
Type of Sample : Water- Drinking Water							
16	Nickel as Ni	mg/l	BDL	0.02	No relaxation	0.001	USEPA 3015A
17	Arsenic as As	mg/l	BDL	0.01	No relaxation	0.001	USEPA 3015A
18	Chromium as Cr	mg/l	BDL	0.05	No relaxation	0.001	USEPA 3015A
19	Uranium as U	mg/l	0.003	0.03	No relaxation	0.001	USEPA 3015A
20	Potassium as K	mg/l	BDL	-	-	1	IS 3025 (Part 45)
21	Sodium as Na	mg/l	17	-	-	1	IS 3025 (Part 45)

Remarks : Latitude=31.4754300N; Longitude=75.59457200E

OTHER INFORMATION

Abbreviation : ULR: Unique Lab Report, BDL: Below Detection Level, NA: Not Applicable

Terms & Conditions : Please refer terms and conditions on backside of Test Report (Page-1)

End of Report

Eco Environ Laboratories & Consultancy Pvt. Ltd. E-207 Phase VIII-B (sector-74) Mohali (Pb.) 160071

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990

-131-
-43-

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TEST REPORT

ULR No. : NA		Test Report No. :	NWAL070224NA034/A
Type of Sample : Water- Drinking Water			
Customer Name	Assistant Engineer	Work Order No. & Date	JSV-500/WSS/2023-24 3729-30 Dt.: 06/02/2024
Address	Jal Shakti, Sub Division, Daulatpur, Distt. Una, HP	Customer reference No. (if any)	NA
		Date of Sampling	07/02/2024
Sampling Protocol	IS 17614 (Part 1), EL-MSP-7.3	Date of Sample Receipt	07/02/2024
Sample Collection Mode	Sampling by laboratory	Period of Analysis	07/02/2024 To 14/02/2024
Testing Location	Permanent Facility	Date of Reporting	14/02/2024
Sampling Location	From Tap- Irrigation Scheme Dangoh		
Sample Description	Clear, colourless liquid.		
Standard/Specification	IS 10500 : 2012		
Packing, Markings, Seal & Qty.	2 Ltrs Plastic Bottle Marked A/07/07		

RESULTS

I. Chemical Testing

1. Water (Drinking Water)

S.No.	Test Parameter	Unit	Result	Acceptable Limit	Permissible Limit in Absence of Alternate Source	Detection Limit	Test Method
1	Conductivity	µmho/cm	403	-	-	1	IS 3025 (Part 14)
2	Bicarbonate as HCO3	mg/l	284	-	-	1	IS:3025 (Part-23)
3	Carbonate as CO3	mg/l	BDL	-	-	1	IS:3025 (Part-23)
4	Silica as SiO2	mg/l	20	-	-	1	APHA23rd Ed 4500D-Hetropoly blue Method

Remarks : Latitude=31.4754300N; Longitude=75.594572008

This test report is the part of Test Report No.NWAL070224NA034

OTHER INFORMATION

Abbreviation : ULR: Unique Lab Report, BDL: Below Detection Level, NA: Not Applicable

Terms & Conditions : Please refer terms and conditions on backside of Test Report (Page-1)

End of Report

Umesh Kumar
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Ver: EL-MT-7.8.2-W

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TEST REPORT

ULR No. : TC118182400000109BF		Test Report No. :	NWAL070224NA035
Type of Sample : Water- Drinking Water			
Customer Name	Assistant Engineer	Work Order No. & Date	JSV-SDO/WSS/2023-24-3729-30 Dt.: 06/02/2024
Address	Jal Shakti, Sub Division, Daulatpur, Distt. Una, HP	Customer reference No. (If any)	NA
		Date of Sampling	07/02/2024
Sampling Protocol	IS 17614 (Part 1), EL-MSP-7.3	Date of Sample Receipt	07/02/2024
Sample Collection Mode	Sampling by laboratory	Period of Analysis	07/02/2024 To 14/02/2024
Testing Location	Permanent Facility	Date of Reporting	14/02/2024
Sampling Location	From Handpump Parmar Basti Behehar		
Sample Description	Clear, colourless liquid.		
Standard/Specification	IS 10500 : 2012		
Packing, Markings, Seal & Qty.	2 litre Plastic Bottle Marked A/07/08		

RESULTS

I. Chemical Testing

1. Water (Drinking Water)

S.No	Test Parameter	Unit	Result	Acceptable Limit	Permissible Limit in Absence of Alternate Source	Detection Limit	Test Method
1	pH @ 25 °C	-	7.54	6.5-8.5	No relaxation	0.5	IS 3025 (Part 11)
2	Calcium as Ca	mg/l	38	75	200	1	IS 3025 (Part 40)
3	Chloride as Cl	mg/l	4.0	250	1000	1	IS 3025 (Part 32)
4	Copper as Cu	mg/l	BDL	0.05	1.5	0.001	USEPA 3015A
5	Fluoride as F	mg/l	0.16	1.0	1.5	0.1	IS 3025 (Part 60)
6	Iron as Fe	mg/l	BDL	1.0	No relaxation	0.001	USEPA 3015A
7	Magnesium as Mg	mg/l	44	30	100	1	IS 3025 (Part 46)
8	Manganese as Mn	mg/l	0.004	0.1	0.3	0.001	USEPA 3015A
9	Nitrate as NO3	mg/l	3.1	45	No relaxation	1	APHA 23rd Ed 4500 B UV Screening Method
10	Selenium as Se	mg/l	BDL	0.01	No relaxation	0.001	USEPA 3015A
11	Sulphate as SO4	mg/l	BDL	200	400	1	IS 3025 (Part 24) Cl 4.0- Turbidity Method
12	Total Hardness as CaCO3	mg/l	276	200	600	1	IS 3025 (Part 21)
13	Zinc as Zn	mg/l	0.112	5.0	15	0.001	USEPA 3015A
14	Cadmium as Cd	mg/l	BDL	0.003	No relaxation	0.001	USEPA 3015A
15	Lead as Pb	mg/l	BDL	0.01	No relaxation	0.001	USEPA 3015A

Ramesh Kumar
Authorized Signatory-Chemical

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-133-
-45-

ULR No. : TC1181824000001099F						Test Report No. : NWAL070224NA035	
Type of Sample : Water- Drinking Water							
16	Nickel as Ni	mg/l	BDL	0.02	No relaxation	0.001	USEPA 3015A
17	Arsenic as As	mg/l	BDL	0.01	No relaxation	0.001	USEPA 3015A
18	Chromium as Cr	mg/l	BDL	0.05	No relaxation	0.001	USEPA 3015A
19	Uranium as U	mg/l	0.005	0.03	No relaxation	0.001	USEPA 3015A
20	Potassium as K	mg/l	BDL	-	-	1	IS 3025 (Part 45)
21	Sodium as Na	mg/l	25	-	-	1	IS 3025 (Part 45)

Remarks : Latitude=31.4633N; Longitude=76.042E

OTHER INFORMATION

Abbreviation : ULR: Unique Lab Report, BDL: Below Detection Level, NA: Not Applicable

Terms & Conditions : Please refer terms and conditions on backside of Test Report (Page-1)

End of Report

Eco Parivaran Laboratories & Consultants Pvt. Ltd. E-207 Phase VIII-B (Sector-74) Mohali (Pb.) 160071

Umesh Kumar
Authorized Signatory-Chemical

Eco Paryavaran Laboratories & Consultants Pvt. Ltd.
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TEST REPORT

ULR No. : NA		Test Report No. :	NWAL070224NA035/A
Type of Sample : Water - Drinking Water			
Customer Name	Assistant Engineer	Work Order No. & Date	JSV-SDO/WSS/2023-24-3729-30 Dt.: 06/02/2024
Address	Jal Shakti, Sub Division, Daulatpur, Distt. Una, HP	Customer reference No. (if any)	NA
		Date of Sampling	07/02/2024
Sampling Protocol	IS 17614 (Part 1), EL-MSP-7.3	Date of Sample Receipt	07/02/2024
Sample Collection Mode	Sampling by laboratory	Period of Analysis	07/02/2024 To 14/02/2024
Testing Location	Permanent Facility	Date of Reporting	14/02/2024
Sampling Location	From Handpump Panwar Basti Babehar		
Sample Description	Clear, colourless liquid.		
Standard/Specification	IS 10500 : 2012		
Packing, Markings, Seal & Qty.	2 litre Plastic Bottle Marked A/07/08		

RESULTS

1. Chemical Testing

1. Water (Drinking Water)

S.No.	Test Parameter	Unit	Result	Acceptable Limit	Permissible Limit in Absence of Alternate Source	Detection Limit	Test Method
1	Conductivity	µmho/cm	480	-	-	1	IS 3025 (Part 14)
2	Bicarbonate as HCO3	mg/l	336	-	-	1	IS:3025 (Part-23)
3	Carbonate as CO3	mg/l	BDL	-	-	1	IS:3025 (Part-23)
4	Silica as SiO2	mg/l	19	-	-	1	APHA23rd Ed 4500D-Hetropoly Blue Method

Remarks : Latitude=31.4633N, Longitude=76.042E
This test report is the part of Test Report No.NWAL070224NA035

OTHER INFORMATION
Abbreviation : ULR: Unique Lab Report, BDL: Below Detection Level, NA: Not Applicable
Terms & Conditions : Please refer terms and conditions on backside of Test Report (Page-1)

End of Report

Umesh Kumar
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TEST REPORT

ULR No. : TC118182400000110OF		Test Report No. :	NWAL070224NA036
Type of Sample : Water- Drinking Water			
Customer Name	Assistant Engineer	Work Order No. & Date	ISV-500/WSS/2023-24-3729-30 Dt.: 06/02/2024
Address	Jal Shakti, Sub Division, Daulatpur, Distt. Una, HP	Customer reference No. (If any)	NA
		Date of Sampling	07/02/2024
Sampling Protocol	IS 17614 (Part 1), EL-MSP-7.3	Date of Sample Receipt	07/02/2024
Sample Collection Mode	Sampling by laboratory	Period of Analysis	07/02/2024 To 14/02/2024
Testing Location	Permanent Facility	Date of Reporting	14/02/2024
Sampling Location	From Tap- Water Supply Scheme Babehor		
Sample Description	Clear, colourless liquid.		
Standard/Specification	IS 10500 : 2012		
Packing, Markings, Seal & Qty.	2 litre Plastic Bottle Marked A/07/09		

RESULTS

1. Chemical Testing
   1. Water (Drinking Water)

S.No.	Test Parameter	Unit	Result	Acceptable Limit	Permissible Limit in Absence of Alternate Source	Detection Limit	Test Method
1	pH @ 25°C	-	7.59	6.5-8.5	No relaxation	0.5	IS 3025 (Part 11)
2	Calcium as Ca	mg/l	58	75	200	1	IS 3025 (Part 40)
3	Chloride as Cl	mg/l	5.0	250	1000	1	IS 3025 (Part 32)
4	Copper as Cu	mg/l	BDL	0.05	1.5	0.001	USEPA 3015A
5	Fluoride as F	mg/l	0.15	1.0	1.5	0.1	IS 3025 (Part 60)
6	Iron as Fe	mg/l	BDL	1.0	No relaxation	0.001	USEPA 3015A
7	Magnesium as Mg	mg/l	18	30	100	1	IS 3025 (Part 46)
8	Manganese as Mn	mg/l	0.002	0.1	0.3	0.001	USEPA 3015A
9	Nitrate as NO3	mg/l	9.5	45	No relaxation	1	APHA 23rd Ed 4500 B UV Screening Method
10	Selenium as Se	mg/l	BDL	0.01	No relaxation	0.001	USEPA 3015A
11	Sulphate as SO4	mg/l	BDL	200	400	1	IS 3025 (Part 24) Cl 4.0- Turbidity Method
12	Total Hardness as CaCO3	mg/l	220	200	600	1	IS 3025 (Part 21)
13	Zinc as Zn	mg/l	0.055	5.0	15	0.001	USEPA 3015A
14	Cadmium as Cd	mg/l	BDL	0.003	No relaxation	0.001	USEPA 3015A
15	Lead as Pb	mg/l	BDL	0.01	No relaxation	0.001	USEPA 3015A

Umesh Kumar
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-136-
-48-

ULR No. : TC11818240000001100F						Test Report No. : NWAL070224NA036	
Type of Sample : Water- Drinking Water							
16	Nickel as Ni	mg/l	BDL	0.02	No relaxation	0.001	USEPA 3015A
17	Arsenic as As	mg/l	BDL	0.01	No relaxation	0.001	USEPA 3015A
18	Chromium as Cr	mg/l	BDL	0.05	No relaxation	0.001	USEPA 3015A
19	Uranium as U	mg/l	0.004	0.03	No relaxation	0.001	USEPA 3015A
20	Potassium as K	mg/l	BDL	-	-	1	IS 3025 (Part 45)
21	Sodium as Na	mg/l	14	-	-	1	IS 3025 (Part 45)

Remarks : Latitude=31.47136740N; Longitude=75.59358320E

OTHER INFORMATION

Abbreviation : ULR: Unique Lab Report, BDL: Below Detection Level, NA: Not Applicable

Terms & Conditions : Please refer terms and conditions on backside of Test Report (Page-1)

End of Report

Parivaran Laboratories & Consultancy Pvt. Ltd. E-207 Phase VIII-B (sector-74) Mohali (Pb.) 160071

Dinesh Kumar
Authorized Signatory-Chemical

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TEST REPORT

ULR No. : NA		Test Report No. :	NWAL070224NA036/A
Type of Sample : Water- Drinking Water			
Customer Name	Assistant Engineer	Work Order No. & Date	JSV-SDO/WSS/2023-24-3729-30 Dt.: 06/02/2024
Address	Jal Shakti, Sub Division, Daulatpur, Distt. Una, HP	Customer reference No. (If any)	NA
		Date of Sampling	07/02/2024
Sampling Protocol	IS 17614 (Part 1), EL-MSP-7.3	Date of Sample Receipt	07/02/2024
Sample Collection Mode	Sampling by Laboratory	Period of Analysis	07/02/2024 To 14/02/2024
Testing Location	Permanent Facility	Date of Reporting	14/02/2024
Sampling Location	From Tap- Water Supply Scheme Babehor		
Sample Description	Clear, colourless liquid.		
Standard/Specification	IS 10500 : 2012		
Packing, Markings, Seal & Qty.	2 litre Plastic Bottle Marked A/07/0#		

RESULTS

I. Chemical Testing

1. Water (Drinking Water)

S.No.	Test Parameter	Unit	Result	Acceptable Limit	Permissible Limit in Absence of Alternate Source	Detection Limit	Test Method
1	Conductivity	umho/cm	454	-	-	1	IS 3025 (Part 14)
2	Bicarbonate as HCO3	mg/l	268	-	-	1	IS 3025 (Part-23)
3	Carbonate as CO3	mg/l	BDL	-	-	1	IS 3025 (Part-23)
4	Silica as SiO2	mg/l	20	-	-	1	APHA23rd Ed 4500D-Hetropoly Blue Method

Remarks : Latitude=31.47136740N, Longitude=75.593583208

This test report is the part of Test Report No.NWAL070224NA036

OTHER INFORMATION

Abbreviation : ULR: Unique Lab Report, BDL: Below Detection Level, NA: Not Applicable

Terms & Conditions : Please refer terms and conditions on backside of Test Report (Page-2)

End of Report

Umesh Kumar
Authorized Signatory-Chemical

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Eco Paryavaran Laboratories & Consultants Pvt. Ltd.

(Formerly known as Eco Laboratories & Consultants Pvt. Ltd.)

TEST REPORT

ULR No. : TC118182400000011D1F		Test Report No. :	NWAL070224NA037
Type of Sample : Water- Drinking Water			
Customer Name	Executive Engineer	Work Order No. & Date	EE-JSD-HAROLI/GA-2023-24/2717-18 Dt.: 05/02/2024
Address	Jal Shakti Division, Haroli, Distt. Una, Himachal Pradesh	Customer reference No. (if any)	NA
		Date of Sampling	07/02/2024
Sampling Protocol	IS 17614 (Part 1), EL-MSP-7.3	Date of Sample Receipt	07/02/2024
Sample Collection Mode	Sampling by laboratory	Period of Analysis	07/02/2024 To 14/02/2024
Testing Location	Permanent Facility	Date of Reporting	14/02/2024
Sampling Location	From Tap- Petrol Pump Mohalla Bharal Ispur		
Sample Description	Clear, colourless liquid.		
Standard/Specification	IS 10500 : 2012		
Packing, Markings, Seal & Qty.	2 litre Plastic Bottle Marked A/07/01		

RESULTS

I. Chemical Testing

1. Water (Drinking Water)

S.No.	Test Parameter	Unit	Result	Acceptable Limit	Permissible Limit in Absence of Alternate Source	Detection Limit	Test Method
1	pH @ 25 °C	-	7.0	6.5-8.5	No relaxation	0.5	IS 3025 (Part 11)
2	Calcium as Ca	mg/l	48	75	200	1	IS 3025 (Part 40)
3	Chloride as Cl	mg/l	7.0	250	1000	1	IS 3025 (Part 32)
4	Copper as Cu	mg/l	BDL	0.05	1.5	0.001	USEPA 3015A
5	Fluoride as F	mg/l	0.22	1.0	1.5	0.1	IS 3025 (Part 60)
6	Iron as Fe	mg/l	BDL	1.0	No relaxation	0.001	USEPA 3015A
7	Magnesium as Mg	mg/l	21	30	100	1	IS 3025 (Part 46)
8	Manganese as Mn	mg/l	0.003	0.1	0.3	0.001	USEPA 3015A
9	Nitrate as NO3	mg/l	16	45	No relaxation	1	APHA 23rd Ed 4500 B UV Screening Method
10	Selenium as Se	mg/l	BDL	0.01	No relaxation	0.001	USEPA 3015A
11	Sulphate as SO4	mg/l	2.1	200	400	1	IS 3025 (Part 24) Cl 4.0-Turbidity Method
12	Total Hardness as CaCO3	mg/l	208	200	600	1	IS 3025 (Part 21)
13	Zinc as Zn	mg/l	0.506	5.0	15	0.001	USEPA 3015A
14	Cadmium as Cd	mg/l	BDL	0.003	No relaxation	0.001	USEPA 3015A
15	Lead as Pb	mg/l	BDL	0.01	No relaxation	0.001	USEPA 3015A

Umesh Kumar
Authorized Signatory-Chemical

998

-139-
— 51 —

ULR No. : TC1181824000001101F					Test Report No. : NWAL070224NA037		
Type of Sample : Water- Drinking Water							
16	Nickel as Ni	mg/l	BDL	0.02	No relaxation	0.001	USEPA 3015A
17	Arsenic as As	mg/l	BDL	0.01	No relaxation	0.001	USEPA 3015A
18	Chromium as Cr	mg/l	BDL	0.05	No relaxation	0.001	USEPA 3015A
19	Uranium as U	mg/l	0.005	0.03	No relaxation	0.001	USEPA 3015A
20	Potassium as K	mg/l	1.2	-	-	1	IS 3025 (Part 45)
21	Sodium as Na	mg/l	26	-	-	1	IS 3025 (Part 45)

Remarks : Latitude=31.50555556N; Longitude=76.17888889E

OTHER INFORMATION

Abbreviation : ULR: Unique Lab Report, BDL: Below Detection Level, NA: Not Applicable

Terms & Conditions : Please refer terms and conditions on backside of Test Report (Page-1)

End of Report

Umesh Kuma
Authorized Signatory-Chemical

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TEST REPORT

ULR No. : NA		Test Report No. :	NWAL070224NA037/A
Type of Sample : Water- Drinking Water			
Customer Name	Executive Engineer	Work Order No. & Date	EE-JSD-HAROLI/GA-2023-24/2717-18 Dt.: 05/02/2024
Address	Jal Shakti Division, Haroli, Distt. Una, Himachal Pradesh	Customer reference No. (if any)	NA
		Date of Sampling	07/02/2024
Sampling Protocol	IS 17614 (Part 1), EL-MSP-7.3	Date of Sample Receipt	07/02/2024
Sample Collection Mode	Sampling by laboratory	Period of Analysis	07/02/2024 To 14/02/2024
Testing Location	Permanent Facility	Date of Reporting	14/02/2024
Sampling Location	From Tap- Petrol Pump Mohalla Bharal Ispur		
Sample Description	Clear, colourless liquid.		
Standard/Specification	IS 10500 : 2012		
Packing, Markings, Seal & Qty.	2 litre Plastic Bottle Marked A/07/01		

RESULTS

I. Chemical Testing

1. Water (Drinking Water)

S.No.	Test Parameter	Unit	Result	Acceptable Limit	Permissible Limit in Absence of Alternate Source	Detection Limit	Test Method
1	Conductivity	µmho/cm	445	-	-	1	IS 3025 (Part 14)
2	Bicarbonate as HCO3	mg/l	264	-	-	1	IS:3025 (Part-23)
3	Carbonate as CO3	mg/l	BDL	-	-	1	IS:3025 (Part-23)
4	Silica as SiO2	mg/l	15	-	-	1	APHA23rd Ed 45000-Hetropoly Blue Method

Remarks : Latitude=31.50555556N; Longitude=76.17888889E

This test report is the part of Test Report No NWAL070224NA037

OTHER INFORMATION

Abbreviation : ULR: Unique Lab Report, BDL: Below Detection Level, NA: Not Applicable

Terms & Conditions : Please refer terms and conditions on backside of Test Report (Page-1)

End of Report

Umesh Kumar
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TEST REPORT

ULR No. : TC118182400001102F		**Test Report No. :**	NWAL070Z24NA038
Type of Sample : Water- Drinking Water			
Customer Name	Executive Engineer	**Work Order No. & Date**	EE-ISD-HAROLI/GA-2023-24/2717-18 Dt.: 05/02/2024
Address	Jal Shakti Division, Haroli, Distt. Una, Himachal Pradesh	**Customer reference No. (If any)**	NA
		Date of Sampling	07/02/2024
Sampling Protocol	IS 17614 (Part 1), EL-MSP-7.3	**Date of Sample Receipt**	07/02/2024
Sample Collection Mode	Sampling by laboratory	**Period of Analysis**	07/02/2024 To 14/02/2024
Testing Location	Permanent Facility	**Date of Reporting**	14/02/2024
Sampling Location	From Tap- Govt.Sr.Sec.School Ispur		
Sample Description	Clear, colourless liquid		
Standard/Specification	IS 10500 : 2012		
Packing, Markings, Seal & Qty.	2 litre Plastic Bottle Marked A/07/02		

RESULTS

I. Chemical Testing

1. Water (Drinking Water)

S.No.	Test Parameter	Unit	Result	Acceptable Limit	Permissible Limit in Absence of Alternate Source	Detection Limit	Test Method
1	pH @ 25 °C	-	7.60	6.5-8.5	No relaxation	0.5	IS 3025 (Part 11)
2	Calcium as Ca	mg/l	45	75	200	1	IS 3025 (Part 40)
3	Chloride as Cl	mg/l	8.0	250	1000	1	IS 3025 (Part 32)
4	Copper as Cu	mg/l	BDL	0.05	1.5	0.001	USEPA 3015A
5	Fluoride as F	mg/l	0.20	1.0	1.5	0.1	IS 3025 (Part 60)
6	Iron as Fe	mg/l	BDL	1.0	No relaxation	0.001	USEPA 3015A
7	Magnesium as Mg	mg/l	18	30	100	1	IS 3025 (Part 46)
8	Manganese as Mn	mg/l	0.005	0.1	0.3	0.001	USEPA 3015A
9	Nitrate as NO3	mg/l	20	45	No relaxation	1	APHA 23rd Ed 4500 B UV Screening Method
10	Selenium as Se	mg/l	BDL	0.01	No relaxation	0.001	USEPA 3015A
11	Sulphate as SO4	mg/l	2.1	200	400	1	IS 3025 (Part 24) Cl 4.0- Turbidity Method
12	Total Hardness as CaCO3	mg/l	188	200	600	1	IS 3025 (Part 21)
13	Zinc as Zn	mg/l	0.406	5.0	15	0.001	USEPA 3015A
14	Cadmium as Cd	mg/l	BDL	0.003	No relaxation	0.001	USEPA 3015A
15	Lead as Pb	mg/l	BDL	0.01	No relaxation	0.001	USEPA 3015A

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ULR No. : TC11818240000001102F						Test Report No. : NWAL070224NA038	
Type of Sample : Water- Drinking Water							
16	Nickel as Ni	mg/l	BDL	0.02	No relaxation	0.001	USEPA 3015A
17	Arsenic as As	mg/l	BDL	0.01	No relaxation	0.001	USEPA 3015A
18	Chromium as Cr	mg/l	BDL	0.05	No relaxation	0.001	USEPA 3015A
19	Uranium as U	mg/l	0.005	0.03	No relaxation	0.001	USEPA 3015A
20	Potassium as K	mg/l	1.1	-	-	1	IS 3025 (Part 45)
21	Sodium as Na	mg/l	24	-	-	1	IS 3025 (Part 45)

Remarks : Latitude=31.49492667N; Longitude=76.16689333E

OTHER INFORMATION

Abbreviation : ULR: Unique Lab Report, BDL: Below Detection Level, NA: Not Applicable

Terms & Conditions : Please refer terms and conditions on backside of Test Report (Page-1)

End of Report

Eco Paryavaran Laboratories & Consultants Pvt. Ltd. E-207 Phase VIII-B (Sector-74) Mohali (Pb.) 160071

Umesh Kumar
Authorized Signatory-Chemical

Eco Paryavaran Laboratories & Consultants Pvt. Ltd.

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TEST REPORT

ULR No. : NA		Test Report No. :	NWAL070224NA038/A
Type of Sample : Water- Drinking Water			
Customer Name	Executive Engineer	Work Order No. & Date	EE/JSD-HAROLI/GA-2023-24/7717-18 Dt.: 05/02/2024
Address	Jal Shakti Division, Haroli, Distt. Una, Himachal Pradesh	Customer reference No. (if any)	NA
		Date of Sampling	07/02/2024
Sampling Protocol	IS 17614 (Part 1); EL-MSP-7.3	Date of Sample Receipt	07/02/2024
Sample Collection Mode	Sampling by laboratory	Period of Analysis	07/02/2024 To 14/02/2024
Testing Location	Permanent Facility	Date of Reporting	14/02/2024
Sampling Location	From Tap- Govt.Sr.Sec.School Ispur		
Sample Description	Clear, colourless liquid		
Standard/Specification	IS 10500 : 2012		
Packing, Marking, Seal & Qty.	2 litre Plastic Bottle Marked A/07/02		

RESULTS

I. Chemical Testing

1. Water (Drinking Water)

S.No.	Test Parameter	Unit	Result	Acceptable Limit	Permissible Limit in Absence of Alternate Source	Detection Limit	Test Method
1	Conductivity	µmho/cm	414	-	-	1	IS 3025 (Part 14)
2	Bicarbonate as HCO3	mg/l	248	-	-	1	IS:3025 (Part-23)
3	Carbonate as CO3	mg/l	BDL	-	-	1	IS:3025 (Part-23)
4	Silica as SiO2	mg/l	15	-	-	1	APHA23rd Ed 4500D-Hetropoly Blue Method

Remarks : Latitude=31.49492667N; Longitude=76.16689333E

This test report is the part of Test Report No.NWAL070224NA038

OTHER INFORMATION

Abbreviation : ULR: Unique Lab Report, BDL: Below Detection Level, NA: Not Applicable

Terms & Conditions : Please refer terms and conditions on backside of Test Report (Page-1)

End of Report

Dinesh Kumar
Authorized Signatory-Chemical

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TEST REPORT

ULR No. : TC118182400000110 3F		Test Report No. :	NWAL070224NA039
Type of Sample : Water- Drinking Water			
Customer Name	Executive Engineer	Work Order No. & Date	EE-JSD-HAROLI/GA-2023-24/2717-18 Dt.: 05/02/2024
Address	Jal Shakti Division, Haroli, Distt. Una, Himachal Pradesh	Customer reference No. (If any)	NA
		Date of Sampling	07/02/2024
Sampling Protocol	IS 17614 (Part 1), EL-MSP-7.3	Date of Sample Receipt	07/02/2024
Sample Collection Mode	Sampling by laboratory	Period of Analysis	07/02/2024 To 14/02/2024
Testing Location	Permanent Facility	Date of Reporting	14/02/2024
Sampling Location	From Tap- Near Ravidas Temple Mohalla Tanda Ispur		
Sample Description	Clear, colourless liquid.		
Standard/Spetification	IS 10500 : 2012		
Packing, Markings, Seal & Qty.	2 litre Plastic Bottle Marked A/07/03		

RESULTS

I. Chemical Testing

1. Water (Drinking Water)

S.No	Test Parameter	Unit	Result	Acceptable Limit	Permissible Limit in Absence of Alternate Source	Detection Limit	Test Method
1	pH @ 25 °C	-	7.90	6.5-8.5	No relaxation	0.5	IS 3025 (Part 11)
2	Calcium as Ca	mg/l	26	75	200	1	IS 3025 (Part 40)
3	Chloride as Cl	mg/l	7.0	250	1000	1	IS 3025 (Part 32)
4	Copper as Cu	mg/l	BDL	0.05	1.5	0.001	USEPA 3015A
5	Fluoride as F	mg/l	0.15	1.0	1.5	0.1	IS 3025 (Part 60)
6	Iron as Fe	mg/l	BDL	1.0	No relaxation	0.031	USEPA 3015A
7	Magnesium as Mg	mg/l	31	30	100	1	IS 3025 (Part 46)
8	Manganese as Mn	mg/l	0.002	0.1	0.3	0.001	USEPA 3015A
9	Nitrate as NO3	mg/l	12	45	No relaxation	1	APHA 23rd Ed 4500 B UV Screening Method
10	Selenium as Se	mg/l	BDL	0.01	No relaxation	0.001	USEPA 3015A
11	Sulphate as SO4	mg/l	2.4	200	400	1	IS 3025 (Part 24) Cl 4.0- Turbidity Method
12	Total Hardness as CaCO3	mg/l	192	200	600	1	IS 3025 (Part 21)
13	Zinc as Zn	mg/l	1.099	5.0	15	0.001	USEPA 3015A
14	Cadmium as Cd	mg/l	BDL	0.003	No relaxation	0.001	USEPA 3015A
15	Lead as Pb	mg/l	BDL	0.01	No relaxation	0.001	USEPA 3015A

Umesh Kumar
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1004

-145-
— 57 —

ULR No. : TC11818240000001103F						Test Report No. :	NWAL070224NA039
Type of Sample : Water- Drinking Water							
16	Nickel as Ni	mg/l	BDL	0.02	No relaxation	0.001	USEPA 3015A
17	Arsenic as As	mg/l	BDL	0.01	No relaxation	0.001	USEPA 3015A
18	Chromium as Cr	mg/l	BDL	0.05	No relaxation	0.001	USEPA 3015A
19	Uranium as U	mg/l	0.006	0.03	No relaxation	0.001	USEPA 3015A
20	Potassium as K	mg/l	1.1	-	-	1	IS 3025 (Part 45)
21	Sodium as Na	mg/l	26	-	-	1	IS 3025 (Part 45)

Remarks : Latitude=31.49830333N; Longitude=76.16461167E

OTHER INFORMATION

Abbreviation : ULR: Unique Lab Report, BDL: Below Detection Level, NA: Not Applicable

Terms & Conditions : Please refer terms and conditions on backside of Test Report (Page-1)

End of Report

E-207 Phase VIII-B (sector-74) Mohali (Pb.) 160071

Umesh Kumar
Authorized Signatory-Chemical

Eco Paryavaran Laboratories & Consultants Pvt. Ltd.

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TEST REPORT

ULR No. : NA		Test Report No. :	NWAL070224NA039/A
Type of Sample : Water- Drinking Water			
Customer Name	Executive Engineer	Work Order No. & Date	EE-JSD-HAROLI/GA-2023-24/1717-18 Dt.: 05/02/2024
Address	Jal Shakti Division, Haroli, Distt. Una, Himachal Pradesh	Customer reference No. (If any)	NA
		Date of Sampling	07/02/2024
Sampling Protocol	IS 17614 (Part 1), EL-MSP-7.3	Date of Sample Receipt	07/02/2024
Sample Collection Mode	Sampling by laboratory	Period of Analysis	07/02/2024 To 14/02/2024
Testing Location	Permanent Facility	Date of Reporting	14/02/2024
Sampling Location	From Tap- Near Ravidas Temple Mohalla Tanda Japur		
Sample Description	Clear, colourless liquid.		
Standard/Specification	IS 10500 : 2012		
Packing, Markings, Seal & Qty.	2 litre Plastic Bottle Marked A/07/03		

RESULTS

I. Chemical Testing

1. Water (Drinking Water)

S.No.	Test Parameter	Unit	Result	Acceptable Limit	Permissible Limit in Absence of Alternate Source	Detection Limit	Test Method
1	Conductivity	µmho/cm	457	-	-	1	IS 3025 (Part 14)
2	Bicarbonate as HCO3	mg/l	264	-	-	1	IS 3025 (Part-23)
3	Carbonate as CO3	mg/l	BDL	-	-	1	IS 3025 (Part-23)
4	Silica as SiO2	mg/l	16	-	-	1	APHA23rd Ed 4500D-Hetropoly Blue Method

Remarks : Latitude=31.40830333N; Longitude=76.16461167E
This test report is the part of Test Report No.NWAL070224NA039

OTHER INFORMATION

Abbreviation : ULR: Unique Lab Report, BDL: Below Detection Level, NA: Not Applicable

Terms & Conditions : Please refer terms and conditions on backside of Test Report (Page-1)

End of Report

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1006

-147-

— 59 —

Eco Paryavaran Laboratories & Consultants Pvt. Ltd.

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TEST REPORT

ULR No. :	TC118182400001104F	Test Report No. :	NWAL070224NA049
Type of Sample : Water- Drinking Water			
Customer Name	Executive Engineer	Work Order No. & Date	EE-/SD-HAROLI/GA-2023-24/2717-18 Dt.: 05/02/2024
Address	Jal Shakti Division, Haroli, Distt. Una, Himachal Pradesh	Customer reference No. (If any)	NA
		Date of Sampling	07/02/2024
Sampling Protocol	IS 17614 (Part 1); EL-MSP-7.3	Date of Sample Receipt	07/02/2024
Sample Collection Mode	Sampling by laboratory	Period of Analysis	07/02/2024 To 14/02/2024
Testing Location	Permanent Facility	Date of Reporting	14/02/2024
Sampling Location	From Tap- Mohalla Pathak Ispur		
Sample Description	Clear, colourless liquid.		
Standard/Specification	IS 10500 : 2012		
Packing, Markings, Seal & Qty.	2litre Plastic Bottle Marked A/07/04		

RESULTS

I. Chemical Testing

1. Water (Drinking Water)

S.No.	Test Parameter	Unit	Result	Acceptable Limit	Permissible Limit in Absence of Alternate Source	Detection Limit	Test Method
1	pH @ 25 °C	-	7.70	6.5-8.5	No relaxation	0.5	IS 3025 (Part 11)
2	Calcium as Ca	mg/l	16	75	200	1	IS 3025 (Part 40)
3	Chloride as Cl	mg/l	8.0	250	1000	1	IS 3025 (Part 32)
4	Copper as Cu	mg/l	BDL	0.05	1.5	0.001	USEPA 3015A
5	Fluoride as F	mg/l	0.19	1.0	1.5	0.1	IS 3025 (Part 60)
6	Iron as Fe	mg/l	0.003	1.0	No relaxation	0.001	USEPA 3015A
7	Magnesium as Mg	mg/l	39	30	100	1	IS 3025 (Part 46)
8	Manganese as Mn	mg/l	0.012	0.1	0.3	0.001	USEPA 3015A
9	Nitrate as NO3	mg/l	16	45	No relaxation	1	APHA 23rd Ed 4500 B UV Screening Method
10	Selenium as Se	mg/l	BDL	0.01	No relaxation	0.001	USEPA 3015A
11	Sulphate as SO4	mg/l	14	200	400	1	IS 3025 (Part 24) Cl 4.0- Turbidity Method
12	Total Hardness as CaCO3	mg/l	200	200	600	1	IS 3025 (Part 21)
13	Zinc as Zn	mg/l	1.533	5.0	15	0.001	USEPA 3015A
14	Cadmium as Cd	mg/l	BDL	0.003	No relaxation	0.001	USEPA 3015A
15	Lead as Pb	mg/l	BDL	0.01	No relaxation	0.001	USEPA 3015A

Authorized Signatory Chemical

Water- EL/M1-7.3.2-W

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— 60 —
-148-

ULR No. : TC11818240000001104F						Test Report No. : NWAL070224NA040	
Type of Sample : Water- Drinking Water							
16	Nickel as Ni	mg/l	BDL	0.02	No relaxation	0.001	USEPA 3015A
17	Arsenic as As	mg/l	BDL	0.01	No relaxation	0.001	USEPA 3015A
18	Chromium as Cr	mg/l	BDL	0.05	No relaxation	0.001	USEPA 3015A
19	Uranium as U	mg/l	0.005	0.03	No relaxation	0.001	USEPA 3015A
20	Potassium as K	mg/l	1.1	-	-	1	IS 3025 (Part 45)
21	Sodium as Na	mg/l	25	-	-	1	IS 3025 (Part 45)

Remarks : Latitude=31.49584333N; Longitude=76.17500167E

OTHER INFORMATION

Abbreviation : ULR: Unique Lab Report, BDL: Below Detection Level, NA: Not Applicable

Terms & Conditions : Please refer terms and conditions on backside of Test Report (Page-1)

End of Report

Eco Paryavaran Laboratories Pvt. Ltd. E-207 Phase VIII (Sector-74) Mohali (Pb.) 160071

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Authorized Signatory-Chemical

1008

-1419-

— 61 —

Eco Paryavaran Laboratories & Consultants Pvt. Ltd.

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TEST REPORT

ULR No. : NA		Test Report No. :	NWAL070224NA040/A
Type of Sample : Water- Drinking Water			
Customer Name	Executive Engineer	Work Order No. & Date	EE-JSD-HAROLI/GA-2023-24/2717-18 Dt.: 05/02/2024
Address	Jal Shakti Division, Haroli, Distt. Una, Himachal Pradesh	Customer reference No. (If any)	NA
		Date of Sampling	07/02/2024
Sampling Protocol	IS 17614 (Part 1), EL-MSP-7.3	Date of Sample Receipt	07/02/2024
Sample Collection Mode	Sampling by laboratory	Period of Analysis	07/02/2024 To 14/02/2024
Testing Location	Permanent Facility	Date of Reporting	14/02/2024
Sampling Location	From Tap- Mohalla Pathak Ispur		
Sample Description	Clear, colourless liquid		
Standard/Specification	IS 10500 : 2012		
Packing, Markings, Seal & Qty.	2Litre Plastic Bottle Marked A/07/04		

RESULTS

I. Chemical Testing

1. Water (Drinking Water)

S.No.	Test Parameter	Unit	Result	Acceptable Limit	Permissible Limit in Absence of Alternate Source	Detection Limit	Test Method
1	Conductivity	µmho/cm	480	-	-	1	IS 3025 (Part 14)
2	Bicarbonate as HCO3	mg/l	264	-	-	1	IS 3025 (Part-23)
3	Carbonate as CO3	mg/l	BDL	-	-	1	IS 3025 (Part-23)
4	Silica as SiO2	mg/l	16	-	-	1	APHA23rd Ed 4500D-Hetropoly Blue Method

Remarks : Latitude=31.49584333N; Longitude=76.17500167E

This test report is the part of Test Report No.NWAL070224NA040

OTHER INFORMATION

Abbreviation : ULR: Unique Lab Report, BDL: Below Detection Level, NA: Not Applicable

Terms & Conditions : Please refer terms and conditions on backside of Test Report (Page-1)

End of Report

Umesh Kumar
Authorized Signatory-Chemical

Water- EL-FSRT-7.8.2-W

Page No. 1/1

Eco Paryavaran Laboratories & Consultants Pvt. Ltd.
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TEST REPORT

ULR No. : TC11818240000001092F		Test Report No. :	NWAL070224NA028
Type of Sample : Water- Drinking Water			
Customer Name	Assistant Engineer	Work Order No. & Date	EE-JSDU-I-GA-WATERTESTING/2024-20643-44 Dt.: 07/02/2024
Address	Jal Shakti Vibhag, Sub Division No.1, Una Himachal Pradesh	Customer reference No. (If any)	NA
		Date of Sampling	07/02/2024
Sampling Protocol	IS 17614 (Part 1), EL-MSP-7.3	Date of Sample Receipt	07/02/2024
Sample Collection Mode	Sampling by laboratory	Period of Analysis	07/02/2024 To 14/02/2024
Testing Location	Permanent Facility	Date of Reporting	14/02/2024
Sampling Location	From Tap- Water Supply Scheme Rampur		
Sample Description	Clear, colourless liquid.		
Standard/Specification	IS 10500 : 2012		
Packing, Markings, Seal & Qty.	2litre Plastic Bottle Marked A/07/10		

RESULTS

I. Chemical Testing

1. Water (Drinking Water)

S.No.	Test Parameter	Unit	Result	Acceptable Limit	Permissible Limit in Absence of Alternate Source	Detection Limit	Test Method
1	pH @ 25 °C	-	7.70	6.5-8.5	No relaxation	0.5	IS 3025 (Part 11)
2	Calcium as Ca	mg/l	27	75	200	1	IS 3025 (Part 40)
3	Chloride as Cl	mg/l	8.0	250	1000	1	IS 3025 (Part 32)
4	Copper as Cu	mg/l	BDL	0.05	1.5	0.001	USEPA 3015A
5	Fluoride as F	mg/l	0.14	1.0	1.5	0.1	IS 3025 (Part 60)
6	Iron as Fe	mg/l	BDL	1.0	No relaxation	0.001	USEPA 3015A
7	Magnesium as Mg	mg/l	33	30	100	1	IS 3025 (Part 46)
8	Manganese as Mn	mg/l	0.002	0.1	0.3	0.001	USEPA 3015A
9	Nitrate as NO3	mg/l	12	45	No relaxation	1	APHA 23rd Ed 4500 B UV Screening Method
10	Selenium as Se	mg/l	BDL	0.01	No relaxation	0.001	USEPA 3015A
11	Sulphate as SO4	mg/l	1.1	200	400	1	IS 3025 (Part 24) Cl 4.0- Turbidity Method
12	Total Hardness as CaCO3	mg/l	204	200	600	1	IS 3025 (Part 21)
13	Zinc as Zn	mg/l	0.009	5.0	15	0.001	USEPA 3015A
14	Cadmium as Cd	mg/l	BDL	0.003	No relaxation	0.001	USEPA 3015A
15	Lead as Pb	mg/l	BDL	0.01	No relaxation	0.001	USEPA 3015A

Umesh Kumar
Authorized Signatory-Chemical

Water- EL-FM1-7.8.2-W

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-151-
— 63 —

ULR No. : TC11818240000001092F						Test Report No. : NWAL070224NA028	
Type of Sample : Water- Drinking Water							
16	Nickel as Ni	mg/l	BDL	0.02	No relaxation	0.001	USEPA 3015A
17	Arsenic as As	mg/l	BDL	0.01	No relaxation	0.001	USEPA 3015A
18	Chromium as Cr	mg/l	BDL	0.05	No relaxation	0.001	USEPA 3015A
19	Uranium as U	mg/l	0.005	0.03	No relaxation	0.001	USEPA 3015A
20	Potassium as K	mg/l	1.3	-	-	1	IS 3025 (Part 45)
21	Sodium as Na	mg/l	23	-	-	1	IS 3025 (Part 45)

Remarks : Latitude=31.2549N; Longitude=76.1636E

OTHER INFORMATION

Abbreviation : ULR: Unique Lab Report, BDL: Below Detection Level, NA: Not Applicable

Terms & Conditions : Please refer terms and conditions on backside of Test Report (Page-1)

End of Report

Umesh Kumar
Authorized Signatory-Chemical

Eco Paryavaran Laboratories & Consultants Pvt. Ltd.

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TEST REPORT

ULR No. : NA		**Test Report No. :**	NWAL070224NA028/A
Type of Sample : Water- Drinking Water			
Customer Name	Assistant Engineer	**Work Order No. & Date**	EE-JSDU-I-GA-WATERTESTING/2024-20643-44 Dt.: 07/02/2024
Address	Jal Shakti Vibhag, Sub Division No.1, Una Himachal Pradesh	**Customer reference No. (If any)**	NA
		Date of Sampling	07/02/2024
Sampling Protocol	IS 17614 (Part 1), EL-MSP-7.3	**Date of Sample Receipt**	07/02/2024
Sample Collection Mode	Sampling by laboratory	**Period of Analysis**	07/02/2024 To 14/02/2024
Testing Location	Permanent Facility	**Date of Reporting**	14/02/2024
Sampling Location	From Tap- Water Supply Scheme Rampur		
Sample Description	Clear, colourless liquid.		
Standard/Specification	IS 10500 : 2012		
Packing, Markings, Seal & Qty.	2litre Plastic Bottle Marked A/07/10		

RESULTS

I. Chemical Testing

1. Water (Drinking Water)

S.No.	Test Parameter	Unit	Result	Acceptable Limit	Permissible Limit in Absence of Alternate Source	Detection Limit	Test Method
1	Conductivity	µmho/cm	432	-	-	1	IS 3025 (Part 14)
2	Bicarbonate as HCO3	mg/l	240	-	-	1	IS:3025 (Part-23)
3	Carbonate as CO3	mg/l	BDL	-	-	1	IS:3025 (Part-23)
4	Silica as SiO2	mg/l	19	-	-	1	APHA23rd Ed 4500D-Hetropoly Blue Method

Remarks : Latitude=31.2549N; Longitude=76.1636E

This test report is the part of Test Report No.NWAL070224NA028

OTHER INFORMATION

Abbreviation : ULR: Unique Lab Report, BDL: Below Detection Level, NA: Not Applicable

Terms & Conditions : Please refer terms and conditions on backside of Test Report (Page-1)

End of Report

Eco Paryavaran Laboratories & Consultants Pvt. Ltd. E-207 Phase VIII-B (Sector-74) Mohali (Pb.) 160071

Umesh Kumar

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Eco Paryavaran Laboratories & Consultants Pvt. Ltd.

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TEST REPORT

TC-11818

ULR No. : TC118182400000001093F		Test Report No. :	NWAL070224NA029
Type of Sample : Water- Drinking Water			
Customer Name	Assistant Engineer	Work Order No. & Date	EE-JSDU-I-GA-WATERTESTING/2024-20643-44 Dt.: 07/02/2024
Address	Jal Shakti Vibhag, Sub Division No.1, Una Himachal Pradesh	Customer reference No. (If any)	NA
		Date of Sampling	07/02/2024
Sampling Protocol	IS 17614 (Part 1), EL-MSP-7.3	Date of Sample Receipt	07/02/2024
Sample Collection Mode	Sampling by laboratory	Period of Analysis	07/02/2024 To 14/02/2024
Testing Location	Permanent Facility	Date of Reporting	14/02/2024
Sampling Location	From Tap- H.No.55 Rampur		
Sample Description	Clear, colourless liquid.		
Standard/Specification	IS 10500 : 2012		
Packing, Markings, Seal & Qty.	2litre Plastic Bottle Marked A/07/11		

RESULTS

I. Chemical Testing

1. Water (Drinking Water)

S.No.	Test Parameter	Unit	Result	Acceptable Limit	Permissible Limit In Absence of Alternate Source	Detection Limit	Test Method
1	pH @ 25 °C	-	7.80	6.5-8.5	No relaxation	0.5	IS 3025 (Part 11)
2	Calcium as Ca	mg/l	48	75	200	1	IS 3025 (Part 40)
3	Chloride as Cl	mg/l	7.0	250	1000	1	IS 3025 (Part 32)
4	Copper as Cu	mg/l	BDL	0.05	1.5	0.001	USEPA 3015A
5	Fluoride as F	mg/l	0.16	1.0	1.5	0.1	IS 3025 (Part 60)
6	Iron as Fe	mg/l	0.002	1.0	No relaxation	0.001	USEPA 3015A
7	Magnesium as Mg	mg/l	23	30	100	1	IS 3025 (Part 46)
8	Manganese as Mn	mg/l	0.004	0.1	0.3	0.001	USEPA 3015A
9	Nitrate as NO3	mg/l	11	45	No relaxation	1	APHA 23rd Ed 4500 B UV Screening Method
10	Selenium as Se	mg/l	BDL	0.01	No relaxation	0.001	USEPA 3015A
11	Sulphate as SO4	mg/l	19	200	400	1	IS 3025 (Part 24) Cl 4.0- Turbidity Method
12	Total Hardness as CaCO3	mg/l	216	200	600	1	IS 3025 (Part 21)
13	Zinc as Zn	mg/l	0.477	5.0	15	0.001	USEPA 3015A
14	Cadmium as Cd	mg/l	BDL	0.003	No relaxation	0.001	USEPA 3015A
15	Lead as Pb	mg/l	BDL	0.01	No relaxation	0.001	USEPA 3015A

Umesh Kumar
Authorized Signatory-Chemical

E-207 Phase VIII-B (Sector-74) Mohali (Pb.) 160071

Water- EL-FM1-7.8.2-W

Page No. 1/2

ULR No. : TC118182400000109 3F					Test Report No. : NWAL070224NA029		
Type of Sample : Water- Drinking Water							
16	Nickel as Ni	mg/l	BDL	0.02	No relaxation	0.001	USEPA 3015A
17	Arsenic as As	mg/l	BDL	0.01	No relaxation	0.001	USEPA 3015A
18	Chromium as Cr	mg/l	BDL	0.05	No relaxation	0.001	USEPA 3015A
19	Uranium as U	mg/l	0.005	0.03	No relaxation	0.001	USEPA 3015A
20	Potassium as K	mg/l	1.3	-	-	1	IS 3025 (Part 45)
21	Sodium as Na	mg/l	23	-	-	1	IS 3025 (Part 45)

Remarks : Latitude=31.2553N; Longitude=76.2553E

OTHER INFORMATION

Abbreviation : ULR: Unique Lab Report, BDL: Below Detection Level, NA: Not Applicable

Terms & Conditions : Please refer terms and conditions on backside of Test Report (Page-1)

End of Report

Eco Pollution Laboratories & Consultants Pvt. Ltd. E-207 Phase VIII-B (Sector-74) Mohali (Pb.) 160071

Umesh Kumar
Authorised Signatory-Chemical

Eco Paryavaran Laboratories & Consultants Pvt. Ltd.

(Formerly known as Eco Laboratories & Consultants Pvt. Ltd.)

TEST REPORT

ULR No. : NA		**Test Report No. :**	NWAL070224NA029/A
Type of Sample : Water- Drinking Water			
Customer Name	Assistant Engineer	**Work Order No. & Date**	EE-JSDU-I-GA-WATERTESTING/2024-20643-44 Dt.: 07/02/2024
Address	Jal Shakti Vibhag, Sub Division No.1, Una Himachal Pradesh	**Customer reference No. (If any)**	NA
		Date of Sampling	07/02/2024
Sampling Protocol	IS 17614 (Part 1), EL-MSP-7.3	**Date of Sample Receipt**	07/02/2024
Sample Collection Mode	Sampling by laboratory	**Period of Analysis**	07/02/2024 To 14/02/2024
Testing Location	Permanent Facility	**Date of Reporting**	14/02/2024
Sampling Location	From Tap- H.No.55 Rampur		
Sample Description	Clear, colourless liquid.		
Standard/Specification	IS 10500 : 2012		
Packing, Markings, Seal & Qty.	2litre Plastic Bottle Marked A/07/11		

RESULTS

I. Chemical Testing

1. Water (Drinking Water)

S.No.	Test Parameter	Unit	Result	Acceptable Limit	Permissible Limit in Absence of Alternate Source	Detection Limit	Test Method
1	Conductivity	µmho/cm	440	-	-	1	IS 3025 (Part 14)
2	Bicarbonate as HCO3	mg/l	248	-	-	1	IS:3025 (Part-23)
3	Carbonate as CO3	mg/l	BDL	-	-	1	IS:3025 (Part-23)
4	Silica as SiO2	mg/l	20	-	-	1	APHA23rd Ed 4500D-Hetropoly Blue Method

Remarks : Latitude=31.2553N; Longitude=76.2553E

This test report is the part of Test Report No.NWAL070224NA029

OTHER INFORMATION

Abbreviation : ULR: Unique Lab Report, BDL: Below Detection Level, *NA*: Not Applicable

Terms & Conditions : Please refer terms and conditions on backside of Test Report (Page-1)

****End of Report****

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Eco Paryavaran Laboratories & Consultants Pvt. Ltd.

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TEST REPORT

ULR No. : TC118182400001094F		Test Report No.:	NWAL070224NA030
Type of Sample : Water- Drinking Water			
Customer Name	Assistant Engineer	Work Order No. & Date	EE-JSDU-I-DA-WATERTESTING/2024-20643-44 Dt.: 07/02/2024
Address	Jal Shakti Vibhag, Sub Division No.1, Una Himachal Pradesh	Customer reference No. (if any)	NA
		Date of Sampling	07/02/2024
Sampling Protocol	IS 17614 (Part 1), EL-MSP-7.3	Date of Sample Receipt	07/02/2024
Sample Collection Mode	Sampling by laboratory	Period of Analysis	07/02/2024 To 14/02/2024
Testing Location	Permanent Facility	Date of Reporting	14/02/2024
Sampling Location	From Tap- Lift Irrigation Scheme Abada Barana		
Sample Description	Clear, colourless liquid.		
Standard/Specification	IS 10500 : 2012		
Packing, Markings, Seal & Qty.	2litre Plastic Bottle Marked A/07/12		

RESULTS

I. Chemical Testing

1. Water (Drinking Water)

S.No.	Test Parameter	Unit	Result	Acceptable Limit	Permissible Limit in Absence of Alternate Source	Detection Limit	Test Method
1	pH @ 25 °C	-	7.50	6.5-8.5	No relaxation	0.5	IS 3025 (Part 11)
2	Calcium as Ca	mg/l	35	75	200	1	IS 3025 (Part 40)
3	Chloride as Cl	mg/l	7.0	250	1000	1	IS 3025 (Part 32)
4	Copper as Cu	mg/l	BDL	0.05	1.5	0.001	USEPA 3015A
5	Fluoride as F	mg/l	0.21	1.0	1.5	0.1	IS 3025 (Part 60)
6	Iron as Fe	mg/l	0.006	1.0	No relaxation	0.001	USEPA 3015A
7	Magnesium as Mg	mg/l	25	30	100	1	IS 3025 (Part 46)
8	Manganese as Mn	mg/l	0.005	0.1	0.3	0.001	USEPA 3015A
9	Nitrate as NO3	mg/l	9.5	45	No relaxation	1	APHA 23rd Ed 4500 B UV Screening Method
10	Selenium as Se	mg/l	BDL	0.01	No relaxation	0.001	USEPA 3015A
11	Sulphate as SO4	mg/l	1.6	200	400	1	IS 3025 (Part 24) Cl 4.0 Turbidity Method
12	Total Hardness as CaCO3	mg/l	195	200	600	1	IS 3025 (Part 21)
13	Zinc as Zn	mg/l	0.373	5.0	15	0.001	USEPA 3015A
14	Cadmium as Cd	mg/l	BDL	0.003	No relaxation	0.001	USEPA 3015A
15	Lead as Pb	mg/l	BDL	0.01	No relaxation	0.001	USEPA 3015A

Umesh Kumar
Authorized Signatory-Chemical

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1016

-157-
— 69 —

ULR No. : TC11818240000001094F					Test Report No. : NWAL070224NA030		
Type of Sample : Water- Drinking Water							
16	Nickel as Ni	mg/l	0.007	0.02	No relaxation	0.001	USEPA 3015A
17	Arsenic as As	mg/l	BDL	0.01	No relaxation	0.001	USEPA 3015A
18	Chromium as Cr	mg/l	BDL	0.05	No relaxation	0.001	USEPA 3015A
19	Uranium as U	mg/l	0.003	0.03	No relaxation	0.001	USEPA 3015A
20	Potassium as K	mg/l	1.2	-	-	1	IS 3025 (Part 45)
21	Sodium as Na	mg/l	20	-	-	1	IS 3025 (Part 45)

Remarks : Latitude=31.2559N; Longitude=76.1649E

OTHER INFORMATION

Abbreviation : ULR: Unique Lab Report, BDL: Below Detection Level, NA: Not Applicable

Terms & Conditions : Please refer terms and conditions on backside of Test Report (Page-1)

End of Report

Parivaran Laboratories Pvt. Ltd. E-207 Phase VIII-B (Sector-74) Mohali (Pb.) 160071

Umesh Kumar
Authorized Signatory-Chemical

Eco Paryavaran Laboratories & Consultants Pvt. Ltd.

(Formerly known as Eco Laboratories & Consultants Pvt. Ltd.)

TEST REPORT

ULR No. : NA		Test Report No. :	NWAL070224NA030/A
Type of Sample : Water- Drinking Water			
Customer Name	Assistant Engineer	Work Order No. & Date	EE-JSDU-I-GA-WATERTESTING/2024-20643-44 Dt.: 07/02/2024
Address	Jal Shakti Vibhag, Sub Division No.1, Una Himachal Pradesh	Customer reference No. (If any)	NA
		Date of Sampling	07/02/2024
Sampling Protocol	IS 17614 (Part 1), EL-MSP-7.3	Date of Sample Receipt	07/02/2024
Sample Collection Mode	Sampling by laboratory	Period of Analysis	07/02/2024 To 14/02/2024
Testing Location	Permanent Facility	Date of Reporting	14/02/2024
Sampling Location	From Tap- Lift Irrigation Scheme Abada Barana		
Sample Description	Clear, colourless liquid.		
Standard/Specification	IS 10500 : 2012		
Packing, Markings, Seal & Qty	2litre Plastic Bottle Marked A/07/12		

RESULTS

1. Chemical Testing

1. Water (Drinking Water)

S.No.	Test Parameter	Unit	Result	Acceptable Limit	Permissible Limit in Absence of Alternate Source	Detection Limit	Test Method
1	Conductivity	µmho/cm	438	-	-	1	IS 3025 (Part 14)
2	Bicarbonate as HCO3	mg/l	240	-	-	1	IS:3025 (Part-23)
3	Carbonate as CO3	mg/l	BDL	-	-	1	IS:3025 (Part-23)
4	Silica as SiO2	mg/l	20	-	-	1	APHA23rd Ed 4500D-Hetropoly Blue Method

Remarks : Latitude=31.25599N; Longitude=76.3649E
This test report is the part of Test Report No.NWAL070224NA030

OTHER INFORMATION

Abbreviation : ULR: Unique Lab Report, BDL: Below Detection Level, NA: Not Applicable

Terms & Conditions : Please refer terms and conditions on backside of Test Report (Page-1)

End of Report

Limesh Kumar
Authorized Signatory-Chemical

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Eco Paryavaran Laboratories & Consultants Pvt. Ltd.

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TEST REPORT

ULR No. : TC118182400001095F		Test Report No. :	NWAL070224NA031
Type of Sample : Water- Drinking Water			
Customer Name	Assistant Engineer	Work Order No. & Date	EE-JSDU-I-GA-WATERTESTING/2024-20643-44 Dt.: 07/02/2024
Address	Jal Shakti Vibhag, Sub Division No.1, Una Himachal Pradesh	Customer reference No. (If any)	NA
		Date of Sampling	07/02/2024
Sampling Protocol	IS 17614 (Part 1), EL-MSP-7.3	Date of Sample Receipt	07/02/2024
Sample Collection Mode	Sampling by laboratory	Period of Analysis	07/02/2024 To 14/02/2024
Testing Location	Permanent Facility	Date of Reporting	14/02/2024
Sampling Location	From Tap- Sunehra		
Sample Description	Clear, colourless liquid.		
Standard/Specification	IS 10500 : 2012		
Packing, Markings, Seal & Qty.	2litre Plastic Bottle Marked A/07/13		

RESULTS

I. Chemical Testing

1. Water (Drinking Water)

S.No.	Test Parameter	Unit	Result	Acceptable Limit	Permissible Limit in Absence of Alternate Source	Detection Limit	Test Method
1	pH @ 25°C	-	7.30	6.5-8.5	No relaxation	0.5	IS 3025 (Part 11)
2	Calcium as Ca	mg/l	107	75	200	1	IS 3025 (Part 40)
3	Chloride as Cl	mg/l	15	250	1000	1	IS 3025 (Part 32)
4	Copper as Cu	mg/l	BDL	0.05	1.5	0.001	USEPA 3015A
5	Fluoride as F	mg/l	0.18	1.0	1.5	0.1	IS 3025 (Part 60)
6	Iron as Fe	mg/l	BDL	1.0	No relaxation	0.001	USEPA 3015A
7	Magnesium as Mg	mg/l	4.0	30	100	1	IS 3025 (Part 46)
8	Manganese as Mn	mg/l	0.004	0.1	0.3	0.001	USEPA 3015A
9	Nitrate as NO3	mg/l	31.5	45	No relaxation	1	APHA 23rd Ed 4500 B UV Screening Method
10	Selenium as Se	mg/l	BDL	0.01	No relaxation	0.001	USEPA 3015A
11	Sulphate as SO4	mg/l	14	200	400	1	IS 3025 (Part 24) Cl 4.0-Turbidity Method
12	Total Hardness as CaCO3	mg/l	284	200	600	1	IS 3025 (Part 21)
13	Zinc as Zn	mg/l	0.01	5.0	15	0.001	USEPA 3015A
14	Cadmium as Cd	mg/l	BDL	0.003	No relaxation	0.001	USEPA 3015A
15	Lead as Pb	mg/l	BDL	0.01	No relaxation	0.001	USEPA 3015A

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ULR No. : TC11818240000001095F					Test Report No. : NWAL070224NA031		
Type of Sample : Water- Drinking Water							
16	Nickel as Ni	mg/l	BDL	0.02	No relaxation	0.001	USEPA 3015A
17	Arsenic as As	mg/l	BDL	0.01	No relaxation	0.001	USEPA 3015A
18	Chromium as Cr	mg/l	BDL	0.05	No relaxation	0.001	USEPA 3015A
19	Uranium as U	mg/l	0.004	0.03	No relaxation	0.001	USEPA 3015A
20	Potassium as K	mg/l	BDL	-	-	1	IS 3025 (Part 45)
21	Sodium as Na	mg/l	18	-	-	1	IS 3025 (Part 45)

Remarks : Latitude=31.2613N; Longitude=76.1727E

OTHER INFORMATION

Abbreviation : ULR: Unique Lab Report, BDL: Below Detection Level, NA: Not Applicable

Terms & Conditions : Please refer terms and conditions on backside of Test Report (Page-1)

End of Report

Parivaran Laboratories & Consultants Pvt. Ltd. E-207 Phase VIII-B (sector-74) Mohali (Pb.) 160071

Umesh Kumar
Authorized Signatory-Chemical

Eco Paryavaran Laboratories & Consultants Pvt. Ltd.

(Formerly known as Eco Laboratories & Consultants Pvt. Ltd.)

TEST REPORT

ULR No. : NA		Test Report No. :	NWALD70224NA031/A
Type of Sample : Water - Drinking Water			
Customer Name	Assistant Engineer	Work Order No. & Date	EE-JSDU-I-GA-WATERTESTING/2024-20643-44 Dt.: 07/02/2024
Address	Jal Shakti Vibhag, Sub Division No.1, Una Himachal Pradesh	Customer reference No. (If any)	NA
		Date of Sampling	07/02/2024
Sampling Protocol	IS 17614 (Part 1), EL-MSP-2.3	Date of Sample Receipt	07/02/2024
Sample Collection Mode	Sampling by laboratory	Period of Analysis	07/02/2024 To 14/02/2024
Testing Location	Permanent Facility	Date of Reporting	14/02/2024
Sampling Location	From Tap- Sunehra		
Sample Description	Clear, colourless liquid.		
Standard/Specification	IS 10500 : 2012		
Packing, Markings, Seal & Qty.	2litre Plastic Bottle Marked A/07/13		

RESULTS

I. Chemical Testing

1. Water (Drinking Water)

S.No.	Test Parameter	Unit	Result	Acceptable Limit	Permissible Limit in Absence of Alternate Source	Detection Limit	Test Method
1	Conductivity	µmho/cm	568	-	-	1	IS 3025 (Part 14)
2	Bicarbonate as HCO3	mg/l	296	-	-	1	IS 3025 (Part 23)
3	Carbonate as CO3	mg/l	BDL	-	-	1	IS 3025 (Part 23)
4	Silica as SiO2	mg/l	17	-	-	1	APHA 23rd Ed 4500D-Hetropoly Blue Method

Remarks : Latitude=31.2613N; Longitude=76.1727E

This test report is the part of Test Report No.NWALD70224NA031

OTHER INFORMATION

Abbreviation : ULR: Unique Lab Report, BDL: Below Detection Level, NA: Not Applicable

Terms & Conditions : Please refer terms and conditions on backside of Test Report (Page-1)

End of Report

Umesh Kumar
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Annexure-R-2

HIMACHAL PRADESH

JAL SHAKTI VIBHAG

No.SE/JSC/NPR/WS/WA-III/GWA/Notice/-2024 - 1120-23 Date:- 27/2/24

To

The Chairman HPGWA-cum-
Engineer-Chief,
Jal Shakti Vibhag ,
Jal Bhawan Shimla.

Subject:- Notice in Original Application NO 728/2023.

Reference:- Your office letter No. JSV-Member Secy HPGWA-cum-SE-P&I-II/2023-24-1136-1143 dated 05-02-2024,1325-1340 Dt:-12-02-2024& Sr. Hydrologist GWO JSV Una letter No.JSV-GWO/E-32/2023-24-1606-17 Dt:-07-02-2024.

In this context, it is intimated that the Executive Engineer, Jal Shakti Division Indora vide his office letter No. 10089-91 dated 26.02.2024 has submitted that the water samples of all the groundwater sources under division Indora and all the water samples are checked in water testing lab in Indora regularly to monitor water quality which is found satisfactory as per report, Now as per report of The Senior Hydrologist Ground water Organization Jal Shakti Vibahg Una HP vide letter under reference this office has approached to ECO Paryavaran Laboratory & Consultants Pvt. Ltd. vide this office letter no spl-1 Dt:- 07-02-2024 to take water samples in the vicinity of source Ulehrian (Long.32.07472222 lat. 75.6375) to check the water quality.

Accordingly the ECO Paryavaran Laboratory & Consultants Pvt. Ltd. checked the area on dated 12-02-2024 and has taken water samples in presence of Shri Pradeep Kumar JE and Sri Ashwini Kumar JE of division Indora. There after the report of all water samples is sent to your good office for information and further necessary action at your end please.

DA:- Report

Superintending Engineer,
Jal Shakti Circle Nurpur.

Copy to the Chief Engineer (DZ) Jal Shakti Vibhag, Dharamshala for information.

Copy to the Senior Hydrologist Ground water Organization Jal Shakti Vibhag Una HP for information.

Copy forwarded to the Executive Engineer Jal Shakti Division Indora for information with reference to his office letter referred above.

Superintending Engineer,
Jal Shakti Circle Nurpur.

FR
EE/GWA
SE/SI-II
01/03/2024

to n/a
JE (Gwa)
02/3/24

Hydrologist (Gwa) 02/3/24

1022

-75- -163-

Eco Paryavaran Laboratories & Consultants Pvt. Ltd.
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TEST REPORT

ULR No. : TC118182400000119BF		Test Report No. :	NWAL090224NA017
Type of Sample : Water- Drinking Water			
Customer Name	Executive Engineer	Work Order No. & Date	EE/JSV/IND/WATERSAMPLE/2023-24-SPL-01 Dt.: 07/02/2024
Address	JSV Division, Indora, Distt. Kangra (HP)	Customer reference No. (If any)	NA
		Date of Sampling	08/02/2024
Sampling Protocol	IS 17614 (Part 1), EL-MSP-7.3	Date of Sample Receipt	09/02/2024
Sample Collection Mode	Sampling by laboratory	Period of Analysis	09/02/2024 To 14/02/2024
Testing Location	Permanent Facility	Date of Reporting	14/02/2024
Sampling Location	Borewell (Govt.Sr.Sec School- Vill. Mand Miani)		
Sample Description	Clear, colourless liquid.		
Standard/Specification	IS 10500 : 2012		
Packing, Markings, Seal & Qty.	2 litre Plastic Bottle Marked D/08/10		

RESULTS

I. Chemical Testing

1. Water (Drinking Water)

S.No.	Test Parameter	Unit	Result	Acceptable Limit	Permissible Limit in Absence of Alternate Source	Detection Limit	Test Method
1	pH @ 25 °C	-	7.78	6.5-8.5	No relaxation	0.5	IS 3025 (Part 11)
2	Calcium as Ca	mg/l	37	75	200	1	IS 3025 (Part 40)
3	Chloride as Cl	mg/l	7.0	250	1000	1	IS 3025 (Part 32)
4	Copper as Cu	mg/l	BDL	0.05	1.5	0.001	USEPA 3015A
5	Fluoride as F	mg/l	BDL	1.0	1.5	0.1	IS 3025 (Part 60)
6	Iron as Fe	mg/l	BDL	1.0	No relaxation	0.001	USEPA 3015A
7	Magnesium as Mg	mg/l	23	30	100	1	IS 3025 (Part 46)
8	Manganese as Mn	mg/l	BDL	0.1	0.3	0.001	USEPA 3015A
9	Nitrate as NO3	mg/l	4.2	45	No relaxation	1	APHA 23rd Ed 4500 h (V Screening Method
10	Selenium as Se	mg/l	BDL	0.01	No relaxation	0.001	USEPA 3015A
11	Sulphate as SO4	mg/l	1.0	200	400	1	IS 3025 (Part 24) Cl 4.0- Turbidity Method
12	Total Hardness as CaCO3	mg/l	188	200	600	1	IS 3025 (Part 21)
13	Zinc as Zn	mg/l	0.083	5.0	15	0.001	USEPA 3015A
14	Cadmium as Cd	mg/l	BDL	0.003	No relaxation	0.001	USEPA 3015A
15	Lead as Pb	mg/l	BDL	0.01	No relaxation	0.001	USEPA 3015A

Umesh Kumar,
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-76-
-164-

ULR No. : TC118182400001198F					Test Report No. : NWA1090224NA017		
Type of Sample : Water- Drinking Water							
16	Nickel as Ni	mg/l	BDL	0.02	No relaxation	0.001	USEPA 3015A
17	Arsenic as As	mg/l	0.002	0.01	No relaxation	0.001	USEPA 3015A
18	Chromium as Cr	mg/l	BDL	0.05	No relaxation	0.001	USEPA 3015A
19	Uranium as U	mg/l	0.002	0.03	No relaxation	0.001	USEPA 3015A
20	Potassium as K	mg/l	1.1	-	-	1	IS 3025 (Part 45)
21	Sodium as Na	mg/l	23	-	-	1	IS 3025 (Part 45)

Remarks : Latitude=32.098365N; Longitude=75.671901E

OTHER INFORMATION

Abbreviation : ULR: Unique Lab Report, BDL: Below Detection Level, NA: Not Applicable

Terms & Conditions : Please refer terms and conditions on backside of Test Report (Page-1)

End of Report

Umesh Kumar
Authorized Signatory-Chemical

1024

-165-
-77-

Eco Paryavaran Laboratories & Consultants Pvt. Ltd.
(Formerly known as Eco Laboratories & Consultants Pvt. Ltd.)

TEST REPORT

ULR No. : NA		Test Report No. :	NWAL090224NA017/A
Type of Sample : Water- Drinking Water			
Customer Name	Executive Engineer	Work Order No. & Date	EE/JSV/IND/WATERSAMPLE/2023-24-SPL-01 Dt.: 07/02/2024
Address	JSV Division, Indora, Distt. Kangra (HP)	Customerreference No. (If any)	NA
		Date of Sampling	08/02/2024
Sampling Protocol	IS 17614 (Part 1), EL-MSP-7.3	Date of Sample Receipt	09/02/2024
Sample Collection Mode	Sampling by laboratory	Period of Analysis	09/02/2024 To 14/02/2024
Testing Location	Permanent Facility	Date of Reporting	14/02/2024
Sampling Location	Borewell (Govt.Sr.Sec School- Vill. Mand Miani)		
Sample Description	Clear, colourless liquid.		
Standard/Specification	IS 10500 : 2012		
Packing, Markings, Seal & Qty.	2 litre Plastic Bottle Marked D/08/10		

RESULTS

I. Chemical Testing

1. Water (Drinking Water)

S.No.	Test Parameter	Unit	Result	Acceptable Limit	Permissible Limit in Absence of Alternate Source	Detection Limit	Test Method
1	Conductivity	µmho/cm	469	-	-	1	IS 3025 (Part 14)
2	Bicarbonate as HCO3	mg/l	212	-	-	1	IS-3025 (Part-23)
3	Carbonate as CO3	mg/l	BDL	-	-	1	IS-3025 (Part-23)
4	Silica as SiO2	mg/l	BDL	-	-	1	APHA23rd Ed 4500D-Hetropoly Blue Method

Remarks : Latitude=32.098365N; Longitude=75.671901E
This test report is the part of Test Report No.NWAL090224NA017

OTHER INFORMATION

Abbreviation : ULR: Unique Lab Report, BDL: Below Detection Level, NA: Not Applicable

Terms & Conditions : Please refer terms and conditions on backside of Test Report (Page-1)

End of Report

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TEST REPORT

ULR No. : TC118182400001199F		Test Report No. :	NWAL090224NA018
Type of Sample : Water- Drinking Water			
Customer Name	Executive Engineer	Work Order No. & Date	EE/JSV/IND/WATERSAMPLE/2023-24-SPL-01 Dt.: 07/02/2024
Address	JSV Division, Indora, Distt. Kangra (HP)	Customer reference No. (If any)	NA
		Date of Sampling	08/02/2024
Sampling Protocol	IS 17614 (Part 1), EL-MSP-7.3	Date of Sample Receipt	09/02/2024
Sample Collection Mode	Sampling by laboratory	Period of Analysis	09/02/2024 To 14/02/2024
Testing Location	Permanent Facility	Date of Reporting	14/02/2024
Sampling Location	Borewell (LWSS- Vill. Majwan)		
Sample Description	Clear, colourless liquid		
Standard/Specification	IS 10500 : 2012		
Packing, Markings, Seal & Qty.	2 litre Plastic Bottle Marked D/08/11		

RESULTS

I. Chemical Testing

1. Water (Drinking Water)

S.No.	Test Parameter	Unit	Result	Acceptable Limit	Permissible Limit in Absence of Alternate Source	Detection Limit	Test Method
1	pH @ 25 °C	-	7.72	6.5-8.5	No relaxation	0.5	IS 3025 (Part 11)
2	Calcium as Ca	mg/l	35	75	200	1	IS 3025 (Part 40)
3	Chloride as Cl	mg/l	5.0	250	1000	1	IS 3025 (Part 32)
4	Copper as Cu	mg/l	BDL	0.05	1.5	0.001	USEPA 3015A
5	Fluoride as F	mg/l	0.64	1.0	1.5	0.1	IS 3025 (Part 60)
6	Iron as Fe	mg/l	BDL	1.0	No relaxation	0.001	USEPA 3015A
7	Magnesium as Mg	mg/l	24	30	100	1	IS 3025 (Part 46)
8	Manganese as Mn	mg/l	BDL	0.1	0.3	0.001	USEPA 3015A
9	Nitrate as NO3	mg/l	5.1	45	No relaxation	1	APHA 23rd Ed 4500 B UV Screening Method
10	Selenium as Se	mg/l	BDL	0.01	No relaxation	0.001	USEPA 3015A
11	Sulphate as SO4	mg/l	BDL	200	400	1	IS 3025 (Part 24) Cl 4.0- Turbidity Method
12	Total Hardness as CaCO3	mg/l	184	200	600	1	IS 3025 (Part 21)
13	Zinc as Zn	mg/l	0.033	5.0	15	0.001	USEPA 3015A
14	Cadmium as Cd	mg/l	BDL	0.003	No relaxation	0.001	USEPA 3015A
15	Lead as Pb	mg/l	BDL	0.01	No relaxation	0.001	USEPA 3015A

Umesh Kumar
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ULR No. : TC118182400000119 9F						Test Report No. : NWAL090224NA018	
Type of Sample : Water- Drinking Water							
16	Nickel as Ni	mg/l	BDL	0.02	No relaxation	0.001	USEPA 3015A
17	Arsenic as As	mg/l	0.002	0.01	No relaxation	0.001	USEPA 3015A
18	Chromium as Cr	mg/l	BDL	0.05	No relaxation	0.001	USEPA 3015A
19	Uranium as U	mg/l	0.002	0.03	No relaxation	0.001	USEPA 3015A
20	Potassium as K	mg/l	1.2	-	-	1	IS 3025 (Part 45)
21	Sodium as Na	mg/l	21	-	-	1	IS 3025 (Part 45)

Remarks : Latitude=32.091812N; Longitude=75.671901E

OTHER INFORMATION

Abbreviation : ULR: Unique Lab Report, BDL: Below Detection Level, NA: Not Applicable

Terms & Conditions : Please refer terms and conditions on backside of Test Report (Page-1)

End of Report

Umesh Kumar
Authorized Signatory-Chemical

Eco Paryavaran Laboratories & Consultants Pvt. Ltd
(Formerly known as Eco Laboratories & Consultants Pvt. Ltd.)

TEST REPORT

ULR No. : NA		Test Report No. :	NWAL090224NA018/A
Type of Sample : Water- Drinking Water			
Customer Name	Executive Engineer	Work Order No. & Date	EE/JSV/IND/WATERSAMPLE/2023-24-SPL-01 Dt.: 07/02/2024
Address	JSV Division, Indora, Distt. Kangra (HP)	Customer reference No. (If any)	NA
		Date of Sampling	08/02/2024
Sampling Protocol	IS 17614 (Part 1), EL-MSP-7.3	Date of Sample Receipt	09/02/2024
Sample Collection Mode	Sampling by laboratory	Period of Analysis	09/02/2024 To 14/02/2024
Testing Location	Permanent Facility	Date of Reporting	14/02/2024
Sampling Location	Borewell (LWSS- Vill. Majwan)		
Sample Description	Clear, colourless liquid.		
Standard/Specification	IS 10500 : 2012		
Packing, Markings, Seal & Qty.	2 litre Plastic Bottle Marked D/08/11		

RESULTS

I. Chemical Testing

1. Water (Drinking Water)

S.No.	Test Parameter	Unit	Result	Acceptable Limit	Permissible Limit in Absence of Alternate Source	Detection Limit	Test Method
1	Conductivity	µmho/cm	435	-	-	1	IS 3025 (Part 14)
2	Bicarbonate as HCO3	mg/l	216	-	-	1	IS:3025 (Part-23)
3	Carbonate as CO3	mg/l	BDL	-	-	1	IS:3025 (Part-23)
4	Silica as SiO2	mg/l	BDL	-	-	1	APHA23rd Ed 4500D-Hetropoly Blue Method

Remarks : Latitude=32.091812N; Longitude=75.671901E
This test report is the part of Test Report No.NWAL090224NA018

OTHER INFORMATION

Abbreviation : ULR: Unique Lab Report, BDL: Below Detection Level, NA: Not Applicable

Terms & Conditions : Please refer terms and conditions on backside of Test Report (Page-1)

End of Report

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Eco Paryavaran Laboratories & Consultants Pvt. Ltd.

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TEST REPORT

ULR No. : TC118182400000120OF		Test Report No. : NWAL000224NA019	
Type of Sample : Water- Drinking Water			
Customer Name	Executive Engineer	Work Order No. & Date	EE/ISV/IND/WATERSAMPLE/2023-24-SPL-01 Dt.: 07/02/2024
Address	JSV Division, Indora, Distt. Kangra (HP)	Customer reference No. (If any)	NA
		Date of Sampling	08/02/2024
Sampling Protocol	IS 17614 (Part 1), EL-MSP-7.3	Date of Sample Receipt	09/02/2024
Sample Collection Mode	Sampling by laboratory	Period of Analysis	09/02/2024 To 14/02/2024
Testing Location	Permanent Facility	Date of Reporting	14/02/2024
Sampling Location	Borewell [LWSS- Vill. Ghandran]		
Sample Description	Clear, colourless liquid.		
Standard/Specification	IS 10500 : 2012		
Packing, Markings, Seal & Qty.	2 litre Plastic Bottle Marked D/08/12		

RESULTS

I. Chemical Testing

1. Water (Drinking Water)

S.No.	Test Parameter	Unit	Result	Acceptable Limit	Permissible Limit in Absence of Alternate Source	Detection Limit	Test Method
1	pH @ 25 °C	-	7.71	6.5-8.5	No relaxation	0.5	IS 3025 (Part 11)
2	Calcium as Ca	mg/l	21	75	200	1	IS 3025 (Part 40)
3	Chloride as Cl	mg/l	7.0	250	1000	1	IS 3025 (Part 32)
4	Copper as Cu	mg/l	BDL	0.05	1.5	0.001	USEPA 3015A
5	Fluoride as F	mg/l	BDL	1.0	1.5	0.1	IS 3025 (Part 60)
6	Iron as Fe	mg/l	BDL	1.0	No relaxation	0.001	USEPA 3015A
7	Magnesium as Mg	mg/l	26	30	100	1	IS 3025 (Part 46)
8	Manganese as Mn	mg/l	BDL	0.1	0.3	0.001	USEPA 3015A
9	Nitrate as NO3	mg/l	5.1	45	No relaxation	1	APHA 23rd Ed 4500 B UV Screening Method
10	Selenium as Se	mg/l	BDL	0.01	No relaxation	0.001	USEPA 3015A
11	Sulphate as SO4	mg/l	1.4	200	400	1	IS 3025 (Part 24) Cl 4.0-Turbidity Method
12	Total Hardness as CaCO3	mg/l	160	200	600	1	IS 3025 (Part 21)
13	Zinc as Zn	mg/l	0.027	5.0	15	0.001	USEPA 3015A
14	Cadmium as Cd	mg/l	BDL	0.003	No relaxation	0.001	USEPA 3015A
15	Lead as Pb	mg/l	BDL	0.01	No relaxation	0.001	USEPA 3015A

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ULR No. : TC118182400000120OF						Test Report No. : NWAL090224NA019	
Type of Sample : Water- Drinking Water							
16	Nickel as Ni	mg/l	BDL	0.02	No relaxation	0.001	USEPA 3015A
17	Arsenic as As	mg/l	0.002	0.01	No relaxation	0.001	USEPA 3015A
18	Chromium as Cr	mg/l	BDL	0.05	No relaxation	0.001	USEPA 3015A
19	Uranium as U	mg/l	0.002	0.03	No relaxation	0.001	USEPA 3015A
20	Potassium as K	mg/l	1.1	-	-	1	IS 3025 (Part 45)
21	Sodium as Na	mg/l	21	-	-	1	IS 3025 (Part 45)

Remarks : Latitude=32.095787N; Longitude=75.678957E

OTHER INFORMATION

Abbreviation : ULR: Unique Lab Report, BDL: Below Detection Level, NA: Not Applicable

Terms & Conditions : Please refer terms and conditions on backside of Test Report (Page-1)

End of Report

Umesh Kumar
Authorized Signatory-Chemical

1030

-83-171-

Eco Paryavaran Laboratories & Consultants Pvt. Ltd.
(Formerly known as Eco Laboratories & Consultants Pvt. Ltd.)

TEST REPORT

ULR No. : NA		Test Report No. :	NWAL090224NA019/A
Type of Sample : Water- Drinking Water			
Customer Name	Executive Engineer	Work Order No. & Date	EE/JSV/IND/WATERSAMPLE/2023-24-SPL-01 Dt.: 07/02/2024
Address	JSV Division, Indora, Distt. Kangra (HP)	Customer reference No. (If any)	NA
		Date of Sampling	08/02/2024
Sampling Protocol	IS 17614 (Part 1), EL-MSP-7.3	Date of Sample Receipt	09/02/2024
Sample Collection Mode	Sampling by laboratory	Period of Analysis	09/02/2024 To 14/02/2024
Testing Location	Permanent Facility	Date of Reporting	14/02/2024
Sampling Location	Borewell (LWSS- Vill. Ghandrain)		
Sample Description	Clear, colourless liquid.		
Standard/Specification	IS 10500 : 2012		
Packing, Markings, Seal & Qty.	2 litre Plastic Bottle Marked D/08/12		

RESULTS

I. Chemical Testing

1. Water (Drinking Water)

S.No.	Test Parameter	Unit	Result	Acceptable Limit	Permissible Limit In Absence of Alternate Source	Detection Limit	Test Method
1	Conductivity	µmho/cm	429	-	-	1	IS 3025 (Part 14)
2	Bicarbonate as HCO3	mg/l	188	-	-	1	IS:3025 (Part-23)
3	Carbonate as CO3	mg/l	BDL	-	-	1	IS:3025 (Part-23)
4	Silica as SiO2	mg/l	BDL	-	-	1	APHA23rd Ed 4500D-Hetropoly Blue Method

Remarks : Latitude=32.095787N; Longitude=75.678957E

This test report is the part of Test Report No.NWAL090224NA019

OTHER INFORMATION

Abbreviation : ULR: Unique Lab Report, BDL: Below Detection Level, NA: Not Applicable

Terms & Conditions : Please refer terms and conditions on backside of Test Report (Page-1)

End of Report

Umesh Kumar
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84 - 172

Eco Paryavaran Laboratories & Consultants Pvt. Ltd
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TEST REPORT

ULR No. :	TC118182400000120IF	Test Report No. :	NW/AL090224NA020
Type of Sample :	Water- Drinking Water		
Customer Name	Executive Engineer	Work Order No. & Date	EE/JSV/IND/WATERSAMPLE/2023-24-SPL-01 Dt.: 07/02/2024
Address	JSV Division, Indora, Distt. Kangra (HP)	Customer reference No. (If any)	NA
		Date of Sampling	08/02/2024
Sampling Protocol	IS 17614 (Part 1), EL-MSP-7.3	Date of Sample Receipt	09/02/2024
Sample Collection Mode	Sampling by laboratory	Period of Analysis	09/02/2024 To 14/02/2024
Testing Location	Permanent Facility	Date of Reporting	14/02/2024
Sampling Location	Borewell (New LWSS- Vill. Malkana)		
Sample Description	Clear, colourless liquid.		
Standard/Specification	IS 10500 : 2012		
Packing, Markings, Seal & Qty.	2 litre Plastic Bottle Marked 0/08/13		

RESULTS

I. Chemical Testing

1. Water (Drinking Water)

S.No.	Test Parameter	Unit	Result	Acceptable Limit	Permissible Limit in Absence of Alternate Source	Detection Limit	Test Method
1	pH @ 25 °C		7.83	6.5-8.5	No relaxation	0.5	IS 3025 (Part 11)
2	Calcium as Ca	mg/l	35	75	200	1	IS 3025 (Part 40)
3	Chloride as Cl	mg/l	13	250	1000	1	IS 3025 (Part 32)
4	Copper as Cu	mg/l	BDL	0.05	1.5	0.001	USEPA 3015A
5	Fluoride as F	mg/l	0.60	1.0	1.5	0.1	IS 3025 (Part 60)
6	Iron as Fe	mg/l	BDL	1.0	No relaxation	0.001	USEPA 3015A
7	Magnesium as Mg	mg/l	7.9	30	100	1	IS 3025 (Part 46)
8	Manganese as Mn	mg/l	BDL	0.1	0.3	0.001	USEPA 3015A
9	Nitrate as NO3	mg/l	1.1	45	No relaxation	1	APHA 23rd Ed 4500 B IIIe Screening Method
10	Selenium as Se	mg/l	BDL	0.01	No relaxation	0.001	USEPA 3015A
11	Sulphate as SO4	mg/l	5.7	200	400	1	IS 3025 (Part 24) Cl 4.0 Turbidity Method
12	Total Hardness as CaCO3	mg/l	120	200	600	1	IS 3025 (Part 21)
13	Zinc as Zn	mg/l	0.015	5.0	15	0.001	USEPA 3015A
14	Cadmium as Cd	mg/l	BDL	0.003	No relaxation	0.001	USEPA 3015A
15	Lead as Pb	mg/l	BDL	0.01	No relaxation	0.001	USEPA 3015A

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ULR No. : TC118182400000120IF					Test Report No. : NWAL090224NA020		
Type of Sample : Water- Drinking Water							
16	Nickel as Ni	mg/l	BDL	0.02	No relaxation	0.001	USEPA 3015A
17	Arsenic as As	mg/l	0.002	0.01	No relaxation	0.001	USEPA 3015A
18	Chromium as Cr	mg/l	BDL	0.05	No relaxation	0.001	USEPA 3015A
19	Uranium as U	mg/l	BDL	0.03	No relaxation	0.001	USEPA 3015A
20	Potassium as K	mg/l	1.4	-	-	1	IS 3025 (Part 45)
21	Sodium as Na	mg/l	7.3	-	-	1	IS 3025 (Part 45)

Remarks : Latitude=32.087872N; Longitude=75.705565E

OTHER INFORMATION

Abbreviation : ULR: Unique Lab Report, BDL: Below Detection Level, NA: Not Applicable

Terms & Conditions : Please refer terms and conditions on backside of Test Report (Page-1)

End of Report

Umesh Kumar
Authorized Signatory-Chemical

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TEST REPORT

ULR No. : NA		Test Report No. :	NWAL090224NA0010/A
Type of Sample : Water- Drinking Water			
Customer Name	Executive Engineer	Work Order No. & Date	EE/JSV/IND/WATERSAMPLE/2023-24/SPL-01 Dt.: 07/02/2024
Address	JSV Division, Indora, Distt. Kangra (HP)	Customer reference No. (If any)	NA
		Date of Sampling	08/02/2024
Sampling Protocol	IS 17614 (Part 1), EL-MSP-7.3	Date of Sample Receipt	09/02/2024
Sample Collection Mode	Sampling by laboratory	Period of Analysis	09/02/2024 To 14/02/2024
Testing Location	Permanent Facility	Date of Reporting	14/02/2024
Sampling Location	Borewell (New LWSS- Vill. Malkana)		
Sample Description	Clear, colourless liquid.		
Standard/Specification	IS 10500 : 2012		
Packing, Markings, Seal & Qty.	2 litre Plastic Bottle Marked 0/08/13		

RESULTS

I. Chemical Testing

1. Water (Drinking Water)

S.No.	Test Parameter	Unit	Result	Acceptable Limit	Permissible Limit in Absence of Alternate Source	Detection Limit	Test Method
1	Conductivity	µmho/cm	332	-	-	1	IS 3025 (Part 14)
2	Bicarbonate as HCO3	mg/l	108	-	-	1	IS:3025 (Part-23)
3	Carbonate as CO3	mg/l	BDL	-	-	1	IS:3025 (Part-23)
4	Silica as SiO2	mg/l	BDL	-	-	1	APHA23rd Ed 4500D-Hetropoly Blue Method

Remarks : Latitude=32.087872N, Longitude=75.705565E

This test report is the part of Test Report No.NWA1090224NA0010

OTHER INFORMATION

Abbreviation : ULR: Unique Lab Report, BDL: Below Detection Level, NA: Not Applicable

Terms & Conditions : Please refer terms and conditions on backside of Test Report (Page-1)

End of Report

Umesh Kumar
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Eco Paryavaran Laboratories & Consultants Pvt. Ltd.
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TEST REPORT

ULR No. : TC118182400000120 2F		Test Report No. : NWAL090224NA021	
Type of Sample : Water- Drinking Water			
Customer Name	Executive Engineer	Work Order No. & Date	EE/JSV/IND/WATERSAMPLE/2023-24-SPL-01 Dt.: 07/02/2024
Address	JSV Division, Indora, Distt. Kangra (HP)	Customer reference No. (If any)	NA
		Date of Sampling	08/02/2024
Sampling Protocol	IS 17614 (Part 1), EL-MSP-7.3	Date of Sample Receipt	09/02/2024
Sample Collection Mode	Sampling by laboratory	Period of Analysis	09/02/2024 To 14/02/2024
Testing Location	Permanent Facility	Date of Reporting	14/02/2024
Sampling Location	Hand Pump (Govt Sr Sec School- Vill. Parail)		
Sample Description	liquid with settleable particles		
Standard/Specification	IS 10500 : 2012		
Packing, Markings, Seal & Qty.	2 litre Plastic Bottle Marked D/08/14		

RESULTS

I. Chemical Testing

1. Water (Drinking Water)

S.No.	Test Parameter	Unit	Result	Acceptable Limit	Permissible Limit in Absence of Alternate Source	Detection Limit	Test Method
1	pH @ 25 °C	-	7.86	6.5-8.5	No relaxation	0.5	IS 3025 (Part 11)
2	Calcium as Ca	mg/l	34	75	200	1	IS 3025 (Part 40)
3	Chloride as Cl	mg/l	11	250	1000	1	IS 3025 (Part 32)
4	Copper as Cu	mg/l	BDL	0.05	1.5	0.001	USEPA 3015A
5	Fluoride as F	mg/l	0.58	1.0	1.5	0.1	IS 3025 (Part 60)
6	Iron as Fe	mg/l	0.055	1.0	No relaxation	0.001	USEPA 3015A
7	Magnesium as Mg	mg/l	6.6	30	100	1	IS 3025 (Part 46)
8	Manganese as Mn	mg/l	0.016	0.1	0.3	0.001	USEPA 3015A
9	Nitrate as NO3	mg/l	BDL	45	No relaxation	1	APHA 23rd Ed 4500 B UV Screening Method
10	Selenium as Se	mg/l	BDL	0.01	No relaxation	0.001	USEPA 3015A
11	Sulphate as SO4	mg/l	4.3	200	400	1	IS 3025 (Part 24) Cl 4.0 Turbidity Method
12	Total Hardness as CaCO3	mg/l	112	200	600	1	IS 3025 (Part 21)
13	Zinc as Zn	mg/l	0.033	5.0	15	0.001	USEPA 3015A
14	Cadmium as Cd	mg/l	BDL	0.003	No relaxation	0.001	USEPA 3015A
15	Lead as Pb	mg/l	BDL	0.01	No relaxation	0.001	USEPA 3015A

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ULR No. : TC118182400000120 2F						Test Report No. : NWALD90224NA021	
Type of Sample : Water- Drinking Water							
16	Nickel as Ni	mg/l	BDL	0.02	No relaxation	0.001	USEPA 3015A
17	Arsenic as As	mg/l	BDL	0.01	No relaxation	0.001	USEPA 3015A
18	Chromium as Cr	mg/l	BDL	0.05	No relaxation	0.001	USEPA 3015A
19	Uranium as U	mg/l	BDL	0.03	No relaxation	0.001	USEPA 3015A
20	Potassium as K	mg/l	2.0	-	-	1	IS 3025 (Part 45)
21	Sodium as Na	mg/l	7.6	-	-	1	IS 3025 (Part 45)

Remarks : Latitude=32.087872N; Longitude=75.705565E

OTHER INFORMATION

Abbreviation : ULR: Unique Lab Report, BDL: Below Detection Level, NA: Not Applicable

Terms & Conditions : Please refer terms and conditions on backside of Test Report (Page-1)

End of Report

Umesh Kumar
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1036

-89-197-

TEST REPORT

ULR No. : NA		Test Report No. :	NWAL090224NA021/A
Type of Sample : Water- Drinking Water			
Customer Name	Executive Engineer	Work Order No. & Date	EE/ISV/IND/WATERSAMPLE/2023-24-SPL-01 Dt.: 07/02/2024
Address	ISV Division, Indora, Distt. Kangra (HP)	Customer reference No. (If any)	NA
		Date of Sampling	08/02/2024
Sampling Protocol	IS 17614 (Part 1), EL-MSP-7.3	Date of Sample Receipt	09/02/2024
Sample Collection Mode	Sampling by laboratory	Period of Analysis	09/02/2024 To 14/02/2024
Testing Location	Permanent Facility	Date of Reporting	14/02/2024
Sampling Location	Hand Pump (Govt.Sr.Sec School- Vill. Paral)		
Sample Description	liquid with settleable particles		
Standard/Specification	IS 10500 : 2012		
Packing, Markings, Seal & Qty.	2 litre Plastic Bottle Marked D/08/14		

RESULTS

I. Chemical Testing

1. Water (Drinking Water)

S.No.	Test Parameter	Unit	Result	Acceptable Limit	Permissible Limit in Absence of Alternate Source	Detection Limit	Test Method
1	Conductivity	µmho/cm	274	-	-	1	IS 3025 (Part 14)
2	Bicarbonate as HCO3	mg/l	100	-	-	1	IS:3025 (Part-23)
3	Carbonate as CO3	mg/l	BDL	-	-	1	IS:3025 (Part-23)
4	Silica as SiO2	mg/l	BDL	-	-	1	APHA23rd Ed 4500D-Heteropoly Blue Method

Remarks : Latitude=32.087872N; Longitude=75.705565E

This test report is the part of Test Report No.NWAL090224NA021

OTHER INFORMATION

Abbreviation : ULR: Unique Lab Report, BDL: Below Detection Level, NA: Not Applicable

Terms & Conditions : Please refer terms and conditions on backside of Test Report (Page-1)

End of Report

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TEST REPORT

ULR No. :	TC118182400000120 3F	Test Report No. :	NVAL090224NA022
Type of Sample :	Water- Drinking Water		
Customer Name	Executive Engineer	Work Order No. & Date	EE/ISV/IND/WATERSAMPLE/20 3-24 SPL-01 Dt. 07/02/2024
Address	ISV Division, Indora, Distt. Kangra (HP)	Customer reference No. (If any)	NA
		Date of Sampling	08/02/2024
Sampling Protocol	IS 17614 (Part 1), EL-MSP-2.3	Date of Sample Receipt	09/02/2024
Sample Collection Mode	Sampling by laboratory	Period of Analysis	09/02/2024 To 14/02/2024
Testing Location	Permanent Facility	Date of Reporting	14/02/2024
Sampling Location	Borewell (LWSS- Vill. Parali)		
Sample Description	Clear, colourless liquid.		
Standard/Specification	IS 10500 : 2012		
Packing, Markings, Seal & Qty.	2 litre Plastic Bottle Marked D/08/15		

RESULTS

I. Chemical Testing

1. Water (Drinking Water)

S.No.	Test Parameter	Unit	Result	Acceptable Limit	Permissible Limit in Absence of Alternate Source	Detection Limit	Test Method
1	pH @ 25 °C	-	7.8	6.5-8.5	No relaxation	0.5	IS 3025 (Part 11)
2	Calcium as Ca	mg/l	34	75	200	1	IS 3025 (Part 40)
3	Chloride as Cl	mg/l	12	250	1000	1	IS 3025 (Part 32)
4	Copper as Cu	mg/l	BDL	0.05	1.5	0.001	USEPA 3015A
5	Fluoride as F	mg/l	0.89	1.0	1.5	0.1	IS 3025 (Part 60)
6	Iron as Fe	mg/l	0.006	1.0	No relaxation	0.001	USEPA 3015A
7	Magnesium as Mg	mg/l	6.6	30	100	1	IS 3025 (Part 46)
8	Manganese as Mn	mg/l	BDL	0.1	0.3	0.001	USEPA 3015A
9	Nitrate as NO3	mg/l	1.9	45	No relaxation	1	APHA 23rd Ed 4500 B UV Screening Method
10	Selenium as Se	mg/l	BDL	0.01	No relaxation	0.001	USEPA 3015A
11	Sulphate as SO4	mg/l	5.7	200	400	1	IS 3025 (Part 24) Cl 4.1 Turbidity Method
12	Total Hardness as CaCO3	mg/l	112	200	600	1	IS 3025 (Part 21)
13	Zinc as Zn	mg/l	0.016	5.0	15	0.001	USEPA 3015A
14	Cadmium as Cd	mg/l	BDL	0.003	No relaxation	0.001	USEPA 3015A
15	Lead as Pb	mg/l	BDL	0.01	No relaxation	0.001	USEPA 3015A

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ULR No. : TC118182400000120 3E						Test Report No. : NWAL090224NA022	
Type of Sample : Water- Drinking Water							
16	Nickel as Ni	mg/l	BDL	0.02	No relaxation	0.001	USEPA 3015A
17	Arsenic as As	mg/l	0.002	0.01	No relaxation	0.001	USEPA 3015A
18	Chromium as Cr	mg/l	BDL	0.05	No relaxation	0.001	USEPA 3015A
19	Uranium as U	mg/l	BDL	0.03	No relaxation	0.001	USEPA 3015A
20	Potassium as K	mg/l	2.1	-	-	1	IS 3025 (Part 45)
21	Sodium as Na	mg/l	7.9	-	-	1	IS 3025 (Part 45)

Remarks : Latitude=32.087872N; Longitude=75.705565E

OTHER INFORMATION

Abbreviation : ULR: Unique Lab Report, BDL: Below Detection Level, NA: Not Applicable

Terms & Conditions : Please refer terms and conditions on backside of Test Report (Page-1)

End of Report

Umesh Kumar
Authorized Signatory-Chemical

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TEST REPORT

ULR No. : NA		Test Report No. :	NWAL090224NA022/A
Type of Sample : Water-Drinking Water			
Customer Name	Executive Engineer	Work Order No. & Date	EE/JSV/IND/WATERSAMPLE/2023-24/SPL-01 Dt.: 07/02/2024
Address	JSV Division, Indora, Distt. Kangra (HP)	Customer reference No. (If any)	NA
		Date of Sampling	08/02/2024
Sampling Protocol	IS 17614 (Part 1), EL-MSP-7.3	Date of Sample Receipt	09/02/2024
Sample Collection Mode	Sampling by laboratory	Period of Analysis	09/02/2024 to 14/02/2024
Testing Location	Permanent Facility	Date of Reporting	14/02/2024
Sampling Location	Borewell (LWSS- Vill. Paral)		
Sample Description	Clear, colourless liquid.		
Standard/Specification	IS 10500 : 2012		
Packing, Markings, Seal & Qty.	2 litre Plastic Bottle Marked D/08/15		

RESULTS

I. Chemical Testing

1. Water (Drinking Water)

S No.	Test Parameter	Unit	Result	Acceptable Limit	Permissible Limit in Absence of Alternate Source	Detection Limit	Test Method
1	Conductivity	µmho/cm	214	-	-	1	IS 3025 (Part 14)
2	Bicarbonate as HCO3	mg/l	100	-	-	1	IS:3025 (Part-23)
3	Carbonate as CO3	mg/l	BDL	-	-	1	IS:3025 (Part-23)
4	Silica as SiO2	mg/l	BDL	-	-	1	APHA23rd Ed 4500D-Heteropoly Blue Method

Remarks : Latitude=32.087872N; Longitude=75.705565E

This test report is the part of Test Report No.NWAL090224NA022

OTHER INFORMATION

Abbreviation : ULR: Unique Lab Report, BDL: Below Detection Level, NA: Not Applicable

Terms & Conditions : Please refer terms and conditions on backside of Test Report (Page-1)

End of Report

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TEST REPORT

ULR No. : TC118182400000001204F		Test Report No. :	NWAL090224NA023
Type of Sample : Water - Drinking Water			
Customer Name	Executive Engineer	Work Order No. & Date	EE/JSV/IND/WATERSA/MP(E)/202 3-24-SPL-01 Dt.: 07/02/2024
Address	JSV Division, Indora, Distt. Kangra (HP)	Customer reference No. (If any)	NA
		Date of Sampling	08/02/2024
Sampling Protocol	IS 17614 (Part 1), EL-MSP-7.3	Date of Sample Receipt	09/02/2024
Sample Collection Mode	Sampling by laboratory	Period of Analysis	09/02/2024 To 14/02/2024
Testing Location	Permanent Facility	Date of Reporting	14/02/2024
Sampling Location	Borewell (LWSS- Vill. Barota)		
Sample Description	Clear, colourless liquid.		
Standard/Specification	IS 10500 : 2012		
Packing, Markings, Seal & Qty.	2 litre Plastic Bottle Marked D/08/16		

RESULTS

I. Chemical Testing

1. Water (Drinking Water)

S.No.	Test Parameter	Unit	Result	Acceptable Limit	Permissible Limit in Absence of Alternate Source	Detection Limit	Test Method
1	pH @ 25 °C	-	7.50	6.5-8.5	No relaxation	0.5	IS 3025 (Part 11)
2	Calcium as Ca	mg/l	61	75	200	1	IS 3025 (Part 40)
3	Chloride as Cl	mg/l	16	250	1000	1	IS 3025 (Part 32)
4	Copper as Cu	mg/l	BDL	0.05	1.5	0.001	USEPA 3015A
5	Fluoride as F	mg/l	0.82	1.0	1.5	0.1	IS 3025 (Part 60)
6	Iron as Fe	mg/l	0.002	1.0	No relaxation	0.001	USEPA 3015A
7	Magnesium as Mg	mg/l	17	30	100	1	IS 3025 (Part 46)
8	Manganese as Mn	mg/l	BDL	0.1	0.3	0.001	USEPA 3015A
9	Nitrate as NO3	mg/l	15	45	No relaxation	1	APHA 23rd Ed 4500 B UV Screening Method
10	Selenium as Se	mg/l	BDL	0.01	No relaxation	0.001	USEPA 3015A
11	Sulphate as SO4	mg/l	BDL	200	400	1	IS 3025 (Part 24) Cl 4.0 Turbidity Method
12	Total Hardness as CaCO3	mg/l	220	200	600	1	IS 3025 (Part 21)
13	Zinc as Zn	mg/l	0.015	5.0	15	0.001	USEPA 3015A
14	Cadmium as Cd	mg/l	BDL	0.003	No relaxation	0.001	USEPA 3015A
15	Lead as Pb	mg/l	BDL	0.01	No relaxation	0.001	USEPA 3015A

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ULR No. : TC118182400001204f					Test Report No. : NWAL090224NA023		
Type of Sample : Water- Drinking Water							
16	Nickel as Ni	mg/l	BDL	0.02	No relaxation	0.001	USEPA 3015A
17	Arsenic as As	mg/l	BDL	0.01	No relaxation	0.001	USEPA 3015A
18	Chromium as Cr	mg/l	BDL	0.05	No relaxation	0.001	USEPA 3015A
19	Uranium as U	mg/l	0.01	0.03	No relaxation	0.001	USEPA 3015A
20	Potassium as K	mg/l	2.2	-	-	1	IS 3025 (Part 45)
21	Sodium as Na	mg/l	10	-	-	1	IS 3025 (Part 45)

Remarks : Latitude=32.036355N; Longitude=75.724865E

OTHER INFORMATION

Abbreviation : ULR: Unique Lab Report, BDL: Below Detection Level, NA: Not Applicable

Terms & Conditions : Please refer terms and conditions on backside of Test Report (Page-1)

End of Report

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1042

-95-183-

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TEST REPORT

ULR No. : NA		Test Report No. :	NWAL090224NA023/A
Type of Sample : Water - Drinking Water			
Customer Name	Executive Engineer	Work Order No. & Date	EE/SV/PHD/WATERSAMPLE/23-24/SPL-01 Dt.: 07/02/2024
Address	ISV Division, Indora, Distt. Kangra (HP)	Customer reference No. (if any)	NA
		Date of Sampling	08/02/2024
Sampling Protocol	IS 17614 (Part 1), EL-MSP-7.3	Date of Sample Receipt	09/02/2024
Sample Collection Mode	Sampling by laboratory	Period of Analysis	09/02/2024 To 14/02/2024
Testing Location	Permanent Facility	Date of Reporting	14/02/2024
Sampling Location	Borewell (LWSS- Vill. Barota)		
Sample Description	Clear, colourless liquid		
Standard/Specification	IS 10500 : 2012		
Packing, Markings, Seal & Qty.	2 litre Plastic Bottle Marked D/08/16		

RESULTS

I. Chemical Testing

1. Water (Drinking Water)

S.No.	Test Parameter	Unit	Result	Acceptable Limit	Permissible Limit in Absence of Alternate Source	Detection Limit	Test Method
1	Conductivity	µmho/cm	429	-	-	1	IS 3025 (Part 14)
2	Bicarbonate as HCO3	mg/l	228	-	-	1	IS:3025 (Part-23)
3	Carbonate as CO3	mg/l	BDL	-	-	1	IS:3025 (Part-23)
4	Silica as SiO2	mg/l	BDL	-	-	1	APHA23rd Ed 4500D-Heteropoly Blue Method

Remarks : Latitude=32.036355N, Longitude=75.724865E

This test report is the part of Test Report No.NWAL090224NA023

OTHER INFORMATION

Abbreviation : ULR: Unique Lab Report, BDL: Below Detection Level, NA: Not Applicable

Terms & Conditions : Please refer terms and conditions on backside of Test Report (Page-1)

End of Report

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Water-EL/MSP-7.3/F-W

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TEST REPORT

ULR No.: TC1181824000001205F		Test Report No.: NWAL090224NA024	
Type of Sample : Water- Drinking Water			
Customer Name	Executive Engineer	Work Order No. & Date	EE/JSV/IND/WATERSAMPLE/2023-24-SPL 01 01.: 07/02/2024
Address	JSV Division, Indora, Distt. Kangra (HP)	Customer reference No. (If any)	NA
		Date of Sampling	08/02/2024
Sampling Protocol	IS 17614 (Part 1), EL-MSP-7.3	Date of Sample Receipt	09/02/2024
Sample Collection Mode	Sampling by laboratory	Period of Analysis	09/02/2024 To 14/02/2024
Testing Location	Permanent Facility	Date of Reporting	14/02/2024
Sampling Location	Borewell (LWSS- Vill. Basantpur)		
Sample Description	Clear, colourless liquid		
Standard/Specification	IS 10500 : 2012		
Packing, Markings, Seal & Qty.	2 litre Plastic Bottle Marked 0/08/17		

RESULTS

I. Chemical Testing

1. Water (Drinking Water)

S.No.	Test Parameter	Unit	Result	Acceptable Limit	Permissible Limit in Absence of Alternate Source	Detection Limit	Test Method
1	pH @ 25 °C	-	7.85	6.5-8.5	No relaxation	0.5	IS 3025 (Part 11)
2	Calcium as Ca	mg/l	40	75	200	1	IS 3025 (Part 40)
3	Chloride as Cl	mg/l	14	250	1000	1	IS 3025 (Part 32)
4	Copper as Cu	mg/l	BDL	0.05	1.5	0.001	USEPA 3015A
5	Fluoride as F	mg/l	0.47	1.0	1.5	0.1	IS 3025 (Part 60)
6	Iron as Fe	mg/l	0.005	1.0	No relaxation	0.001	USEPA 3015A
7	Magnesium as Mg	mg/l	11	30	100	1	IS 3025 (Part 46)
8	Manganese as Mn	mg/l	0.003	0.1	0.3	0.001	USEPA 3015A
9	Nitrate as NO3	mg/l	1.1	45	No relaxation	1	APHA 23rd Ed 4500 B UV Screening Method
10	Selenium as Se	mg/l	BDL	0.01	No relaxation	0.001	USEPA 3015A
11	Sulphate as SO4	mg/l	6.2	200	400	1	IS 3025 (Part 24) Cl 4.0 Turbidity Method
12	Total Hardness as CaCO3	mg/l	144	200	600	1	IS 3025 (Part 21)
13	Zinc as Zn	mg/l	0.02	5.0	15	0.001	USEPA 3015A
14	Cadmium as Cd	mg/l	BDL	0.003	No relaxation	0.001	USEPA 3015A
15	Lead as Pb	mg/l	BDL	0.01	No relaxation	0.001	USEPA 3015A

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ULR No. : TC118182400000120SF					Test Report No. : NWAL090224NA024		
Type of Sample : Water- Drinking Water							
16	Nickel as Ni	mg/l	BDL	0.02	No relaxation	0.001	USEPA 3015A
17	Arsenic as As	mg/l	0.003	0.01	No relaxation	0.001	USEPA 3015A
18	Chromium as Cr	mg/l	BDL	0.05	No relaxation	0.001	USEPA 3015A
19	Uranium as U	mg/l	0.003	0.03	No relaxation	0.001	USEPA 3015A
20	Potassium as K	mg/l	1.6	-	-	1	IS 3025 (Part 45)
21	Sodium as Na	mg/l	12	-	-	1	IS 3025 (Part 45)

Remarks : Latitude=32.061918N; Longitude=75.685147E

OTHER INFORMATION

Abbreviation : ULR: Unique Lab Report, BDL: Below Detection Level, NA: Not Applicable

Terms & Conditions : Please refer terms and conditions on backside of Test Report (Page-1)

End of Report

Umesh Kumar
Authorized Signatory-Chemical

Eco Parya-varan Laboratories & Consultants Pvt. Ltd.
(Formerly known as Eco Laboratories & Consultants Pvt. Ltd.)

TEST REPORT

ULR No.: NA		Test Report No.:	NWA1090/24NAC24/A
Type of Sample : Water- Drinking Water			
Customer Name	Executive Engineer	Work Order No. & Date	EE/JSV/IND/WATERSAMPLE/2023-24-SPL-01 DL: 07/02/2024
Address	JSV Division, Indora, Distt. Kangra (HP)	Customer reference No. (If any)	NA
		Date of Sampling	08/02/2024
Sampling Protocol	IS 17614 (Part 1), EL-MSP-7.3	Date of Sample Receipt	09/02/2024
Sample Collection Mode	Sampling by laboratory	Period of Analysis	09/02/2024 To 14/02/2024
Testing Location	Permanent Facility	Date of Reporting	14/02/2024
Sampling Location	Borewell (LWSS- Vill. Basantpur)		
Sample Description	Clear, colourless liquid		
Standard/Specification	IS 10500 : 2012		
Packing, Markings, Seal & Qty.	2 litre Plastic Bottle Marked D/08/17		

RESULTS

I. Chemical Testing

1. Water (Drinking Water)

S.No.	Test Parameter	Unit	Result	Acceptable Limit	Permissible Limit In Absence of Alternate Source	Detection Limit	Test Method
1	Conductivity	µmho/cm	315	-	-	1	IS 3025 (Part 14)
2	Bicarbonate as HCO3	mg/l	136	-	-	1	IS:3025 (Part-23)
3	Carbonate as CO3	mg/l	BDL	-	-	1	IS:3025 (Part-23)
4	Silica as SiO2	mg/l	BDL	-	-	1	APHA23rd Ed 4500D-Hetropoly Blue Method

Remarks : Latitude= 32.061918N; Longitude= 75.635147E
This test report is the part of Test Report No.NWA1090/24NAC24/A

OTHER INFORMATION

Abbreviation : ULR: Unique Lab Report, BDL: Below Detection Level, NA: Not Applicable

Terms & Conditions : Please refer terms and conditions on backside of Test Report (Page-1)

End of Report

Umesh Kumar
Authorized Signatory-Chemical

Eco Paryavaran Laboratories & Consultants Pvt. Ltd.
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TEST REPORT

ULR No. :	TL118162400000120IF	Test Report No. :	NVAL000224NA028
Type of Sample :	Water- Drinking Water		
Customer Name	Executive Engineer	Work Order No. & Date	EE/JSV/IND/WATERSAMPLE/2023-24-SPL-01 Dt.: 07/02/2024
Address	JSV Division, Indora, Distt. Kangra (HP)	Customer reference No. (If any)	NA
		Date of Sampling	08/02/2024
Sampling Protocol	IS 17614 (Part 1), EL-MSP-7.3	Date of Sample Receipt	09/02/2024
Sample Collection Mode	Sampling by laboratory	Period of Analysis	09/02/2024 To 14/02/2024
Testing Location	Permanent Facility	Date of Reporting	14/02/2024
Sampling Location	New Borewell (LWSS- Vill. Khanpur)		
Sample Description	Clear, colourless liquid.		
Standard/Specification	IS 10500 : 2012		
Packing, Markings, Seal & Qty.	2 litre Plastic Bottle Marked D/08/21		

RESULTS

I. Chemical Testing

1. Water (Drinking Water)

S.No.	Test Parameter	Unit	Result	Acceptable Limit	Permissible Limit in Absence of Alternate Source	Detection Limit	Test Method
1	pH @ 25 °C	-	7.80	6.5-8.5	No relaxation	0.5	IS 3025 (Part 11)
2	Calcium as Ca	mg/l	38	75	200	1	IS 3025 (Part 40)
3	Chloride as Cl	mg/l	5.0	250	1000	1	IS 3025 (Part 32)
4	Copper as Cu	mg/l	BDL	0.05	1.5	0.001	USEPA 3015A
5	Fluoride as F	mg/l	0.25	1.0	1.5	0.1	IS 3025 (Part 60)
6	Iron as Fe	mg/l	0.007	1.0	No relaxation	0.001	USEPA 3015A
7	Magnesium as Mg	mg/l	13	30	100	1	IS 3025 (Part 46)
8	Manganese as Mn	mg/l	0.003	0.1	0.3	0.001	USEPA 3015A
9	Nitrate as NO3	mg/l	BDL	45	No relaxation	1	APHA 23rd Ed 4500 B UV Screening Method
10	Selenium as Se	mg/l	BDL	0.01	No relaxation	0.001	USEPA 3015A
11	Sulphate as SO4	mg/l	1.1	200	400	1	IS 3025 (Part 24) Cl 4.6 Turbidity Method
12	Total Hardness as CaCO3	mg/l	148	200	600	1	IS 3025 (Part 21)
13	Zinc as Zn	mg/l	0.011	5.0	15	0.001	USEPA 3015A
14	Cadmium as Cd	mg/l	BDL	0.003	No relaxation	0.001	USEPA 3015A
15	Lead as Pb	mg/l	BDL	0.01	No relaxation	0.001	USEPA 3015A

Umesh Kumar
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ULR No. : IC118182400001209F					Test Report No. : NWAL090224NA028		
Type of Sample : Water- Drinking Water							
16	Nickel as Ni	mg/l	BDL	0.02	No relaxation	0.001	USEPA 3015A
17	Arsenic as As	mg/l	0.003	0.01	No relaxation	0.001	USEPA 3015A
18	Chromium as Cr	mg/l	BDL	0.05	No relaxation	0.001	USEPA 3015A
19	Uranium as U	mg/l	0.002	0.03	No relaxation	0.001	USEPA 3015A
20	Potassium as K	mg/l	1.4	-	-	1	IS 3025 (Part 45)
21	Sodium as Na	mg/l	21	-	-	1	IS 3025 (Part 45)

Remarks : Latitude=32.072614N; Longitude=75.6379698

OTHER INFORMATION

Abbreviation : ULR: Unique Lab Report, BDL: Below Detection Level, NA: Not Applicable

Terms & Conditions : Please refer terms and conditions on backside of Test Report (Page-1)

End of Report

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Authorized Signatory-Chemical

Eco Paryavaran Laboratories & Consultants Pvt. Ltd.
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TEST REPORT

ULR No. : NA		Test Report No. :	NWAL090224INA028/A
Type of Sample : Water- Drinking Water			
Customer Name	Executive Engineer	Work Order No. & Date	EE/ISV/IND/WATERSAMPLE/2023-24-SPL-01 Dt.: 07/02/2024
Address	ISV Division, Indora, Distt. Kangra (HP)	Customer reference No. (If any)	NA
		Date of Sampling	08/02/2024
Sampling Protocol	IS 17014 (Part 1), EL-MSP-7.3	Date of Sample Receipt	09/02/2024
Sample Collection Mode	Sampling by laboratory	Period of Analysis	09/02/2024 To 14/02/2024
Testing Location	Permanent Facility	Date of Reporting	14/02/2024
Sampling Location	New Borewell (LWSS- Vill. Khanpur)		
Sample Description	Clear, colourless liquid.		
Standard/Specification	IS 10500 : 2012		
Packing, Markings, Seal & Qty.	2 litre Plastic Bottle Marked Drnk/23		

RESULTS

I. Chemical Testing

1. Water (Drinking Water)

S.No.	Test Parameter	Unit	Result	Acceptable Limit	Permissible Limit in Absence of Alternate Source	Detection Limit	Test Method
1	Conductivity	µmho/cm	330	-	-	1	IS 3025 (Part 14)
2	Bicarbonate as HCO3	mg/l	188	-	-	1	IS:3025 (Part-23)
3	Carbonate as CO3	mg/l	BDL	-	-	1	IS:3025 (Part-23)
4	Silica as SiO2	mg/l	BDL	-	-	1	APHA23rd Ed 4500-Si-Molybdosilicate Blue Method

Remarks : * Latitude=32°07'26.14"N, Longitude= 75.637969E

This test report is the part of Test Report No.NWAL090224INA028

OTHER INFORMATION

Abbreviation : ULR: Unique Lab Report, BDL: Below Detection Level, NA: Not Applicable

Terms & Conditions : Please refer terms and conditions on backside of Test Report (Page-1)

End of Report

Umesh Kumar
Authorized Signatory-Chemical

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Eco Paryavaran Laboratories & Consultants Pvt. Ltd
(Formerly known as Eco Laboratories & Consultants)

TEST REPORT

ULR No. : TC118162A000601210F		Test Report No. :	INVA1090/24NA0125
Type of Sample : Water, Drinking Water			
Customer Name	Executive Engineer	Work Order No. & Date	EE/JSV/IND/WATERSAMPLE/2023-24-SPL-01 Dt.: 07/02/2024
Address	JSV Division, Indora, Distt. Kangra (HP)	Customer reference No. (If any)	NA
		Date of Sampling	08/02/2024
Sampling Protocol	IS 17614 (Part 1), EE-MSP-7.3	Date of Sample Receipt	09/02/2024
Sample Collection Mode	Sampling by laboratory	Period of Analysis	09/02/2024 To 14/02/2024
Testing Location	Permanent Facility	Date of Reporting	14/02/2024
Sampling Location	Borewell (LWSS- Vill. Nidwari)		
Sample Description	Clear, colourless liquid.		
Standard/Specification	IS 10500 : 2012		
Packing, Markings, Seal & Qty.	2 litre Plastic Bottle Marked D/08/22		

RESULTS

I. Chemical Testing

1. Water (Drinking Water)

S.No.	Test Parameter	Unit	Result	Acceptable Limit	Permissible Limit In Absence of Alternate Source	Detection Limit	Test Method
1	pH @ 25 °C	-	7.75	6.5-8.5	No relaxation	0.5	IS 3025 (Part 11)
2	Calcium as Ca	mg/l	20	75	200	1	IS 3025 (Part 40)
3	Chloride as Cl	mg/l	5.0	250	1000	1	IS 3025 (Part 32)
4	Copper as Cu	mg/l	BDL	0.05	1.5	0.001	USEPA 3015A
5	Fluoride as F	mg/l	0.56	1.0	1.5	0.1	IS 3025 (Part 60)
6	Iron as Fe	mg/l	BDL	1.0	No relaxation	0.001	USEPA 3015A
7	Magnesium as Mg	mg/l	25	30	100	1	IS 3025 (Part 46)
8	Manganese as Mn	mg/l	BDL	0.1	0.3	0.001	USEPA 3015A
9	Nitrate as NO3	mg/l	3.6	45	No relaxation	1	APHA 23rd Ed 4500 B IV Screening Method
10	Selenium as Se	mg/l	BDL	0.01	No relaxation	0.001	USEPA 3015A
11	Sulphate as SO4	mg/l	BDL	200	400	1	IS 3025 (Part 24) Cl 4.0 Turbidity Method
12	Total Hardness as CaCO3	mg/l	152	200	600	1	IS 3025 (Part 21)
13	Zinc as Zn	mg/l	0.018	5.0	15	0.001	USEPA 3015A
14	Cadmium as Cd	mg/l	BDL	0.003	No relaxation	0.001	USEPA 3015A
15	Lead as Pb	mg/l	BDL	0.01	No relaxation	0.001	USEPA 3015A

Umesh Kumar
Authorized Signatory Chemical

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ULR No. : TC118183400001210F						Test Report No. : NWALO90234NA029	
Type of Sample : Water- Drinking Water							
16	Nickel as Ni	mg/l	BDL	0.02	No relaxation	0.001	USEPA 3015A
17	Arsenic as As	mg/l	0.003	0.01	No relaxation	0.001	USEPA 3015A
18	Chromium as Cr	mg/l	BDL	0.05	No relaxation	0.001	USEPA 3015A
19	Uranium as U	mg/l	0.002	0.03	No relaxation	0.001	USEPA 3015A
20	Potassium as K	mg/l	1.1	-	-	1	IS 3025 (Part 45)
21	Sodium as Na	mg/l	10	-	-	1	IS 3025 (Part 45)

Remarks : Latitude= 32.07011N; Longitude= 76.616262E

OTHER INFORMATION

Abbreviation : ULR: Unique Lab Report, BDL: Below Detection Level, NA: Not Applicable

Terms & Conditions : Please refer terms and conditions on **backside** of Test Report (Page-1)

End of Report

Umesh Kumar
Authorized Signatory-Chemical

Eco Paryavaran Laboratories & Consultants Pvt. Ltd
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TEST REPORT

ULR No. : NA		Test Report No. :	NWALE090224NA029/A
Type of Sample : Water- Drinking Water			
Customer Name	Executive Engineer	Work Order No. & Date	EE/JSV/IND/WATERSAMPLE/20[illegible] 3-24-SPL-01 Dt.: 07/02/2024
Address	JSV Division, Indora, Distt. Kangra (HP)	Customer reference No. (If any)	NA
		Date of Sampling	08/02/2024
Sampling Protocol	IS 17614 (Part 1), EL-MSP-7.3	Date of Sample Receipt	09/02/2024
Sample Collection Mode	Sampling by laboratory	Period of Analysis	09/02/2024 to 14/02/2024
Testing Location	Permanent Facility	Date of Reporting	14/02/2024
Sampling Location	Borewell (LWSS- Vill. Milwan)		
Sample Description	Clear, colourless liquid.		
Standard/Specification	IS 10500 : 2012		
Packing, Markings, Seal & Qty.	2 litre Plastic Bottle Marked D/08/22		

RESULTS

I. Chemical Testing

1. Water (Drinking Water)

S.No.	Test Parameter	Unit	Result	Acceptable Limit	Permissible Limit in Absence of Alternate Source	Detection Limit	Test Method
1	Conductivity	µmho/cm	380	-	-	1	IS 3025 (Part 14)
2	Bicarbonate as HCO3	mg/l	140	-	-	1	IS:3025 (Part-23)
3	Carbonate as CO3	mg/l	BDL	-	-	1	IS:3025 (Part-23)
4	Silica as SiO2	mg/l	BDL	-	-	1	APHA 23rd Ed 4500D-Hetropoly Blue Method

Remarks : Latitude=32.07011N; Longitude=75.616262E
This test report is the part of Test Report No.NWALE090224NA029

OTHER INFORMATION

Abbreviation : ULR: Unique Lab Report, BDL: Below Detection Level, NA: Not Applicable

Terms & Conditions : Please refer terms and conditions on backside of Test Report (Page-1)

End of Report

Umesh Kumar
Authorized Signatory-Chemical

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Eco Paryavaran Laboratories & Consultants Pvt. Ltd

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TEST REPORT

ULR No. : TC118182400003121 H		Test Report No. :	UWAL090/24NA010
Type of Sample : Water- Drinking Water			
Customer Name	Executive Engineer	Work Order No. & Date	EE/JSV/IND/WATER SAMPLE/22-23-24-SPL-01 Dt. 07/02/2024
Address	JSV Division, Indora, Distt. Kangra (HP)	Customer reference No. (If any)	NA
		Date of Sampling	08/02/2024
Sampling Protocol	IS 17614 (Part 1), EL-MSP-7.3	Date of Sample Receipt	09/02/2024
Sample Collection Mode	Sampling by Laboratory	Period of Analysis	09/02/2024 To 14/02/2024
Testing Location	Permanent Facility	Date of Reporting	14/02/2024
Sampling Location	Borewell (LWSS- Vill. Mohtali Old)		
Sample Description	Clear, colourless liquid.		
Standard/Specification	IS 10500 : 2012		
Packing, Markings, Seal & Qty.	2 litre Plastic Bottle Marked D/08/23		

RESULTS

I. Chemical Testing

1. Water (Drinking Water)

S.No.	Test Parameter	Unit	Result	Acceptable Limit	Permissible Limit in Absence of Alternate Source	Detection Limit	Test Method
1	pH @ 25 °C	-	7.32	6.5-8.5	No relaxation	0.5	IS 3025 (Part 11)
2	Calcium as Ca	mg/l	115	75	200	1	IS 3025 (Part 40)
3	Chloride as Cl	mg/l	45	250	1000	1	IS 3025 (Part 32)
4	Copper as Cu	mg/l	BDL	0.05	1.5	0.001	USEPA 3015A
5	Fluoride as F	mg/l	0.68	1.0	1.5	0.1	IS 3025 (Part 60)
6	Iron as Fe	mg/l	0.002	1.0	No relaxation	0.001	USEPA 3015A
7	Magnesium as Mg	mg/l	11	30	100	1	IS 3025 (Part 46)
8	Manganese as Mn	mg/l	0.281	0.1	0.3	0.001	USEPA 3015A
9	Nitrate as NO3	mg/l	43	45	No relaxation	1	APHA 23rd Ed 4500 B UV Screening Method
10	Selenium as Se	mg/l	BDL	0.01	No relaxation	0.001	USEPA 3015A
11	Sulphate as SO4	mg/l	30	200	400	1	IS 3025 (Part 24) Cl 4.0 Turbidity Method
12	Total Hardness as CaCO3	mg/l	332	200	600	1	IS 3025 (Part 21)
13	Zinc as Zn	mg/l	0.015	5.0	15	0.001	USEPA 3015A
14	Cadmium as Cd	mg/l	BDL	0.003	No relaxation	0.001	USEPA 3015A
15	Lead as Pb	mg/l	BDL	0.01	No relaxation	0.001	USEPA 3015A

Umesh Kumar
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ECO BHAWAN E-207, Industrial Area, Phase VIII-B (Sector-74), Mohali (Punjab) 160071

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ULR No. : TC118182400000121IF						Test Report No. : NWA10902240A030	
Type of Sample : Water- Drinking Water							
16	Nickel as Ni	mg/l	BDL	0.02	No relaxation	0.001	USEPA 3015A
17	Arsenic as As	mg/l	BDL	0.01	No relaxation	0.001	USEPA 3015A
18	Chromium as Cr	mg/l	BDL	0.05	No relaxation	0.001	USEPA 3015A
19	Uranium as U	mg/l	0.003	0.03	No relaxation	0.001	USEPA 3015A
20	Potassium as K	mg/l	1.2	-	-	1	IS 3025 (Part 45)
21	Sodium as Na	mg/l	20	-	-	1	IS 3025 (Part 45)

Remarks : Latitude=32.215023N; Longitude=75.667901E

OTHER INFORMATION

Abbreviation : ULR: Unique Lab Report, BDL: Below Detection Level, NA: Not Applicable

Terms & Conditions : Please refer terms and conditions on backside of Test Report (Page-1)

End of Report

Upesh Kumar
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Eco Paryavaran Laboratories & Consultants Pvt. Ltd.
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TEST REPORT

ULR No. : NA		Test Report No. :	NWAL090224NA030/A
Type of Sample : Water- Drinking Water			
Customer Name	Executive Engineer	Work Order No. & Date	EE/JSV/IVD/WATER SAMPLING/3-24 SPL-01 Dt.: 07/02/2024
Address	JSV Division, Indora, Distt. Kangra (HP)	Customer reference No. (If any)	NA
		Date of Sampling	08/02/2024
Sampling Protocol	IS 17614 (Part 1), EL-MSP-7.3	Date of Sample Receipt	09/02/2024
Sample Collection Mode	Sampling by laboratory	Period of Analysis	09/02/2024 To 14/02/2024
Testing Location	Permanent Facility	Date of Reporting	14/02/2024
Sampling Location	Borewell (LWSS- Vill. Mohtali Old)		
Sample Description	Clear, colourless liquid		
Standard/Specification	IS 10500 : 2012		
Packing, Markings, Seal & Qty.	2 litre Plastic Bottle Marked D/08/23		

RESULTS

I. Chemical Testing

1. Water (Drinking Water)

S.No.	Test Parameter	Unit	Result	Acceptable Limit	Permissible Limit in Absence of Alternate Source	Detection Limit	Test Method
1	Conductivity	µmho/cm	788	-	-	1	IS 3025 (Part 14)
2	Bicarbonate as HCO3	mg/l	320	-	-	1	IS 3025 (Part-23)
3	Carbonate as CO3	mg/l	BDL	-	-	1	IS 3025 (Part-23)
4	Silica as SiO2	mg/l	19	-	-	1	APHA 23rd Ed 4500D Heteropoly blue Method

Remarks : Latitude=32.215023N; Longitude=75.667901E
This test report is the part of Test Report No.NWAL090224NA030

OTHER INFORMATION

Abbreviation : ULR: Unique Lab Report, BDL: Below Detection Level, NA: Not Applicable

Terms & Conditions : Please refer terms and conditions on backside of Test Report (Page-1)

End of Report

Umesh Kumar
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Eco Paryavaran Laboratories & Consultants Pvt. Ltd
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TEST REPORT

ULR No. : TC118JE240000012I2F		Test Report No. :	NWAL090224NA033
Type of Sample : Water- Drinking Water			
Customer Name	Executive Engineer	Work Order No. & Date	EE/JSV/PVD/WATER SA/MP(-) D. 3-24 SPL-01 01-02-24
Address	JSV Division, Indora, Distt. Kangra (HP)	Customer reference No. (If any)	NA
		Date of Sampling	08/02/2024
Sampling Protocol	IS 17614 (Part 1), EL-MSP-7.3	Date of Sample Receipt	09/02/2024
Sample Collection Mode	Sampling by laboratory	Period of Analysis	09/02/2024 To 14/02/2024
Testing Location	Permanent Facility	Date of Reporting	14/02/2024
Sampling Location	Borewell (LWSS- Vill. Mohtali Neve)		
Sample Description	Clear, colourless liquid		
Standard/Specification	IS 10500 : 2012		
Packing, Markings, Seal & Qty.	2 litre Plastic Bottle Marked D/08/24		

RESULTS

I. Chemical Testing

1. Water (Drinking Water)

S.No.	Test Parameter	Unit	Result	Acceptable Limit	Permissible Limit in Absence of Alternate Source	Detection Limit	Test Method
1	pH @ 25 °C	-	7.61	6.5-8.5	No relaxation	0.5	IS 3025 (Part 11)
2	Calcium as Ca	mg/l	90	75	200	1	IS 3025 (Part 40)
3	Chloride as Cl	mg/l	40	250	1000	1	IS 3025 (Part 32)
4	Copper as Cu	mg/l	BDL	0.05	1.5	0.001	USEPA 3015A
5	Fluoride as F	mg/l	0.71	1.0	1.5	0.1	IS 3025 (Part 60)
6	Iron as Fe	mg/l	0.001	1.0	No relaxation	0.001	USEPA 3015A
7	Magnesium as Mg	mg/l	18	30	100	1	IS 3025 (Part 46)
8	Manganese as Mn	mg/l	0.02	0.1	0.3	0.001	USEPA 3015A
9	Nitrate as NO3	mg/l	38	45	No relaxation	1	APHA 23rd Ed 4500 B (V) Screening Method
10	Selenium as Se	mg/l	BDL	0.01	No relaxation	0.001	USEPA 3015A
11	Sulphate as SO4	mg/l	29	200	400	1	IS 3025 (Part 24) Cl 4.3 Turbidity Method
12	Total Hardness as CaCO3	mg/l	300	200	600	1	IS 3025 (Part 21)
13	Zinc as Zn	mg/l	0.794	5.0	15	0.001	USEPA 3015A
14	Cadmium as Cd	mg/l	BDL	0.003	No relaxation	0.001	USEPA 3015A
15	Lead as Pb	mg/l	BDL	0.01	No relaxation	0.001	USEPA 3015A

Umesh Kumar
Authorized Signatory-Chemical

1056

— 109 —
— 197 —

ULR No. : TC118182400001212F						Test Report No. : NWAL090Z24NA031	
Type of Sample : Water- Drinking Water							
16	Nickel as Ni	mg/l	BDL	0.02	No relaxation	0.001	USEPA 3015A
17	Arsenic as As	mg/l	BDL	0.01	No relaxation	0.001	USEPA 3015A
18	Chromium as Cr	mg/l	BDL	0.05	No relaxation	0.001	USEPA 3015A
19	Uranium as U	mg/l	0.002	0.03	No relaxation	0.001	USEPA 3015A
20	Potassium as K	mg/l	1.9	-	-	1	IS 3025 (Part 45)
21	Sodium as Na	mg/l	17	-	-	1	IS 3025 (Part 45)

Remarks : Latitude=32.213058N; Longitude=75.66839E

OTHER INFORMATION

Abbreviation : ULR: Unique Lab Report, BDL: Below Detection Level, NA: Not Applicable

Terms & Conditions : Please refer terms and conditions on backside of Test Report (Page-1)

End of Report

Umesh Kumar
Authorized Signatory-Chemical

Eco Paryavaran Laboratories & Consultants Pvt. Ltd.
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TEST REPORT

ULR No. : NA		Test Report No. :	NWAL090224NA031/A
Type of Sample : Water- Drinking Water			
Customer Name	Executive Engineer	Work Order No. & Date	EE/ISV/IND/WATERSAMPLE/2023-24-SPL-01 Dt.: 07/02/2024
Address	ISV Division, Indora, Distt. Kangra (HP)	Customer reference No. (If any)	NA
		Date of Sampling	08/02/2024
Sampling Protocol	IS 17614 (Part 1), EL-MSP-7.3	Date of Sample Receipt	09/02/2024
Sample Collection Mode	Sampling by laboratory	Period of Analysis	09/02/2024 To 14/02/2024
Testing Location	Permanent Facility	Date of Reporting	14/02/2024
Sampling Location	Borewell (LWSS- Vill. Mohtali New)		
Sample Description	Clear, colourless liquid		
Standard/Specification	IS 10500 : 2012		
Packing, Markings, Seal & Qty.	2 litre Plastic Bottle Marked D/08/24		

RESULTS

I. Chemical Testing

1. Water (Drinking Water)

S.No.	Test Parameter	Unit	Result	Acceptable Limit	Permissible Limit in Absence of Alternate Source	Detection Limit	Test Method
1	Conductivity	µmho/cm	615	-	-	1	IS 3025 (Part 14)
2	Bicarbonate as HCO3	mg/l	248	-	-	1	IS:3025 (Part-23)
3	Carbonate as CO3	mg/l	BDL	-	-	1	IS:3025 (Part-23)
4	Silica as SiO2	mg/l	18	-	-	1	APHA23rd Ed 4500D-Heteropoly Blue Method

Remarks : Latitude=32.21305°N; Longitude=75.60839E

This test report is the part of Test Report No.NWAL090224NA031

OTHER INFORMATION

Abbreviation : ULR: UniqueLab Report, BDL: Below Detection Level, NA: Not Applicable

Terms & Conditions : Please refer terms and conditions on backside of Test Report (Page-1)

End of Report

Umesh Kumar
Authorized Signatory-Chemical

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1058

Eco Paryavaran Laboratories & Consultants Pvt. Ltd
(Formerly known as Eco Laboratories & Consultants Pvt. Ltd.)

TEST REPORT

ULR No. :	TC118182400000121 3F	Test Report No. :	NWAL090224NA012
Type of Sample : Water- Drinking Water			
Customer Name	Executive Engineer	Work Order No. & Date	EE/JSV/IND/WATERSAMPLE/2023-24/SPL-01 Dt.: 07/02/2024
Address	JSV Division, Indora, Distt. Kangra (HP)	Customer reference No. (If any)	NA
		Date of Sampling	08/02/2024
Sampling Protocol	IS 17614 (Part 1), EL-MSP-7.3	Date of Sample Receipt	09/02/2024
Sample Collection Mode	Sampling by laboratory	Period of Analysis	09/02/2024 To 14/02/2024
Testing Location	Permanent Facility	Date of Reporting	14/02/2024
Sampling Location	Borewell (LWSS- Vill. Suragpur Mohtal)		
Sample Description	Clear, colourless liquid		
Standard/Specification	IS 10500 : 2012		
Packing, Markings, Seal & Qty.	2 litre Plastic Bottle Marked D/DE/25		

RESULTS

I. Chemical Testing

1. Water (Drinking Water)

S.No.	Test Parameter	Unit	Result	Acceptable Limit	Permissible Limit in Absence of Alternate Source	Detection Limit	Test Method
1	pH @ 25 °C	-	7.62	6.5-8.5	No relaxation	0.5	IS 3025 (Part 11)
2	Calcium as Ca	mg/l	74	75	200	1	IS 3025 (Part 40)
3	Chloride as Cl	mg/l	13	250	1000	1	IS 3025 (Part 32)
4	Copper as Cu	mg/l	BDL	0.05	1.5	0.001	USEPA 3015A
5	Fluoride as F	mg/l	0.58	1.0	1.5	0.1	IS 3025 (Part 60)
6	Iron as Fe	mg/l	BDL	1.0	No relaxation	0.001	USEPA 3015A
7	Magnesium as Mg	mg/l	19	30	100	1	IS 3025 (Part 46)
8	Manganese as Mn	mg/l	BDL	0.1	0.3	0.001	USEPA 3015A
9	Nitrate as NO3	mg/l	4.0	45	No relaxation	1	APHA 23rd Ed 4500 B IV Screening Method
10	Selenium as Se	mg/l	BDL	0.01	No relaxation	0.001	USEPA 3015A
11	Sulphate as SO4	mg/l	8.7	200	400	1	IS 3025 (Part 24) Cl 5.0 Turbidity Method
12	Total Hardness as CaCO3	mg/l	264	200	600	1	IS 3025 (Part 21)
13	Zinc as Zn	mg/l	0.003	5.0	15	0.001	USEPA 3015A
14	Cadmium as Cd	mg/l	BDL	0.003	No relaxation	0.001	USEPA 3015A
15	Lead as Pb	mg/l	BDL	0.01	No relaxation	0.001	USEPA 3015A

Umesh Kumar
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ULR No. : TC118182400001213F					Test Report No. : NWAL0902/4NA032		
Type of Sample : Water- Drinking Water							
16	Nickel as Ni	mg/l	BDL	0.02	No relaxation	0.001	USEPA 3015A
17	Arsenic as As	mg/l	BDL	0.01	No relaxation	0.001	USEPA 3015A
18	Chromium as Cr	mg/l	BDL	0.05	No relaxation	0.001	USEPA 3015A
19	Uranium as U	mg/l	0.003	0.03	No relaxation	0.001	USEPA 3015A
20	Potassium as K	mg/l	1.6	-	-	1	IS 3025 (Part 45)
21	Sodium as Na	mg/l	28	-	-	1	IS 3025 (Part 45)

Remarks : Latitude=32.21082N; Longitude=75.677958E

OTHER INFORMATION

Abbreviation : ULR: Unique Lab Report, BDL: Below Detection Level, NA: Not Applicable

Terms & Conditions : Please refer terms and conditions on backside of Test Report (Page-1)

End of Report

Dinesh Kumar
Authorized Signatory-Chemical

1060

-113-
-201-

Eco Paryavaran Laboratories & Consultants Pvt. Ltd.
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TEST REPORT

ULR No. : NA		Test Report No. :	NWAL090224NA032/A
Type of Sample : Water- Drinking Water			
Customer Name	Executive Engineer	Work Order No. & Date	EE/JSV/IND/WATERSAMPLE/2023-24-SPL-01 DL: 07/02/2024
Address	JSV Division, Indora, Distt. Kangra (HP)	Customer reference No. (if any)	NA
		Date of Sampling	08/02/2024
Sampling Protocol	IS 17614 (Part 1), EL-MSP-7.3	Date of Sample Receipt	09/02/2024
Sample Collection Mode	Sampling by laboratory	Period of Analysis	09/02/2024 To 14/02/2024
Testing Location	Permanent Facility	Date of Reporting	14/02/2024
Sampling Location	Borewell (LWSS- Vill. Surajpur Mohtali)		
Sample Description	Clear, colourless liquid.		
Standard/Specification	IS 10500 : 2012		
Packing, Markings, Seal & Qty.	2 litre Plastic Bottle Marked D/08/25		

RESULTS

I. Chemical Testing

1. Water (Drinking Water)

S.No.	Test Parameter	Unit	Result	Acceptable Limit	Permissible Limit in Absence of Alternate Source	Detection Limit	Test Method
1	Conductivity	µmho/cm	600	-	-	1	IS 3025 (Part 14)
2	Bicarbonate as HCO3	mg/l	260	-	-	1	IS:3025 (Part-23)
3	Carbonate as CO3	mg/l	BDL	-	-	1	IS:3025 (Part-23)
4	Silica as SiO2	mg/l	16	-	-	1	APHA23rd Ed 4500-Si tetrapoly blue Method

Remarks : Latitude=32.21082N; Longitude=75.677958E

This test report is the part of Test Report No.NWAL090224NA032

OTHER INFORMATION

Abbreviation : ULR: Unique Lab Report, BDL: Below Detection Level, NA: Not Applicable

Terms & Conditions : Please refer terms and conditions on backside of Test Report (Page-1)

End of Report

Umesh Kumar
Authorized Signatory-Chemical

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Eco Paryavaran Laboratories & Consultants Pvt. Ltd.
(Formerly known as Eco Laboratories & Consultants Pvt. Ltd.)

TEST REPORT

ULR No. :	TC118182400000120GF	Test Report No. :	NWAL090224NA025
Type of Sample : Water- Drinking Water			
Customer Name	Executive Engineer	Work Order No. & Date	EE/JSV/IND/WATERSAN/PLI/202 3-24 SPL-01 Dt. 07/02/2024
Address	JSV Division, Indora, Distt. Kangra (HP)	Customer reference No. (If any)	NA
		Date of Sampling	08/02/2024
Sampling Protocol	IS 17614 (Part 1), EL-MSP-7.3	Date of Sample Receipt	09/02/2024
Sample Collection Mode	Sampling by laboratory	Period of Analysis	09/02/2024 To 14/02/2024
Testing Location	Permanent Facility	Date of Reporting	14/02/2024
Sampling Location	Borewell (3 HP- Vill. Utehrian)		
Sample Description	Clear, colourless liquid.		
Standard/Specification	IS 10500 : 2012		
Packing, Markings, Seal & Qty.	2 litre Plastic Bottle Marked D/08/18		

RESULTS

I. Chemical Testing

1. Water (Drinking Water)

S. No.	Test Parameter	Unit	Result	Acceptable Limit	Permissible Limit in Absence of Alternate Source	Detection Limit	Test Method
1	pH @ 25 °C	-	7.85	6.5-8.5	No relaxation	0.5	IS 3025 (Part 11)
2	Calcium as Ca	mg/l	42	75	200	1	IS 3025 (Part 40)
3	Chloride as Cl	mg/l	5.0	250	1000	1	IS 3025 (Part 32)
4	Copper as Cu	mg/l	BDL	0.05	1.5	0.001	USEPA 3015A
5	Fluoride as F	mg/l	0.60	1.0	1.5	0.1	IS 3025 (Part 60)
6	Iron as Fe	mg/l	0.002	1.0	No relaxation	0.001	USEPA 3015A
7	Magnesium as Mg	mg/l	18	30	100	1	IS 3025 (Part 46)
8	Manganese as Mn	mg/l	BDL	0.1	0.3	0.001	USEPA 3015A
9	Nitrate as NO3	mg/l	5.0	45	No relaxation	1	APHA 23rd Ed 4500 B UV Screening Method
10	Selenium as Se	mg/l	BDL	0.01	No relaxation	0.001	USEPA 3015A
11	Sulphate as SO4	mg/l	9.5	200	400	1	IS 3025 (Part 24) Cl & D Turbidity Method
12	Total Hardness as CaCO3	mg/l	180	200	600	1	IS 3025 (Part 21)
13	Zinc as Zn	mg/l	0.014	5.0	15	0.001	USEPA 3015A
14	Cadmium as Cd	mg/l	BDL	0.003	No relaxation	0.001	USEPA 3015A
15	Lead as Pb	mg/l	BDL	0.01	No relaxation	0.001	USEPA 3015A

Umesh Kumar
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1062

-203-
-115-

ULR No. : TC118182400000120GF						Test Report No. : NWAL090224NA025	
Type of Sample : Water- Drinking Water							
16	Nickel as Ni	mg/l	BDL	0.02	No relaxation	0.001	USEPA 3015A
17	Arsenic as As	mg/l	BDL	0.01	No relaxation	0.001	USEPA 3015A
18	Chromium as Cr	mg/l	BDL	0.05	No relaxation	0.001	USEPA 3015A
19	Uranium as U	mg/l	0.002	0.03	No relaxation	0.001	USEPA 3015A
20	Potassium as K	mg/l	1.2	-	-	1	IS 3025 (Part 45)
21	Sodium as Na	mg/l	21	-	-	1	IS 3025 (Part 45)

Remarks : Latitude=32.077783N, Longitude=75.657038E

OTHER INFORMATION

Abbreviation : ULR: Unique Lab Report, BDL: Below Detection Level, NA: Not Applicable

Terms & Conditions : Please refer terms and conditions on backside of Test Report (Page-1)

End of Report

Umesh Kumar
Authorized Signatory-Chemical

Eco Paryavaran Laboratories & Consultants Pvt. Ltd.
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TEST REPORT

ULR No. : NA		Test Report No. :	NWAL090224NA025/A
Type of Sample : Water- Drinking Water			
Customer Name	Executive Engineer	Work Order No. & Date	EE/ISV/IND/WATERSAMPLE/202 3-24/SPL-3; DL. 07/02/2024
Address	ISV Division, Indora, Distt. Kangra (HP)	Customer reference No. (if any)	NA
		Date of Sampling	08/02/2024
Sampling Protocol	IS 17614 (Part 1), EL-MSP-7.3	Date of Sample Receipt	09/02/2024
Sample Collection Mode	Sampling by laboratory	Period of Analysis	09/02/2024 To 14/02/2024
Testing Location	Permanent Facility	Date of Reporting	14/02/2024
Sampling Location	Borewell (3 HP- Vill. Dhehran)		
Sample Description	Clear, colourless liquid.		
Standard/Specification	IS 10500 : 2012		
Packing, Markings, Seal & Qty.	2 litre Plastic Bottle Marked D/08/18		

RESULTS

I. Chemical Testing

1. Water (Drinking Water)

S.No.	Test Parameter	Unit	Result	Acceptable Limit	Permissible Limit in Absence of Alternate Source	Detection Limit	Test Method
1	Conductivity	µmho/cm	448	-	-	1	IS 3025 (Part 14)
2	Bicarbonate as HCO3	mg/l	220	-	-	1	IS:3025 (Part-23)
3	Carbonate as CO3	mg/l	BDL	-	-	1	IS:3025 (Part-23)
4	Silica as SiO2	mg/l	4.4	-	-	1	APHA23rd Ed 4500D-Heteropoly Blue Method

Remarks : Latitude=32.077783N; Longitude=75.657038E

This test report is the part of Test Report No.NWAL090224NA025

OTHER INFORMATION

Abbreviation : ULR: Unique Lab Report, BDL: Below Detection Level, NA: Not Applicable

Terms & Conditions : Please refer terms and conditions on backside of Test Report (Page-1)

End of Report

Umesh Kumar
Authorized Signatory-Chemical

Water / ENT-7.8 / W

Page No. 1/1

1064

-117-
-205-

Eco Panel Analytical Laboratories & Consultants Pvt. Ltd.
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TEST REPORT

ULR No. : TC118182400000120?F		Test Report No. :	NVAL090224NA026
Type of Sample : Water-Drinking Water			
Customer Name	Executive Engineer	Work Order No. & Date	EE/JSV/IND/WATERSAMPLE/2023-24-SPL-01 Dt.: 07/02/2024
Address	JSV Division, Indora, Distt. Kangra (HP)	Customer reference No. (If any)	NA
		Date of Sampling	08/02/2024
Sampling Protocol	IS 17614 (Part 1), EL-MSP-7.3	Date of Sample Receipt	09/02/2024
Sample Collection Mode	Sampling by laboratory	Period of Analysis	09/02/2024 To 14/02/2024
Testing Location	Permanent Facility	Date of Reporting	14/02/2024
Sampling Location	Borewell (25 HP- Vill. Ulehrian)		
Sample Description	Clear, colourless liquid.		
Standard/Specification	IS 10500 : 2012		
Packing, Markings, Seal & Qty.	2 litre Plastic Bottle Marked D/SE/23		

RESULTS

I. Chemical Testing

1. Water (Drinking Water)

S.No.	Test Parameter	Unit	Result	Acceptable Limit	Permissible Limit in Absence of Alternate Source	Detection Limit	Test Method
1	pH @ 25 °C		7.72	6.5-8.5	No relaxation	0.5	IS 3025 (Part 11)
2	Calcium as Ca	mg/l	26	75	200	1	IS 3025 (Part 40)
3	Chloride as Cl	mg/l	5.9	250	1000	1	IS 3025 (Part 32)
4	Copper as Cu	mg/l	BDL	0.05	1.5	0.001	USEPA 3015A
5	Fluoride as F	mg/l	0.00	1.0	1.5	0.1	IS 3025 (Part 60)
6	Iron as Fe	mg/l	0.002	1.0	No relaxation	0.001	USEPA 3015A
7	Magnesium as Mg	mg/l	1.5	30	100	1	IS 3025 (Part 46)
8	Manganese as Mn	mg/l	0.1	0.1	0.3	0.001	USEPA 3015A
9	Nitrate as NO3	mg/l	4.1	45	No relaxation	1	(NABL 23 & Ed 4500 Nitrate Screening Method
10	Selenium as Se	mg/l	BDL	0.01	No relaxation	0.001	USEPA 3015A
11	Sulphate as SO4	mg/l	0.2	200	400	1	IS 3025 (Part 24) Cl 4.0 Turbidity Method
12	Total Hardness as CaCO3	mg/l	180	200	600	1	IS 3025 (Part 21)
13	Zinc as Zn	mg/l	0.076	5.0	15	0.001	USEPA 3015A
14	Cadmium as Cd	mg/l	BDL	0.003	No relaxation	0.001	USEPA 3015A
15	Lead as Pb	mg/l	BDL	0.01	No relaxation	0.001	USEPA 3015A

Dinesh Kumar
Authorized Signatory Chemical

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~~118~~ -206-

ULR No. : TC118182400000120 7F					Test Report No. : NWAL090224NA026		
Type of Sample : Water- Drinking Water							
16	Nickel as Ni	mg/l	BDL	0.02	No relaxation	0.001	USEPA 3015A
17	Arsenic as As	mg/l	BDL	0.01	No relaxation	0.001	USEPA 3015A
18	Chromium as Cr	mg/l	BDL	0.05	No relaxation	0.001	USEPA 3015A
19	Uranium as U	mg/l	0.003	0.03	No relaxation	0.001	USEPA 3015A
20	Potassium as K	mg/l	1.2	-	-	1	IS 3025 (Part 45)
21	Sodium as Na	mg/l	23	-	-	1	IS 3025 (Part 45)

Remarks : Latitude=32.077665N; Longitude=75.656723E

OTHER INFORMATION

Abbreviation : ULR: Unique Lab Report, BDL: Below Detection Level, NA: Not Applicable

Terms & Conditions : Please refer terms and conditions on backside of Test Report (Page-1)

End of Report

Umesh Kumar
Authorized Signatory-Chemical

1066

-207-
-119-

Eco Paryavaran Laboratories & Consultants Pvt Ltd
(Formerly known as Eco Laboratories & Consultants Pvt. Ltd.)

TEST REPORT

ULR No. : NA		Test Report No. : NWAL090224NAD29/A	
Type of Sample : Water-Drinking Water			
Customer Name	Executive Engineer	Work Order No. & Date	EE/JSV/IND/WATERSAMPLE/2023-24-SPL-01 Dt.: 07/02/2024
Address	JSV Division, Indora, Distt. Kangra (HP)	Customer reference No. (If any)	NA
		Date of Sampling	08/02/2024
Sampling Protocol	IS 17614 (Part 1), EL-MSP-7.3	Date of Sample Receipt	09/02/2024
Sample Collection Mode	Sampling by laboratory	Period of Analysis	09/02/2024 To 14/02/2024
Testing Location	Permanent Facility	Date of Reporting	14/02/2024
Sampling Location	Borewell (25 HP- Vill. Ullehrian)		
Sample Description	Clear, colourless liquid.		
Standard/Specification	IS 10500 : 2012		
Packing, Markings, Seal & Qty.	2 litre Plastic Bottle Marked D/08/19		

RESULTS

I. Chemical Testing

1. Water (Drinking Water)

S.No.	Test Parameter	Unit	Result	Acceptable Limit	Permissible Limit in Absence of Alternate Source	Detection Limit	Test Method
1	Conductivity	µmho/cm	421	-	-	1	IS 3025 (Part 14)
2	Bicarbonate as HCO3	mg/l	252	-	-	1	IS:3025 (Part-23)
3	Carbonate as CO3	mg/l	BDL	-	-	1	IS:3025 (Part-23)
4	Silica as SiO2	mg/l	BDL	-	-	1	APHA23rd Ed 4500D-Hetropoly Blue Method

Remarks : Latitude=32.077065N; Longitude=75.656723E

This test report is the part of Test Report No.NWAL090224NAD29/A

OTHER INFORMATION

Abbreviation : ULR: Unique Lab Report, BDL: Below Detection Level, NA: Not Applicable

Terms & Conditions : Please refer terms and conditions on backside of Test Report (Page-1)

End of Report

Umesh Kumar
Authorized Signatory-Chemical

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Eco Paryavaran Laboratories & Consultants Pvt. Ltd.
(Formerly known as Eco Laboratories & Consultants Pvt. Ltd.)

TEST REPORT

ULR No. TC128182400001208I		Test Report No. :	NWAL090224NA027
Type of Sample : Water- Drinking Water			
Customer Name	Executive Engineer	Work Order No. & Date	EE/JSV/IND/WATERSAMPLE/2023-24-SPL-01 Dt.: 07/02/2024
Address	JSV Division, Indora, Distt. Kangra (HP)	Customer reference No. (If any)	NA
		Date of Sampling	09/02/2024
Sampling Protocol	IS 17614 (Part 1), EL-MSP-7.3	Date of Sample Receipt	09/02/2024
Sample Collection Mode	Sampling by laboratory	Period of Analysis	09/02/2024 To 14/02/2024
Testing Location	Permanent Facility	Date of Reporting	14/02/2024
Sampling Location	Borewell (Radha Soami Satsang- VIII. Ulehrian)		
Sample Description	Clear, colourless liquid.		
Standard/Specification	IS 10500 - 2012		
Packing, Markings, Seal & Qty.	2 litre Plastic Bottle Marked D/09/20		

RESULTS

I. Chemical Testing

1. Water (Drinking Water)

S.No.	Test Parameter	Unit	Result	Acceptable Limit	Permissible Limit in Absence of Alternate Source	Detection Limit	Test Method
1	pH @ 25 °C	-	7.66	6.5-8.5	No relaxation	0.5	IS 3025 (Part 11)
2	Calcium as Ca	mg/l	51	75	200	1	IS 3025 (Part 40)
3	Chloride as Cl	mg/l	5.0	250	1000	1	IS 3025 (Part 32)
4	Copper as Cu	mg/l	BDL	0.05	1.5	0.001	USEPA 3015A
5	Fluoride as F	mg/l	0.80	1.0	1.5	0.1	IS 3025 (Part 60)
6	Iron as Fe	mg/l	BDL	1.0	No relaxation	0.001	USEPA 3015A
7	Magnesium as Mg	mg/l	18	30	100	1	IS 3025 (Part 46)
8	Manganese as Mn	mg/l	BDL	0.1	0.3	0.001	USEPA 3015A
9	Nitrate as NO3	mg/l	3.1	45	No relaxation	1	APHA 23rd Ed 4500 B UV Screening Method
10	Selenium as Se	mg/l	BDL	0.01	No relaxation	0.001	USEPA 3015A
11	Sulphate as SO4	mg/l	1.1	200	400	1	IS 3025 (Part 24) Cl 4.0 Turbidity Method
12	Total Hardness as CaCO3	mg/l	200	200	600	1	IS 3025 (Part 21)
13	Zinc as Zn	mg/l	0.013	5.0	15	0.001	USEPA 3015A
14	Cadmium as Cd	mg/l	BDL	0.003	No relaxation	0.001	USEPA 3015A
15	Lead as Pb	mg/l	BDL	0.01	No relaxation	0.001	USEPA 3015A

Umesh Kumar
Authorised Signatory-Chemical

1068

- 209 -

~~120~~

ULR No. : TC118182400001270H					Test Report No. : NVENV090/24NAB...7		
Type of Sample : Water- Drinking Water							
16	Nickel as Ni	mg/l	BDL	0.02	No relaxation	0.001	USEPA 3015A
17	Arsenic as As	mg/l	BDL	0.01	No relaxation	0.001	USEPA 3015A
18	Chromium as Cr	mg/l	BDL	0.05	No relaxation	0.001	USEPA 3015A
19	Uranium as U	mg/l	0.003	0.03	No relaxation	0.001	USEPA 3015A
20	Potassium as K	mg/l	1.2	-	-	1	IS 3025 (Part 45)
21	Sodium as Na	mg/l	25	-	-	1	IS 3025 (Part 45)

Remarks : Latitude=32.0769277N; Longitude=75.651348E

OTHER INFORMATION

Abbreviation : ULR: Unique Lab Report, BDL: Below Detection Level, NA: Not Applicable

Terms & Conditions : Please refer terms and conditions on backside of Test Report (Page-2)

End of Report

Umesh Kumar
Authorized Signatory-Chemical

Water-D/MT-7.8.2-W

Page 1 of 2

Eco Parya Environmental Laboratories (P) Ltd.
(Formerly known as Eco Laboratories & Consultants (P) Ltd.)

TEST REPORT

ULR No. NA Test Report No. NWAL09022 4NA0107

Type of Sample : Water- Drinking Water

Customer Name	Executive Engineer	Work Order No. & Date	EE/ISV/IND/WATER/SAMPLE/2023-24-SPL-01 Dt.: 07/02/2024
Address	JSV Division, Indora, Distt. Kangra (HP)	Customer reference No. (If any)	NA
		Date of Sampling	08/02/2024
Sampling Protocol	IS 17614 (Part 1) Cl-MSP:7.3	Date of Sample Receipt	09/02/2024
Sample Collection Mode	Sampling by Laboratory	Period of Analysis	09/02/2024 To 14/02/2024
Testing Location	Permanent Facility	Date of Reporting	14/02/2024
Sampling Location	Borewell (Radha Soami Satsang- Vill. Ulehrian)		
Sample Description	Clear, colourless liquid.		
Standard/Specification	IS 10500 : 2012		
Packing, Markings, Seal & Qty.	2 litre Plastic Bottle Marked 0108/23		

RESULTS

I. Chemical Testing

1. Water (Drinking Water)

S.No	Test Parameter	Unit	Result	Acceptable Limit	Permissible Limit in Absence of Alternate Source	Detection Limit	Test Method
1	Conductivity	µmho/cm	429	-	-	1	IS 3025 (Part 14)
2	Bicarbonate as HCO3	mg/l	244	-	-	1	IS:3025 (Part-23)
3	Carbonate as CO3	mg/l	BDL	-	-	1	IS:3025 (Part-23)
4	Silica as SiO2	mg/l	BDL	-	-	1	APHA23rd Ed 4500D-Heteropoly Blue Method

Remarks : Latitude=32.0769270, Longitude=75.6513488E

This test report is the part of Test Report No.NWAL09022 4NA0107

OTHER INFORMATION

Abbreviation : ULR: Unique Lab Report, BDL: Below Detection Level, NA: Not Applicable

Terms & Conditions : Please refer terms and conditions on backside of Test Report (Page-1)

End of Report

Umesh Kumar
Authorized Signatory-Chemical

ECO BHAWAN E-207, Industrial Area, Phase VI, Sector 61, Mohali, Punjab 160 061

1070

-123- -211-

HIMACHAL PRADESH
JAL SHAKTI VIBHAG

No:SE/ISC/NPR/WS/WA-II/GWA/Notice-2024-1183-16 Dated:- 21-03-2024

To

The Chairman HPGWA-cum-
Engineer-Chief,
Jal Shakti Vibhag
Jal Bhawan Shimla

Subject:- Notice in Original Application NO 728/2023.

Reference:- Your office letter No. JSV-Member Secy HPGWA-cum-SE-P&I-II/2023-24-1136-1143 dated 05-02-2024,1325-1340 Dt:-12-02-2024& Sr. Hydrologist GWO JSV Una letter No.JSV-GWO/E-32/2023-24-1606-17 Dt:-07-02-2024.

In this context, it is intimated that the Executive Engineer, Jal Shakti Division Indora vide his office letter No. 10089-91 dated 26.02.2024 has submitted that the water samples of all the groundwater sources under division Indora and all the water samples are checked in water testing lab in Indora regularly to monitor water quality which is found satisfactory as per report, Now as per report of The Senior Hydrologist Ground water Organization Jal Shakti Vibahg Una HP vide letter under reference this office has approached to ECO Paryavaran Laboratory & Consultants Pvt. Ltd. vide this office letter no spl-1 Dt:- 07-02-2024 to take water samples in the vicinity of source Jagir (Long.75.90277778 lat. 31.9730556) to check the water quality.

Accordingly the ECO Paryavaran Laboratory & Consultants Pvt. Ltd. checked the area on dated 12-02-2024 and has taken water samples in presence of Shri Sanjeevan Kumar JE of division Fatehpur. There after the report of all water samples is sent to your good office for information and further necessary action at your end please.

DA:- Report

Superintending Engineer,
Jal Shakti Circle Nurpur.

Copy to the Chief Engineer (DZ) Jal Shakti Vibhag, Dharamshala for information.

Copy to the Senior Hydrologist Ground water Organization Jal Shakti Vibhag Una HP for information.

Copy forwarded to the Executive Engineer Jal Shakti Division Fatehpur for information with reference to his office letter referred above.

Superintending Engineer,
Jal Shakti Circle Nurpur.

Eco Paryavaran Laboratories & Consultants Pvt. Ltd.
(Formerly known as Eco Laboratories & Consultants Pvt. Ltd.)

TEST REPORT

ULR No. : TC118182400000118 9F		**Test Report No. :**	NWAL090224NA006
Type of Sample : Water- Drinking Water			
Customer Name	Executive Engineer	**Work Order No. & Date**	EE/JSV/FTR/WS/2024-9928-29 Dt.: 07/02/2024
Address	Jal Shakti Division, Fatehpur, Distt. Kangra (HP)	**Customer reference No. (If any)**	NA
		Date of Sampling	08/02/2024
Sampling Protocol	IS 17614 (Part 1), EL-MSP-7.3	**Date of Sample Receipt**	09/02/2024
Sample Collection Mode	Sampling by laboratory	**Period of Analysis**	09/02/2024 To 14/02/2024
Testing Location	Permanent Facility	**Date of Reporting**	14/02/2024
Sampling Location	Hand Pump (Near Rajesh Auto Electrical Shop- Vil. Jagir)		
Sample Description	Clear, colourless liquid.		
Standard/Specification	IS 10500 : 2012		
Packing, Markings, Seal & Qty.	2 litre Plastic Bottle Marked D/08/01		

RESULTS

I. Chemical Testing

1. Water (Drinking Water)

S.No.	Test Parameter	Unit	Result	Acceptable Limit	Permissible Limit in Absence of Alternate Source	Detection Limit	Test Method
1	pH @ 25 °C	-	8.20	6.5-8.5	No relaxation	0.5	IS 3025 (Part 11)
2	Calcium as Ca	mg/l	26	75	200	1	IS 3025 (Part 40)
3	Chloride as Cl	mg/l	5.0	250	1000	1	IS 3025 (Part 32)
4	Copper as Cu	mg/l	BDL	0.05	1.5	0.001	USEPA 3015A
5	Fluoride as F	mg/l	0.85	1.0	1.5	0.1	IS 3025 (Part 60)
6	Iron as Fe	mg/l	0.26	1.0	No relaxation	0.001	USEPA 3015A
7	Magnesium as Mg	mg/l	3.7	30	100	1	IS 3025 (Part 46)
8	Manganese as Mn	mg/l	0.043	0.1	0.3	0.001	USEPA 3015A
9	Nitrate as NO3	mg/l	BDL	45	No relaxation	1	APHA 23rd Ed 4500 B UV Screening Method
10	Selenium as Se	mg/l	BDL	0.01	No relaxation	0.001	USEPA 3015A
11	Sulphate as SO4	mg/l	BDL	200	400	1	IS 3025 (Part 24) Cl 4.0 Turbidity Method
12	Total Hardness as CaCO3	mg/l	80	200	600	1	IS 3025 (Part 21)
13	Zinc as Zn	mg/l	0.147	5.0	15	0.001	USEPA 3015A
14	Cadmium as Cd	mg/l	BDL	0.003	No relaxation	0.001	USEPA 3015A
15	Lead as Pb	mg/l	BDL	0.01	No relaxation	0.001	USEPA 3015A

Umesh Kumar
Authorized Signatory-Chemical

ECO BHAWAN E-207, Industrial Area, Phase VIII-B (Sector-74), Mohali (Punjab) 160071
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ULR No. : TC11818240000001189F					Test Report No. : NWAL090224NA006		
Type of Sample : Water- Drinking Water							
16	Nickel as Ni	mg/l	BDL	0.02	No relaxation	0.001	USEPA 3015A
17	Arsenic as As	mg/l	BDL	0.01	No relaxation	0.001	USEPA 3015A
18	Chromium as Cr	mg/l	BDL	0.05	No relaxation	0.001	USEPA 3015A
19	Uranium as U	mg/l	BDL	0.03	No relaxation	0.001	USEPA 3015A
20	Potassium as K	mg/l	1.8	-	-	1	IS 3025 (Part 45)
21	Sodium as Na	mg/l	63	-	-	1	IS 3025 (Part 45)

Remarks : Latitude=31.961615N; Longitude=75.89427E

OTHER INFORMATION

Abbreviation : ULR: Unique Lab Report, BDL: Below Detection Level, NA: Not Applicable

Terms & Conditions : Please refer terms and conditions on backside of Test Report (Page-1)

End of Report

Umesh Kumar
Authorized Signatory-Chemical

Eco Paryavaran Laboratories & Consultants Pvt. Ltd.

(Formerly known as Eco Laboratories & Consultants Pvt. Ltd.)

TEST REPORT

ULR No. : NA		Test Report No. :	NWAL090224NA006/A
Type of Sample : Water- Drinking Water			
Customer Name	Executive Engineer	Work Order No. & Date	EE/JSV/FTR/WS/2024-9928-29 Dt.: 07/02/2024
Address	Jal Shakti Division, Fatehpur, Distt. Kangra (HP)	Customer reference No. (If any)	NA
		Date of Sampling	08/02/2024
Sampling Protocol	IS 17614 (Part 1), EL-MSP-7.3	Date of Sample Receipt	09/02/2024
Sample Collection Mode	Sampling by laboratory	Period of Analysis	09/02/2024 To 14/02/2024
Testing Location	Permanent Facility	Date of Reporting	14/02/2024
Sampling Location	Hand Pump (Near Rajesh Auto Electrical Shop- Vil. Jagir)		
Sample Description	Clear, colourless liquid.		
Standard/Specification	IS 10500 : 2012		
Packing, Markings, Seal & Qty.	2 litre Plastic Bottle Marked D/08/01		

RESULTS

I. Chemical Testing

1. Water (Drinking Water)

S.No.	Test Parameter	Unit	Result	Acceptable Limit	Permissible Limit in Absence of Alternate Source	Detection Limit	Test Method
1	Conductivity	µmho/cm	469	-	-	1	IS 3025 (Part 14)
2	Bicarbonate as HCO3	mg/l	180	-	-	1	IS:3025 (Part-23)
3	Carbonate as CO3	mg/l	BDL	-	-	1	IS:3025 (Part-23)
4	Silica as SiO2	mg/l	BDL	-	-	1	APHA23rd Ed 4500D-Hetropoly Blue Method

Remarks : Latitude=31.961615N; Longitude=75.89427E

This test report is the part of Test Report No.NWAL090224NA006

OTHER INFORMATION

Abbreviation : ULR: Unique Lab Report, BDL: Below Detection Level, NA: Not Applicable

Terms & Conditions : Please refer terms and conditions on backside of Test Report (Page-1)

End of Report

Umesh Kumar
Authorized Signatory-Chemical

ECO BHAWAN E-207, Industrial Area, Phase VIII-B (Sector-74), Mohali (Punjab) 160071

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Eco Paryavaran Laboratories & Consultants Pvt. Ltd.
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TEST REPORT

ULR No. : TC118182400000119OF		Test Report No. : NWAL090224NA007	
Type of Sample : Water- Drinking Water			
Customer Name	Executive Engineer	Work Order No. & Date	EE/JSV/FTR/WS/2024-9928-29 Dt.: 07/02/2024
Address	Jal Shakti Division, Fatehpur, Distt. Kangra (HP)	Customer reference No. (if any)	NA
		Date of Sampling	08/02/2024
Sampling Protocol	IS 17614 (Part 1), EL-MSP-7.3	Date of Sample Receipt	09/02/2024
Sample Collection Mode	Sampling by laboratory	Period of Analysis	09/02/2024 To 14/02/2024
Testing Location	Permanent Facility	Date of Reporting	14/02/2024
Sampling Location	Hand Pump (Near Shiv Mandir, Mohalla- Utkyal)		
Sample Description	Liquid with settleable particles.		
Standard/Specification	IS 10500 : 2012		
Packing, Markings, Seal & Qty.	2 litre Plastic Bottle Marked D/08/02		

RESULTS

I. Chemical Testing

1. Water (Drinking Water)

S.No.	Test Parameter	Unit	Result	Acceptable Limit	Permissible Limit in Absence of Alternate Source	Detection Limit	Test Method
1	pH @ 25 °C	-	7.63	6.5-8.5	No relaxation	0.5	IS 3025 (Part 11)
2	Calcium as Ca	mg/l	61	75	200	1	IS 3025 (Part 40)
3	Chloride as Cl	mg/l	7.0	250	1000	1	IS 3025 (Part 32)
4	Copper as Cu	mg/l	BDL	0.05	1.5	0.001	USEPA 3015A
5	Fluoride as F	mg/l	0.18	1.0	1.5	0.1	IS 3025 (Part 60)
6	Iron as Fe	mg/l	0.163	1.0	No relaxation	0.001	USEPA 3015A
7	Magnesium as Mg	mg/l	33	30	100	1	IS 3025 (Part 46)
8	Manganese as Mn	mg/l	0.092	0.1	0.3	0.001	USEPA 3015A
9	Nitrate as NO3	mg/l	BDL	45	No relaxation	1	APHA 23rd Ed 4500 B UV Screening Method
10	Selenium as Se	mg/l	BDL	0.01	No relaxation	0.001	USEPA 3015A
11	Sulphate as SO4	mg/l	BDL	200	400	1	IS 3025 (Part 24) Cl 4.0 Turbidity Method
12	Total Hardness as CaCO3	mg/l	288	200	600	1	IS 3025 (Part 21)
13	Zinc as Zn	mg/l	1.172	5.0	15	0.001	USEPA 3015A
14	Cadmium as Cd	mg/l	BDL	0.003	No relaxation	0.001	USEPA 3015A
15	Lead as Pb	mg/l	BDL	0.01	No relaxation	0.001	USEPA 3015A

Umesh Kumar
Authorized Signatory-Chemical

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ULR No. : TC1181824000001190F					Test Report No. : NWAL090224NA007		
Type of Sample : Water- Drinking Water							
16	Nickel as Ni	mg/l	BDL	0.02	No relaxation	0.001	USEPA 3015A
17	Arsenic as As	mg/l	BDL	0.01	No relaxation	0.001	USEPA 3015A
18	Chromium as Cr	mg/l	BDL	0.05	No relaxation	0.001	USEPA 3015A
19	Uranium as U	mg/l	0.002	0.03	No relaxation	0.001	USEPA 3015A
20	Potassium as K	mg/l	2.5	-	-	1	IS 3025 (Part 45)
21	Sodium as Na	mg/l	63	-	-	1	IS 3025 (Part 45)

Remarks : Latitude=31.970592N; Longitude=75.902841E

OTHER INFORMATION

Abbreviation : ULR: Unique Lab Report, BDL: Below Detection Level, NA: Not Applicable

Terms & Conditions : Please refer terms and conditions on backside of Test Report (Page-1)

End of Report

Umesh Kumar
Authorized Signatory-Chemical

1076 -129- -217-

Eco Paryavaran Laboratories & Consultants Pvt. Ltd.
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TEST REPORT

ULR No. : NA		Test Report No. :	NWAL090224NA007/A
Type of Sample : Water- Drinking Water			
Customer Name	Executive Engineer	Work Order No. & Date	EE/JSV/FTR/WS/2024-9928-29 Dt.: 07/02/2024
Address	Jal Shakti Division, Fatehpur, Distt. Kangra (HP)	Customer reference No. (If any)	NA
		Date of Sampling	08/02/2024
Sampling Protocol	IS 17614 (Part 1), EL-MSP-7.3	Date of Sample Receipt	09/02/2024
Sample Collection Mode	Sampling by laboratory	Period of Analysis	09/02/2024 To 14/02/2024
Testing Location	Permanent Facility	Date of Reporting	14/02/2024
Sampling Location	Hand Pump (Near Shiv Mandir, Mohalla- Utkyal)		
Sample Description	Liquid with settleable particles.		
Standard/Specification	IS 10500 : 2012		
Packing, Markings, Seal & Qty.	2 litre Plastic Bottle Marked D/08/02		

RESULTS

I. Chemical Testing

1. Water (Drinking Water)

S.No.	Test Parameter	Unit	Result	Acceptable Limit	Permissible Limit in Absence of Alternate Source	Detection Limit	Test Method
1	Conductivity	µmho/cm	665	-	-	1	IS 3025 (Part 14)
2	Bicarbonate as HCO3	mg/l	412	-	-	1	IS:3025 (Part-23)
3	Carbonate as CO3	mg/l	BDL	-	-	1	IS:3025 (Part-23)
4	Silica as SiO2	mg/l	BDL	-	-	1	APHA23rd Ed 4500D-Hetropoly Blue Method

Remarks : Latitude=31.970592N; Longitude=75.902841E
This test report is the part of Test Report No.NWAL090224NA007

OTHER INFORMATION

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Terms & Conditions : Please refer terms and conditions on backside of Test Report (Page-1)

End of Report

Dinesh Kumar
Authorized Signatory-Chemical

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Eco Paryavaran Laboratories & Consultants Pvt. Ltd.
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TEST REPORT

ULR No. : TC118182400000119lF		Test Report No. : NWAL090224NA008	
Type of Sample : Water- Drinking Water			
Customer Name	Executive Engineer	Work Order No. & Date	EE/JSV/FTR/WS/2024-9925-29 Dt.: 07/02/2024
Address	Jal Shakti Division, Fatehpur, Distt. Kangra (HP)	Customer reference No. (If any)	NA
		Date of Sampling	08/02/2024
Sampling Protocol	IS 17614 (Part 1), EL-MSP-7.3	Date of Sample Receipt	09/02/2024
Sample Collection Mode	Sampling by laboratory	Period of Analysis	09/02/2024 To 14/02/2024
Testing Location	Permanent Facility	Date of Reporting	14/02/2024
Sampling Location	Hand Pump (Near Kangra Central Co-Operative Bank- Vill. Sathana)		
Sample Description	Liquid with settleable particles.		
Standard/Specification	IS 10500 : 2012		
Packing, Markings, Seal & Qty.	2 litre Plastic Bottle Marked D/08/03		

RESULTS

I. Chemical Testing

1. Water (Drinking Water)

S.No.	Test Parameter	Unit	Result	Acceptable Limit	Permissible Limit in Absence of Alternate Source	Detection Limit	Test Method
1	pH @ 25 °C	-	7.55	6.5-8.5	No relaxation	0.5	IS 3025 (Part 11)
2	Calcium as Ca	mg/l	22	75	200	1	IS 3025 (Part 40)
3	Chloride as Cl	mg/l	17	250	1000	1	IS 3025 (Part 32)
4	Copper as Cu	mg/l	BDL	0.05	1.5	0.001	USEPA 3015A
5	Fluoride as F	mg/l	0.57	1.0	1.5	0.1	IS 3025 (Part 60)
6	Iron as Fe	mg/l	0.062	1.0	No relaxation	0.001	USEPA 3015A
7	Magnesium as Mg	mg/l	10	30	100	1	IS 3025 (Part 46)
8	Manganese as Mn	mg/l	0.015	0.1	0.3	0.001	USEPA 3015A
9	Nitrate as NO3	mg/l	2.1	45	No relaxation	1	APHA 23rd Ed 4500 B UV Screening Method
10	Selenium as Se	mg/l	BDL	0.01	No relaxation	0.001	USEPA 3015A
11	Sulphate as SO4	mg/l	12	200	400	1	IS 3025 (Part 24) Cl 4.0- Turbidity Method
12	Total Hardness as CaCO3	mg/l	96	200	600	1	IS 3025 (Part 21)
13	Zinc as Zn	mg/l	0.151	5.0	15	0.001	USEPA 3015A
14	Cadmium as Cd	mg/l	BDL	0.003	No relaxation	0.001	USEPA 3015A
15	Lead as Pb	mg/l	BDL	0.01	No relaxation	0.001	USEPA 3015A

Umesh Kumar
Authorized Signatory-Chemical

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ULR No. : TC11818240000001191F						Test Report No. : NWAL090224NA008	
Type of Sample : Water- Drinking Water							
16	Nickel as Ni	mg/l	BDL	0.02	No relaxation	0.001	USEPA 3015A
17	Arsenic as As	mg/l	0.004	0.01	No relaxation	0.001	USEPA 3015A
18	Chromium as Cr	mg/l	BDL	0.05	No relaxation	0.001	USEPA 3015A
19	Uranium as U	mg/l	0.004	0.03	No relaxation	0.001	USEPA 3015A
20	Potassium as K	mg/l	1.2	-	-	1	IS 3025 (Part 45)
21	Sodium as Na	mg/l	133	-	-	1	IS 3025 (Part 45)

Remarks : Latitude=31.973107N; Longitude=75.910944E

OTHER INFORMATION

Abbreviation : ULR: Unique Lab Report, BDL: Below Detection Level, NA: Not Applicable

Terms & Conditions : Please refer terms and conditions on backside of Test Report (Page-1)

End of Report

Umesh Kumar
Authorized Signatory-Chemical

Eco Paryavaran Laboratories & Consultants Pvt. Ltd.
(Formerly known as Eco Laboratories & Consultants Pvt. Ltd.)

TEST REPORT

ULR No. : NA		Test Report No. :	NWAL090224NA008/A
Type of Sample : Water- Drinking Water			
Customer Name	Executive Engineer	Work Order No. & Date	EE/ISV/FTR/WS/2024-9928-29 Dt.: 07/02/2024
Address	Jal Shakti Division, Fatehpur, Distt. Kangra (HP)	Customer reference No. (If any)	NA
		Date of Sampling	08/02/2024
Sampling Protocol	IS 17614 (Part 1), EL-MSP-7.3	Date of Sample Receipt	09/02/2024
Sample Collection Mode	Sampling by laboratory	Period of Analysis	09/02/2024 To 14/02/2024
Testing Location	Permanent Facility	Date of Reporting	14/02/2024
Sampling Location	Hand Pump (Near Kangra Central Co-Operative Bank- Vill. Sathana)		
Sample Description	Liquid with settleable particles.		
Standard/Specification	IS 10500 : 2012		
Packing, Markings, Seal & Qty.	2 litre Plastic Bottle Marked D/08/03		

RESULTS

I. Chemical Testing

1. Water (Drinking Water)

S.No.	Test Parameter	Unit	Result	Acceptable Limit	Permissible Limit In Absence of Alternate Source	Detection Limit	Test Method
1	Conductivity	µmho/cm	703	-	-	1	IS 3025 (Part 14)
2	Bicarbonate as HCO3	mg/l	380	-	-	1	IS:3025 (Part-23)
3	Carbonate as CO3	mg/l	BDL	-	-	1	IS:3025 (Part-23)
4	Silica as SiO2	mg/l	BDL	-	-	1	APHA23rd Ed 4500D-Hetropoly Blue Method

Remarks : Latitude=31.973107N; Longitude=75.910944E
This test report is the part of Test Report No.NWAL090224NA008

OTHER INFORMATION

Abbreviation : ULR: Unique Lab Report, BDL: Below Detection Level, NA: Not Applicable

Terms & Conditions : Please refer terms and conditions on backside of Test Report (Page-1)

End of Report

Umesh Kumar
Authorized Signatory Chemical

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Eco Paryavaran Laboratories & Consultants Pvt. Ltd.
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TEST REPORT

ULR No. : TC118182400000119 2F		Test Report No. : NWAL090224NA009	
Type of Sample : Water- Drinking Water			
Customer Name	Executive Engineer	Work Order No. & Date	EE/JSV/FTR/WS/2024-9928-29 Dt.: 07/02/2024
Address	Jal Shakti Division, Fatehpur, Distt. Kangra (HP)	Customer reference No. (If any)	NA
		Date of Sampling	08/02/2024
Sampling Protocol	IS 17614 (Part 1), EL-MSP-7.3	Date of Sample Receipt	09/02/2024
Sample Collection Mode	Sampling by laboratory	Period of Analysis	09/02/2024 To 14/02/2024
Testing Location	Permanent Facility	Date of Reporting	14/02/2024
Sampling Location	Hand Pump (Near Ram Kumar House, Mohalla- Dahu Vill.- Sathana)		
Sample Description	Clear, colourless liquid.		
Standard/Specification	IS 10500 : 2012		
Packing, Markings, Seal & Qty.	2 litre Plastic Bottle Marked D/08/04		

RESULTS

I. Chemical Testing

1. Water (Drinking Water)

S.No.	Test Parameter	Unit	Result	Acceptable Limit	Permissible Limit in Absence of Alternate Source	Detection Limit	Test Method
1	pH @ 25 °C	-	7.43	6.5-8.5	No relaxation	0.5	IS 3025 (Part 11)
2	Calcium as Ca	mg/l	61	75	200	1	IS 3025 (Part 40)
3	Chloride as Cl	mg/l	35	250	1000	1	IS 3025 (Part 32)
4	Copper as Cu	mg/l	BDL	0.05	1.5	0.001	USEPA 3015A
5	Fluoride as F	mg/l	0.57	1.0	1.5	0.1	IS 3025 (Part 60)
6	Iron as Fe	mg/l	0.017	1.0	No relaxation	0.001	USEPA 3015A
7	Magnesium as Mg	mg/l	23	30	100	1	IS 3025 (Part 46)
8	Manganese as Mn	mg/l	0.016	0.1	0.3	0.001	USEPA 3015A
9	Nitrate as NO3	mg/l	7.3	45	No relaxation	1	APHA 23rd Ed 4500 B UV Screening Method
10	Selenium as Se	mg/l	BDL	0.01	No relaxation	0.001	USEPA 3015A
11	Sulphate as SO4	mg/l	35	200	400	1	IS 3025 (Part 24) Cl 4.0- Turbidity Method
12	Total Hardness as CaCO3	mg/l	248	200	600	1	IS 3025 (Part 21)
13	Zinc as Zn	mg/l	0.136	5.0	15	0.001	USEPA 3015A
14	Cadmium as Cd	mg/l	BDL	0.003	No relaxation	0.001	USEPA 3015A
15	Lead as Pb	mg/l	BDL	0.01	No relaxation	0.001	USEPA 3015A

Umesh Kumar
Authorized Signatory-Chemical

ECO BHAWAN E-207, Industrial Area, Phase VIII-B (Sector-74), Mohali (Punjab) 160071
0172-4616225 9781303109 contact@ecoparyavaran.org | md@ecoparyavaran.org www.ecoparyavaran.org

ULR No. : TC118182400000119 2F					Test Report No. : NWAL090224NA009		
Type of Sample : Water- Drinking Water							
16	Nickel as Ni	mg/l	BDL	0.02	No relaxation	0.001	USEPA 3015A
17	Arsenic as As	mg/l	0.01	0.01	No relaxation	0.001	USEPA 3015A
18	Chromium as Cr	mg/l	BDL	0.05	No relaxation	0.001	USEPA 3015A
19	Uranium as U	mg/l	0.025	0.03	No relaxation	0.001	USEPA 3015A
20	Potassium as K	mg/l	1.2	-	-	1	IS 3025 (Part 45)
21	Sodium as Na	mg/l	154	-	-	1	IS 3025 (Part 45)

Remarks : Latitude=31.967857N; Longitude=75.91806E

OTHER INFORMATION

Abbreviation : ULR: Unique Lab Report, BDL: Below Detection Level, NA: Not Applicable

Terms & Conditions : Please refer terms and conditions on backside of Test Report (Page-1)

End of Report

Umesh Kumar
Authorized Signatory-Chemical

1082

-135- -223-

Eco Paryavaran Laboratories & Consultants Pvt. Ltd.
(Formerly known as Eco Laboratories & Consultants Pvt. Ltd.)

TEST REPORT

ULR No. : NA		Test Report No. :	NWAL090224NA009/A
Type of Sample : Water- Drinking Water			
Customer Name	Executive Engineer	Work Order No. & Date	EE/JSV/FTR/WS/2024-9928-29 Dt.: 07/02/2024
Address	Jal Shakti Division, Fatehpur, Distt. Kangra (HP)	Customer reference No. (If any)	NA
		Date of Sampling	08/02/2024
Sampling Protocol	IS 17614 (Part 1), EL-MSP-7.3	Date of Sample Receipt	09/02/2024
Sample Collection Mode	Sampling by laboratory	Period of Analysis	09/02/2024 To 14/02/2024
Testing Location	Permanent Facility	Date of Reporting	14/02/2024
Sampling Location	Hand Pump (Near Ram Kumar House, Mohalla- Dahu Vill.- Sathana)		
Sample Description	Clear, colourless liquid.		
Standard/Specification	IS 10500 : 2012		
Packing, Markings, Seal & Qty.	2 litre Plastic Bottle Marked D/08/04		

RESULTS

1. Chemical Testing

1. Water (Drinking Water)

S.No.	Test Parameter	Unit	Result	Acceptable Limit	Permissible Limit in Absence of Alternate Source	Detection Limit	Test Method
1	Conductivity	µmho/cm	838	-	-	1	IS 3025 (Part 14)
2	Bicarbonate as HCO3	mg/l	440	-	-	1	IS:3025 (Part-23)
3	Carbonate as CO3	mg/l	BDL	-	-	1	IS:3025 (Part-23)
4	Silica as SiO2	mg/l	BDL	-	-	1	APHA23rd Ed 4500D-Hetropoly Blue Method

Remarks : Latitude=31.967857N; Longitude=75.91806E

This test report is the part of Test Report No.NWAL090224NA009

OTHER INFORMATION

Abbreviation : ULR: Unique Lab Report, BDL: Below Detection Level, NA: Not Applicable

Terms & Conditions : Please refer terms and conditions on backside of Test Report (Page-1)

End of Report

Umesh Kumar
Authorized Signatory-Chemical

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Eco Paryavaran Laboratories & Consultants Pvt. Ltd.
(Formerly known as Eco Laboratories & Consultants Pvt. Ltd.)

TEST REPORT

ULR No. : TC118182400000119 3F		Test Report No. : NWAL090224NA010	
Type of Sample : Water - Drinking Water			
Customer Name	Executive Engineer	Work Order No. & Date	EE/JSV/FTR/WS/2024-9928-29 Dt.: 07/02/2024
Address	Jal Shakti Division, Fatehpur, Distt. Kangra (HP)	Customer reference No. (If any)	NA
		Date of Sampling	08/02/2024
Sampling Protocol	IS 17614 (Part 1), EL-MSP-7.3	Date of Sample Receipt	09/02/2024
Sample Collection Mode	Sampling by laboratory	Period of Analysis	09/02/2024 To 14/02/2024
Testing Location	Permanent Facility	Date of Reporting	14/02/2024
Sampling Location	Hand Pump (Near Radha Soami Satsang Beas Vill- Sathana)		
Sample Description	liquid with settleable particles		
Standard/Specification	IS 10500 : 2012		
Packing, Markings, Seal & Qty.	2 litre Plastic Bottle Marked D/08/05		

RESULTS

I. Chemical Testing

1. Water (Drinking Water)

S.No.	Test Parameter	Unit	Result	Acceptable Limit	Permissible Limit in Absence of Alternate Source	Detection Limit	Test Method
1	pH @ 25 °C	-	8.15	6.5-8.5	No relaxation	0.5	IS 3025 (Part 11)
2	Calcium as Ca	mg/l	4.8	75	200	1	IS 3025 (Part 40)
3	Chloride as Cl	mg/l	23	250	1000	1	IS 3025 (Part 32)
4	Copper as Cu	mg/l	BDL	0.05	1.5	0.001	USEPA 3015A
5	Fluoride as F	mg/l	0.83	1.0	1.5	0.1	IS 3025 (Part 60)
6	Iron as Fe	mg/l	0.242	1.0	No relaxation	0.001	USEPA 3015A
7	Magnesium as Mg	mg/l	2.0	30	100	1	IS 3025 (Part 46)
8	Manganese as Mn	mg/l	0.005	0.1	0.3	0.001	USEPA 3015A
9	Nitrate as NO3	mg/l	BDL	45	No relaxation	1	APHA 23rd Ed 4500 B UV Screening Method
10	Selenium as Se	mg/l	BDL	0.01	No relaxation	0.001	USEPA 3015A
11	Sulphate as SO4	mg/l	9.7	200	400	1	IS 3025 (Part 24) Cl 4.0- Turbidity Method
12	Total Hardness as CaCO3	mg/l	20	200	600	1	IS 3025 (Part 21)
13	Zinc as Zn	mg/l	0.53	5.0	15	0.001	USEPA 3015A
14	Cadmium as Cd	mg/l	BDL	0.003	No relaxation	0.001	USEPA 3015A
15	Lead as Pb	mg/l	BDL	0.01	No relaxation	0.001	USEPA 3015A

Umesh Kumar
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ULR No. : TC118182400000119 3F					Test Report No. : NWAL090224NA010		
Type of Sample : Water- Drinking Water							
16	Nickel as Ni	mg/l	BDL	0.02	No relaxation	0.001	USEPA 3015A
17	Arsenic as As	mg/l	0.01	0.01	No relaxation	0.001	USEPA 3015A
18	Chromium as Cr	mg/l	BDL	0.05	No relaxation	0.001	USEPA 3015A
19	Uranium as U	mg/l	BDL	0.03	No relaxation	0.001	USEPA 3015A
20	Potassium as K	mg/l	BDL	-	-	1	IS 3025 (Part 45)
21	Sodium as Na	mg/l	373	-	-	1	IS 3025 (Part 45)

Remarks : Latitude=31.969865N; Longitude=75.922523E

OTHER INFORMATION

Abbreviation : ULR: Unique Lab Report, BDL: Below Detection Level, NA: Not Applicable

Terms & Conditions : Please refer terms and conditions on backside of Test Report (Page-1)

End of Report

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Eco Paryavaran Laboratories & Consultants Pvt. Ltd.

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TEST REPORT

ULR No. : NA		Test Report No. :	NWAL090224NA010/A
Type of Sample : Water- Drinking Water			
Customer Name	Executive Engineer	Work Order No. & Date	EE/JSV/FTR/WS/2024-9928-29 Dt.: 07/02/2024
Address	Jal Shakti Division, Fatehpur, Distt. Kangra (HP)	Customer reference No. (If any)	NA
		Date of Sampling	08/02/2024
Sampling Protocol	IS 17614 (Part 1), EL-MSP-7.3	Date of Sample Receipt	09/02/2024
Sample Collection Mode	Sampling by laboratory	Period of Analysis	09/02/2024 To 14/02/2024
Testing Location	Permanent Facility	Date of Reporting	14/02/2024
Sampling Location	Hand Pump (Near Radha Soami Satsang Beas Vill- Sathana)		
Sample Description	liquid with settleable particles		
Standard/Specification	IS 10500 : 2012		
Packing, Markings, Seal & Qty.	2 litre Plastic Bottle Marked 0/08/05		

RESULTS

I. Chemical Testing

1. Water (Drinking Water)

S.No.	Test Parameter	Unit	Result	Acceptable Limit	Permissible Limit in Absence of Alternate Source	Detection Limit	Test Method
1	Conductivity	µmho/cm	848	-	-	1	IS 3025 (Part 14)
2	Bicarbonate as HCO3	mg/l	452	-	-	1	IS:3025 (Part-23)
3	Carbonate as CO3	mg/l	BDL	-	-	1	IS:3025 (Part-23)
4	Silica as SiO2	mg/l	BDL	-	-	1	APHA23rd Ed 4500D-Hetropoly Blue Method

Remarks : Latitude=31.969865N; Longitude=75.922523E

This test report is the part of Test Report No.NWAL090224NA010

OTHER INFORMATION

Abbreviation : ULR: Unique Lab Report, BDL: Below Detection Level, NA: Not Applicable

Terms & Conditions : Please refer terms and conditions on backside of Test Report (Page-1)

End of Report

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1086

— 139 — -227-

Eco Paryavaran Laboratories & Consultants Pvt. Ltd.
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TEST REPORT

ULR No. : TC118182400000119 4F		Test Report No. :	NWAL090224NA011
Type of Sample : Water- Drinking Water			
Customer Name	Executive Engineer	Work Order No. & Date	EE/JSV/FTR/WS/2024-9928-29 Dt.: 07/02/2024
Address	Jal Shakti Division, Fatehpur, Distt. Kangra (HP)	Customer reference No. (If any)	NA
		Date of Sampling	08/02/2024
Sampling Protocol	IS 17614 (Part 1), EL-MSP-7.3	Date of Sample Receipt	09/02/2024
Sample Collection Mode	Sampling by laboratory	Period of Analysis	09/02/2024 To 14/02/2024
Testing Location	Permanent Facility	Date of Reporting	14/02/2024
Sampling Location	Hand Pump (Near Shiv Mandir, Mohalla-Changol Vill. Sathana)		
Sample Description	Clear, colourless liquid.		
Standard/Specification	IS 10500 : 2012		
Packing, Markings, Seal & Qty.	2 litre Plastic Bottle Marked D/08/05		

RESULTS

I. Chemical Testing

1. Water (Drinking Water)

S.No.	Test Parameter	Unit	Result	Acceptable Limit	Permissible Limit in Absence of Alternate Source	Detection Limit	Test Method
1	pH @ 25 °C	-	8.08	6.5-8.5	No relaxation	0.5	IS 3025 (Part 11)
2	Calcium as Ca	mg/l	3.2	75	200	1	IS 3025 (Part 40)
3	Chloride as Cl	mg/l	99	250	1000	1	IS 3025 (Part 32)
4	Copper as Cu	mg/l	BDL	0.05	1.5	0.001	USEPA 3015A
5	Fluoride as F	mg/l	0.84	1.0	1.5	0.1	IS 3025 (Part 60)
6	Iron as Fe	mg/l	0.071	1.0	No relaxation	0.001	USEPA 3015A
7	Magnesium as Mg	mg/l	4.9	30	100	1	IS 3025 (Part 46)
8	Manganese as Mn	mg/l	0.009	0.1	0.3	0.001	USEPA 3015A
9	Nitrate as NO3	mg/l	BDL	45	No relaxation	1	APHA 23rd Ed 4500 B UV Screening Method
10	Selenium as Se	mg/l	BDL	0.01	No relaxation	0.001	USEPA 3015A
11	Sulphate as SO4	mg/l	81	200	400	1	IS 3025 (Part 24) Cl 4.0- Turbidity Method
12	Total Hardness as CaCO3	mg/l	28	200	600	1	IS 3025 (Part 21)
13	Zinc as Zn	mg/l	0.012	5.0	15	0.001	USEPA 3015A
14	Cadmium as Cd	mg/l	BDL	0.003	No relaxation	0.001	USEPA 3015A
15	Lead as Pb	mg/l	BDL	0.01	No relaxation	0.001	USEPA 3015A

Umesh Kumar
Authorized Signatory Chemical

Water- EL/FM1.1 & 2-W

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-140-
-228-

ULR No. : TC118182400000119 4F					Test Report No. : NWAL090224NA011		
Type of Sample : Water - Drinking Water							
16	Nickel as Ni	mg/l	BDL	0.02	No relaxation	0.001	USEPA 3015A
17	Arsenic as As	mg/l	0.01	0.01	No relaxation	0.001	USEPA 3015A
18	Chromium as Cr	mg/l	BDL	0.05	No relaxation	0.001	USEPA 3015A
19	Uranium as U	mg/l	BDL	0.03	No relaxation	0.001	USEPA 3015A
20	Potassium as K	mg/l	1.2	-	-	1	IS 3025 (Part 45)
21	Sodium as Na	mg/l	305	-	-	1	IS 3025 (Part 45)

Remarks : Latitude=31.971441N; Longitude=75.914128E

OTHER INFORMATION

Abbreviation : ULR: Unique Lab Report, BDL: Below Detection Level, NA: Not Applicable

Terms & Conditions : Please refer terms and conditions on backside of Test Report (Page-1)

End of Report

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1088

-141- -229-

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TEST REPORT

ULR No. : NA		Test Report No. :	NWAL090224NA011/A
Type of Sample : Water- Drinking Water			
Customer Name	Executive Engineer	Work Order No. & Date	EE/JSV/FTR/WS/2024-9928-29 Dt.: 07/02/2024
Address	Jal Shakti Division, Fatehpur, Distt. Kangra (HP)	Customer reference No. (If any)	NA
		Date of Sampling	08/02/2024
Sampling Protocol	IS 17614 (Part 1), EL-MSP-7.3	Date of Sample Receipt	09/02/2024
Sample Collection Mode	Sampling by laboratory	Period of Analysis	09/02/2024 To 14/02/2024
Testing Location	Permanent Facility	Date of Reporting	14/02/2024
Sampling Location	Hand Pump (Near Shiv Mandir, Mohalla-Changol Vill. Sathana)		
Sample Description	Clear, colourless liquid.		
Standard/Specification	IS 10500 : 2012		
Packing, Markings, Seal & Qty.	2 litre Plastic Bottle Marked 0/08/06		

RESULTS

I. Chemical Testing

1. Water (Drinking Water)

S.No.	Test Parameter	Unit	Result	Acceptable Limit	Permissible Limit in Absence of Alternate Source	Detection Limit	Test Method
1	Conductivity	µmho/cm	905	-	-	1	IS 3025 (Part 14)
2	Bicarbonate as HCO3	mg/l	316	-	-	1	IS:3025 (Part-23)
3	Carbonate as CO3	mg/l	BDL	-	-	1	IS:3025 (Part-23)
4	Silica as SiO2	mg/l	BDL	-	-	1	APHA23rd Ed 4500D-Hetropoly Blue Method

Remarks : Latitude=31.971441N; Longitude=75.914128E
This test report is the part of Test Report No NWAL090224NA011

OTHER INFORMATION

Abbreviation : ULR: Unique Lab Report, BDL: Below Detection Level, NA: Not Applicable

Terms & Conditions : Please refer terms and conditions on backside of Test Report (Page-1)

End of Report

Umesh Kumar
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Water-EL/FM1-7.8.2-W

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TEST REPORT

ULR No. : TC118182400000119SF		Test Report No. :	NWAL090224NA012
Type of Sample : Water- Drinking Water			
Customer Name	Executive Engineer	Work Order No. & Date	EE/JSV/FTR/WS/2024-9928-29 Dt.: 07/02/2024
Address	Jal Shakti Division, Fatehpur, Distt. Kangra (HP)	Customer reference No. (If any)	NA
		Date of Sampling	08/02/2024
Sampling Protocol	IS 17614 (Part 1), EL-MSP-7.3	Date of Sample Receipt	09/02/2024
Sample Collection Mode	Sampling by laboratory	Period of Analysis	09/02/2024 To 14/02/2024
Testing Location	Permanent Facility	Date of Reporting	14/02/2024
Sampling Location	Tubewell No.36- Vill. Sathana		
Sample Description	Clear, colourless liquid.		
Standard/Specification	IS 10500 : 2012		
Packing, Markings, Seal & Qty.	2 litre Plastic Bottle Marked D/08/07		

RESULTS

I. Chemical Testing

1. Water (Drinking Water)

S.No.	Test Parameter	Unit	Result	Acceptable Limit	Permissible Limit in Absence of Alternate Source	Detection Limit	Test Method
1	pH @ 25 °C	-	7.78	6.5-8.5	No relaxation	0.5	IS 3025 (Part 11)
2	Calcium as Ca	mg/l	50	75	200	1	IS 3025 (Part 40)
3	Chloride as Cl	mg/l	12	250	1000	1	IS 3025 (Part 32)
4	Copper as Cu	mg/l	BDL	0.05	1.5	0.001	USEPA 3015A
5	Fluoride as F	mg/l	0.14	1.0	1.5	0.1	IS 3025 (Part 60)
6	Iron as Fe	mg/l	0.016	1.0	No relaxation	0.001	USEPA 3015A
7	Magnesium as Mg	mg/l	15	30	100	1	IS 3025 (Part 46)
8	Manganese as Mn	mg/l	0.007	0.1	0.3	0.001	USEPA 3015A
9	Nitrate as NO3	mg/l	6.0	45	No relaxation	1	APHA 23rd Ed 4500 B UV Screening Method
10	Selenium as Se	mg/l	BDL	0.01	No relaxation	0.001	USEPA 3015A
11	Sulphate as SO4	mg/l	7.0	200	400	1	IS 3025 (Part 24) Cl 4.0- Turbidity Method
12	Total Hardness as CaCO3	mg/l	188	200	600	1	IS 3025 (Part 21)
13	Zinc as Zn	mg/l	0.148	5.0	15	0.001	USEPA 3015A
14	Cadmium as Cd	mg/l	BDL	0.003	No relaxation	0.001	USEPA 3015A
15	Lead as Pb	mg/l	BDL	0.01	No relaxation	0.001	USEPA 3015A

Umesh Kumar
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1090

—143— -231-

ULR No. : TC118182400000119SF					Test Report No. : NWAL090224NA012		
Type of Sample : Water- Drinking Water							
16	Nickel as Ni	mg/l	BDL	0.02	No relaxation	0.001	USEPA 3015A
17	Arsenic as As	mg/l	BDL	0.01	No relaxation	0.001	USEPA 3015A
18	Chromium as Cr	mg/l	BDL	0.05	No relaxation	0.001	USEPA 3015A
19	Uranium as U	mg/l	0.008	0.03	No relaxation	0.001	USEPA 3015A
20	Potassium as K	mg/l	3.1	-	-	1	IS 3025 (Part 45)
21	Sodium as Na	mg/l	25	-	-	1	IS 3025 (Part 45)

Remarks : Latitude=31.968322N; Longitude=75.895966E

OTHER INFORMATION

Abbreviation : ULR: Unique Lab Report, BDL: Below Detection Level, NA: Not Applicable

Terms & Conditions : Please refer terms and conditions on backside of Test Report (Page-1)

End of Report

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TEST REPORT

ULR No. : NA		Test Report No. :	NWAL090224NA012/A
Type of Sample : Water- Drinking Water			
Customer Name	Executive Engineer	Work Order No. & Date	EE/JSV/FTR/WS/2024-9928-29 Dt.: 07/02/2024
Address	Jal Shakti Division, Fatehpur, Distt. Kangra (HP)	Customer reference No. (If any)	NA
		Date of Sampling	08/02/2024
Sampling Protocol	IS 17614 (Part 1), EL-MSP-7.3	Date of Sample Receipt	09/02/2024
Sample Collection Mode	Sampling by laboratory	Period of Analysis	09/02/2024 To 14/02/2024
Testing Location	Permanent Facility	Date of Reporting	14/02/2024
Sampling Location	Tubewell No.36- Vill. Sathiana		
Sample Description	Clear, colourless liquid		
Standard/Specification	IS 10500 : 2012		
Packing, Markings, Seal & Qty.	2 litre Plastic Bottle Marked D/08/07		

RESULTS

I. Chemical Testing

1. Water (Drinking Water)

S.No.	Test Parameter	Unit	Result	Acceptable Limit	Permissible Limit in Absence of Alternate Source	Detection Limit	Test Method
1	Conductivity	µmho/cm	477	-	-	1	IS 3025 (Part 14)
2	Bicarbonate as HCO3	mg/l	220	-	-	1	IS:3025 (Part-23)
3	Carbonate as CO3	mg/l	BDL	-	-	1	IS:3025 (Part-23)
4	Silica as SiO2	mg/l	BDL	-	-	1	APHA23rd Ed 4500D-Hetropoly Blue Method

Remarks : Latitude=31.968322N; Longitude=75.895966E
This test report is the part of Test Report No.NWAL090224NA012

OTHER INFORMATION

Abbreviation : ULR: Unique Lab Report, BDL: Below Detection Level, NA: Not Applicable

Terms & Conditions : Please refer terms and conditions on backside of Test Report (Page-1)

End of Report

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TEST REPORT

ULR No. : TC118182400000119GF		Test Report No. : NWAL090224NA013	
Type of Sample : Water- Drinking Water			
Customer Name	Executive Engineer	Work Order No. & Date	EE/ISV/FTR/WS/2024-9928-29 Dt.: 07/02/2024
Address	Jal Shakti Division, Fatehpur, Distt. Kangra (HP)	Customer reference No. (If any)	NA
		Date of Sampling	08/02/2024
Sampling Protocol	IS 17614 (Part 1), EL-MSP-7.3	Date of Sample Receipt	09/02/2024
Sample Collection Mode	Sampling by laboratory	Period of Analysis	09/02/2024 To 14/02/2024
Testing Location	Permanent Facility	Date of Reporting	14/02/2024
Sampling Location	Borewell (Near Nursery Vill.- Ray Sathana Phase-2nd)		
Sample Description	Clear, colourless liquid.		
Standard/Specification	IS 10500 : 2012		
Packing, Markings, Seal & Qty.	2 litre Plastic Bottle Marked D/08/08		

RESULTS

I. Chemical Testing

1. Water (Drinking Water)

S.No.	Test Parameter	Unit	Result	Acceptable Limit	Permissible Limit in Absence of Alternate Source	Detection Limit	Test Method
1	pH @ 25 °C	-	7.66	6.5-8.5	No relaxation	0.5	IS 3025 (Part 11)
2	Calcium as Ca	mg/l	21	75	200	1	IS 3025 (Part 40)
3	Chloride as Cl	mg/l	10	250	1000	1	IS 3025 (Part 32)
4	Copper as Cu	mg/l	BDL	0.05	1.5	0.001	USEPA 3015A
5	Fluoride as F	mg/l	0.24	1.0	1.5	0.1	IS 3025 (Part 60)
6	Iron as Fe	mg/l	0.005	1.0	No relaxation	0.001	USEPA 3015A
7	Magnesium as Mg	mg/l	38	30	100	1	IS 3025 (Part 46)
8	Manganese as Mn	mg/l	0.003	0.1	0.3	0.001	USEPA 3015A
9	Nitrate as NO3	mg/l	3.3	45	No relaxation	1	APHA 23rd Ed 4500 B UV Screening Method
10	Selenium as Se	mg/l	BDL	0.01	No relaxation	0.001	USEPA 3015A
11	Sulphate as SO4	mg/l	2.4	200	400	1	IS 3025 (Part 24) Cl 4.0- Turbidity Method
12	Total Hardness as CaCO3	mg/l	208	200	600	1	IS 3025 (Part 21)
13	Zinc as Zn	mg/l	0.212	5.0	15	0.001	USEPA 3015A
14	Cadmium as Cd	mg/l	BDL	0.003	No relaxation	0.001	USEPA 3015A
15	Lead as Pb	mg/l	BDL	0.01	No relaxation	0.001	USEPA 3015A

Umesh Kumar
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ULR No. : TC11818240000001196F					Test Report No. : NWAL090224NA013		
Type of Sample : Water- Drinking Water							
16	Nickel as Ni	mg/l	BDL	0.02	No relaxation	0.001	USEPA 3015A
17	Arsenic as As	mg/l	BDL	0.01	No relaxation	0.001	USEPA 3015A
18	Chromium as Cr	mg/l	BDL	0.05	No relaxation	0.001	USEPA 3015A
19	Uranium as U	mg/l	0.003	0.03	No relaxation	0.001	USEPA 3015A
20	Potassium as K	mg/l	2.4	-	-	1	IS 3025 (Part 45)
21	Sodium as Na	mg/l	18	-	-	1	IS 3025 (Part 45)

Remarks : Latitude=31.961615N; Longitude=75.894271E

OTHER INFORMATION

Abbreviation : ULR: Unique Lab Report, BDL: Below Detection Level, NA: Not Applicable

Terms & Conditions : Please refer terms and conditions on backside of Test Report [Page-1]

End of Report

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1094

-147--235-

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TEST REPORT

ULR No. : NA		Test Report No. :	NWAL090224NA013/A
Type of Sample : Water- Drinking Water			
Customer Name	Executive Engineer	Work Order No. & Date	EE/JSV/FTR/WS/2024-9928-29 Dt.: 07/02/2024
Address	Jal Shakti Division, Fatehpur, Distt. Kangra (HP)	Customer reference No. (If any)	NA
		Date of Sampling	08/02/2024
Sampling Protocol	IS 17614 (Part 1), EL-MSP-7.3	Date of Sample Receipt	09/02/2024
Sample Collection Mode	Sampling by laboratory	Period of Analysis	09/02/2024 To 14/02/2024
Testing Location	Permanent Facility	Date of Reporting	14/02/2024
Sampling Location	Borewell (Near Nursery Vill.- Ray Sathana Phase-2nd)		
Sample Description	Clear, colourless liquid.		
Standard/Specification	IS 10500 : 2012		
Packing, Markings, Seal & Qty.	2 litre Plastic Bottle Marked D/08/08		

RESULTS

I. Chemical Testing

1. Water (Drinking Water)

S.No.	Test Parameter	Unit	Result	Acceptable Limit	Permissible Limit in Absence of Alternate Source	Detection Limit	Test Method
1	Conductivity	µmho/cm	394	-	-	1	IS 3025 (Part 14)
2	Bicarbonate as HCO3	mg/l	240	-	-	1	IS:3025 (Part-23)
3	Carbonate as CO3	mg/l	BDL	-	-	1	IS:3025 (Part-23)
4	Silica as SiO2	mg/l	BDL	-	-	1	APHA23rd Ed 4500D-Hetropoly Blue Method

Remarks : Latitude=31.961615N; Longitude=75.894271E
This test report is the part of Test Report No.NWAL090224NA013

OTHER INFORMATION

Abbreviation : ULR: Unique Lab Report, BDL: Below Detection Level, NA: Not Applicable

Terms & Conditions : Please refer terms and conditions on backside of Test Report (Page-1)

End of Report

Umesh Kumar
Authorized Signatory-Chemical

ECO BHAWAN E-207, Industrial Area, Phase VIII-B (Sector-74), Mohali (Punjab) 160071
0172-4616225 9781303109 contact@ecoparyavaran.org | md@ecoparyavaran.org www.ecoparyavaran.org

Eco Paryavaran Laboratories & Consultants Pvt. Ltd.

(Formerly known as Eco Laboratories & Consultants Pvt. Ltd.)

TEST REPORT

ULR No. : TC118182400000119?F		Test Report No. :	NWAL090224NA014
Type of Sample : Water- Drinking Water			
Customer Name	Executive Engineer	Work Order No. & Date	EE/ISV/FTR/WS/2024-9928-29 Dt.: 07/02/2024
Address	Jal Shakti Division, Fatehpur, Distt. Kangra (HP)	Customer reference No. (If any)	NA
		Date of Sampling	08/02/2024
Sampling Protocol	IS 17614 (Part 1), EL-MSP-7.3	Date of Sample Receipt	09/02/2024
Sample Collection Mode	Sampling by laboratory	Period of Analysis	09/02/2024 To 14/02/2024
Testing Location	Permanent Facility	Date of Reporting	14/02/2024
Sampling Location	Public Tap- Vill. Jagir WSS & Sathana Chhabar		
Sample Description	Clear, colourless liquid.		
Standard/Specification	IS 10500 : 2012		
Packing, Markings, Seal & Qty.	2 litre Plastic Bottle Marked D/08/09		

RESULTS

I. Chemical Testing

1. Water (Drinking Water)

S.No.	Test Parameter	Unit	Result	Acceptable Limit	Permissible Limit in Absence of Alternate Source	Detection Limit	Test Method
1	pH @ 25 °C	-	7.84	6.5-8.5	No relaxation	0.5	IS 3025 (Part 11)
2	Calcium as Ca	mg/l	53	75	200	1	IS 3025 (Part 40)
3	Chloride as Cl	mg/l	13	250	1000	1	IS 3025 (Part 32)
4	Copper as Cu	mg/l	BDL	0.05	1.5	0.001	USEPA 3015A
5	Fluoride as F	mg/l	0.78	1.0	1.5	0.1	IS 3025 (Part 60)
6	Iron as Fe	mg/l	0.004	1.0	No relaxation	0.001	USEPA 3015A
7	Magnesium as Mg	mg/l	18	30	100	1	IS 3025 (Part 46)
8	Manganese as Mn	mg/l	0.005	0.1	0.3	0.001	USEPA 3015A
9	Nitrate as NO3	mg/l	7.6	45	No relaxation	1	APHA 23rd Ed 4500 B UV Screening Method
10	Selenium as Se	mg/l	BDL	0.01	No relaxation	0.001	USEPA 3015A
11	Sulphate as SO4	mg/l	7.4	200	400	1	IS 3025 (Part 24) Cl 4.0- Turbidity Method
12	Total Hardness as CaCO3	mg/l	208	200	600	1	IS 3025 (Part 21)
13	Zinc as Zn	mg/l	0.995	5.0	15	0.001	USEPA 3015A
14	Cadmium as Cd	mg/l	BDL	0.003	No relaxation	0.001	USEPA 3015A
15	Lead as Pb	mg/l	BDL	0.01	No relaxation	0.001	USEPA 3015A

Umesh Kumar
Authorized Signatory-Chemical

ECO BHAWAN E-207, Industrial Area, Phase VIII-B (Sector-74), Mohali (Punjab) 160071

0172-4616225 9781303109 contact@ecoparyavaran.org | md@ecoparyavaran.org www.ecoparyavaran.org

1096

-149-
-237-

ULR No. : TC118182400000119 7F						Test Report No. : NWAL090224NA014	
Type of Sample : Water- Drinking Water							
16	Nickel as Ni	mg/l	BDL	0.02	No relaxation	0.001	USEPA 3015A
17	Arsenic as As	mg/l	BDL	0.01	No relaxation	0.001	USEPA 3015A
18	Chromium as Cr	mg/l	BDL	0.05	No relaxation	0.001	USEPA 3015A
19	Uranium as U	mg/l	0.005	0.03	No relaxation	0.001	USEPA 3015A
20	Potassium as K	mg/l	2.5	-	-	1	IS 3025 (Part 45)
21	Sodium as Na	mg/l	25	-	-	1	IS 3025 (Part 45)

Remarks : Latitude=31.979564N; Longitude=75.869933E

OTHER INFORMATION

Abbreviation : ULR: Unique Lab Report, BDL: Below Detection Level, NA: Not Applicable

Terms & Conditions : Please refer terms and conditions on backside of Test Report (Page-1)

End of Report

Umesh Kumar
Authorized Signatory-Chemical

Eco Paryavaran Laboratories & Consultants Pvt. Ltd.
(Formerly known as Eco Paryavaran Laboratories & Consultants Pvt. Ltd.)

TEST REPORT

ULR No. : NA		Test Report No. :	NWAL090224NA014/A
Type of Sample : Water- Drinking Water			
Customer Name	Executive Engineer	Work Order No. & Date	EE/ISV/FTR/WS/2024-9928-29 Dt.: 07/02/2024
Address	Jal Shakti Division, Fatehpur, Distt. Kangra (HP)	Customer reference No. (If any)	NA
		Date of Sampling	08/02/2024
Sampling Protocol	IS 17614 (Part 1), EL-MSP-7.3	Date of Sample Receipt	09/02/2024
Sample Collection Mode	Sampling by laboratory	Period of Analysis	09/02/2024 To 14/02/2024
Testing Location	Permanent Facility	Date of Reporting	14/02/2024
Sampling Location	Public Tap- Vill. Jagir WSS & Sathana Chhabar		
Sample Description	Clear, colourless liquid.		
Standard/Specification	IS 10500 : 2012		
Packing, Markings, Seal & Qty.	2 litre Plastic Bottle Marked D/08/09		

RESULTS

I. Chemical Testing

1. Water [Drinking Water]

S.No.	Test Parameter	Unit	Result	Acceptable Limit	Permissible Limit in Absence of Alternate Source	Detection Limit	Test Method
1	Conductivity	µmho/cm	402	-	-	1	IS 3025 (Part 14)
2	Bicarbonate as HCO3	mg/l	224	-	-	1	IS:3025 (Part-23)
3	Carbonate as CO3	mg/l	BDL	-	-	1	IS:3025 (Part-23)
4	Silica as SiO2	mg/l	BDL	-	-	1	APHA23rd Ed 4500D-Hetropoly Blue Method

Remarks : Latitude=31.979564N; Longitude=75.869933E
This test report is the part of Test Report No NWAL090224NA014

OTHER INFORMATION

Abbreviation : ULR: Unique Lab Report, BDL: Below Detection Level, NA: Not Applicable

Terms & Conditions : Please refer terms and conditions on backside of Test Report (Page-1)

End of Report

Umesh Kumar
Authorized Signatory-Chemical

ECO BHAWAN E-207, Industrial Area, Phase VIII-B (Sector-74), Mohali (Punjab) 160071
0172-4616225 9781303109 contact@ecoparyavaran.org | md@ecoparyavaran.org www.ecoparyavaran.org

Annexure - V

1099

Government of Jammu and Kashmir
Jal Shakti Department
Civil Secretariat, Jammu/Srinagar
****

urgent
Sh. V. K. Choudhary ji
25/07/2024
Sh. Rakesh Pl. update and file in OA 728/2023 file
5/7/2024

(Dr SK Ambast)
Chairman CGWA,
Government of India,
Ministry of Jal Shakti,
Department of Water Resources RD & GR,
Central Ground Water Authority,
New Delhi.

No. JSD-LS02(1)/47/2024-Legal (cc no. 7427474) Dated: 21.06.2024

Subject: News item appearing in Hindustan dated 30.11.2023 titled "Arsenic found in groundwater in 25 States, fluoride in 27 States: Govt - reg.

Respected Sir,

Kindly refer your communication No-CGWA-22/3/2024-CGWA-218 Dated. 30 May, 2024, whereby status report has been sought from this Department, with further direction to file reply to Hon'ble National Green Tribunal Principal Bench, New Delhi, ensuring that there is no discrepancy between the information between the information furnished to the Authority and that to Hon'ble Tribunal

In this regard, I am directed to forward herewith the status report/ reply prepared by this Department (Enclosed as Annexure-A), for your kind perusal. Besides, it is requested to advice, whether consolidated reply is to be filed by the Authority itself or this Department has to file the same.

With highest regards

Your faithfully

20/06/24
(Akshar Kotwal)IKAS
Under Secretary to the Govt,
Jal Shakti Department,
UT of J&K.

Copy to:
1. Pvt. Secretary to Financial Commissioner (ACS), JSD for kind information of the Financial Commissioner (ACS).

1100

- 240 -

ANNEXURE "A"

BEFORE THE NATIONAL GREEN TRIBUNAL PRINCIPAL BENCH, NEW DELHI

Original Application No.728/2023

In re: News item appearing in Hindustan dated 30.11.2023 titled" Arsenic found in ground water in 25 States,fluoride in 27 States:: Govt.

In The Matter Of: Compliance Report in terms of order dated 20-11-2023 passed in O.A.No.728/2023 titled In re: News item appearing in Hindustan dated 30.11.2023 titled "Arsenic found in Groundwater in 25 States Fluoride in 27 States; Govt."

Background: The Principal Bench New Delhi of Hon'ble National Green Tribunal has took Suo Moto Cognizance on the basis of reporting published on a News Paper "Business Standard" under the heading "Arsenic found in ground water in 25 states, Fluoride in 27 States: Govt." during the course of hearing Hon,ble NGT has been pleased to passed the order dated 20-12- 2023. The operative part of order is reproduced here:

"Let Notices be issued to all the above respondents, Response may be filed by above respondents with in one month after receipt of notice, by email at judicial-ngt@gov.in preferably in the form of searchable PDF/OCR Support PDF and not in the form of image PDF."

The Districts of Jammu and Kashmir in which Arsenic is reported to be > 0.01 mg/L are Jammu, Kathua and Rajouri and The Districts of Jammu and Kashmir in which Fluoride(F) is reported to be > 1.5 mg/L are Jammu, Kathua, Samba and Udhampur.

Response On Behalf Of Union Territory Of Jammu and Kashmir.

1. That in Compliance to the Order dated 20-11-2023 passed by the Hon'ble National Green Tribunal in O.A.No.728/2023 the Jal Shakti Department Jammu & Kashmir forwarded the Order mentioned supra to the chief Engineer, Public Health Engineering Jammu with direction to furnish the response in the matter.

2. It is submitted that no presence of Arsenic and fluoride has been encountered in already drilled tube wells/bore wells of Jammu province till date.

3. That it is further submitted that since there is no presence of Arsenic found in drilled tube-wells/bore-wells, therefore all habitants are provided with safe water supply, and no habitant of the Jammu province is affected.

Hence Compliance report in terms of order dated 20-11-2024 Passed in O.A. No.728/2023titled **"Arsenic found in groundwater in 25 States, fluoride in 27 States: Govt."** is submitted for the Kind perusal of the Hon'ble National Green Tribunal.

Respondents Through Counsel

Annexure-VI

GOVERNMENT OF KARNATAKA
Rural Drinking Water and Sanitation Department
O/o the Director, RDW&SD, II Floor, "E" Block, KHB Complex,
Cauvery Bhavan, K.G. Road,Bengaluru-560 009, ☎ : 080-22240508 &
: 22240509 E-mail: krwssd@gmail.com

No.RDW&SD/11WQMSP/2024 | 776 **Date: 04.07.2024**

To
The Chairman,
Central Ground Water Authority,
Department of Water Resources, RD&GR,
18/11, Jamnagar House, Mansingh Road,
New Delhi-110011

9/ 19/7/24

Sir,

Sub: News item appearing in Hindustan dated: 30.11 2023 titled " Arsenic found in groundwater in 25 States, Fluoride in 27 States: Govt"-reg

Ref: Your Letter No.CGWA-22/3/2024- CGWA-223 dated: 30.05 2024.

*****

Adverting to above subject. regarding original application no 728/2013 titled "Arsenic found in groundwater in 25 States, fluoride in 27 states: Govt " in the Hon'ble Green tribunal, please find attached, the details regarding action taken by the Karnatka State to ensure the supply of Arsenic/Fluride free Drinking water to Rural house hold of Karnataka .

Thanks and Regards,

Yours Sincerely,
Director,
Rural Drinking Water
& Sanitation Department.
Bengaluru

Copy to:

1. The Additional Chief Secretary, Rural Developmet and Panchayath raj Department. M.S Building, Bengaluru. For kind information.
2. Regional Director, Central Ground Water Board, 27th Main, 7th Cross Rd, Ist Sector, HSR Layout, Bengaluru, Karnataka 560102.
3. Office copy.

24/7/2024

DETAILS OF ARSENIC AND FLUORIDE EFFECTED VILLAGES NUMBER ARE REMEDIAL ACTION STATUS

	Division name	No of Arsenic affected villages	No of fluoride affected villages	Alternate sources provided to the village		No of villages covered with alternate borewell sources
				Multi village scheme (mvs)	RO based WPP	
1	Bagalkote	NA	181	00	181	00
3	Ballari	NA	53	10	53	00
2	Bangalore Rural	NA	00	00	00	00
4	Belagavi	NA	02	00	02	00
5	Bengaluru Urban	NA	00			
7	Bidar	NA	08	00	3	5
9	Chamarajanagar	NA	00	00	00	00
10	ChikBallapur	NA	390	03	296	91 VILLAGESARE PROVIDED WITH ALTERNATE BOREWELL
12	Chikkodi	NA	02	0	02	00
11	Chikmagalur	NA	09	0	09	00
8	Chitradurga	NA	422	00	392	30
15	Dakshina Kannada	NA	00	00	00	00
14	Davangere	NA	14	10	12	00
16	Dharwad	NA	00	00	00	00
6	Gadag	00	00	00	00	00
17	Hassan	NA	11	01	10	00
18	Haveri	NA	19	02	19	00
20	Kalaburagi	NA	60	07	11	42
21	Kodagu	NA	00	00	00	00
13	Kolar	NA	77	00	76	01
22	Koppal	NA	106	63	46	00
19	Mysuru	NA	00	00	00	00
23	Mandya	NA	31	10	14	0
24	Raichur	00	157	5	25	130 borewell are provided. Shortly jaladhare MVS is progressive
25	Ramanagaram	NA	20	00	10	10
26	Shivamogga	NA	14	UNDER CONSTRUCTION	00	
27	Tumkur	NA	211		211	00
28	Udupi	NA	00	00	00	00
29	Uttara Kannada	NA	00	00	00	00
30	Vijayanagar	NA	74	00	74	00
31	Vijayapura	NA	196	29	196	00
32	Yadgir	20	26	20(AS)	26(F)	00

ಪಿ. ಇ. ಯತೀಶ್‌ಚಂದ್ರನ್, ಕ.ಆ.ಸೇ.
ಸರ್ಕಾರದ ಕಾರ್ಯದರ್ಶಿ
ಸಣ್ಣ ನೀರಾವರಿ ಮತ್ತು
ಅಂತರ್ಜಲ ಅಭಿವೃದ್ಧಿ ಇಲಾಖೆ

ಇ-ಮೇಲ್ : prs-mi@karnataka.gov.in
ದೂರವಾಣಿ : 080-22254965/22034173
ಕರ್ನಾಟಕ ಸರ್ಕಾರದ ಸಚಿವಾಲಯ
ಕೊಠಡಿ ಸಂಖ್ಯೆ : 208, 2ನೇ ಮಹಡಿ
ವಿಕಾಸ ಸೌಧ, ಬೆಂಗಳೂರು-560 001

E-79777995/2024

ಅ.ಸ ಸಂಖ್ಯೆ: MID 07 AJA 2024 ದಿನಾಂಕ:24.05.2024

28/05/24

ಮಾನ್ಯರೆ,

ವಿಷಯ: ಮಾನ್ಯ ರಾಷ್ಟ್ರೀಯ ನ್ಯಾಯ ಮಂಡಳಿಯ ಅರ್ಜಿ ಸಂಖ್ಯೆ:728/2023ಕ್ಕೆ ಸಂಬಂಧಿಸಿದಂತೆ ಕ್ರಮ ಕೈಗೊಳ್ಳುವಂತೆ ಕೋರುವ ಬಗ್ಗೆ.

Please discuss
28.5.24
Dir (Rus)
Plz discuss
28/05/24

******

ಮಾನ್ಯ ಹಸಿರು ನ್ಯಾಯ ಮಂಡಳಿ ಇವರಿಂದ ಸ್ವೀಕೃತವಾದ ಅರ್ಜಿ ಸಂಖ್ಯೆ: 728/2023ನ್ನು ಪರಿಶೀಲಿಸಲಾಗಿ, ಸದರಿ ಅರ್ಜಿಯು ಅಂತರ್ಜಲದಲ್ಲಿ ಸೇರ್ಪಡೆಯಾಗಿರುವ ವಿಷಕಾರಕ ಅಂಶಗಳ ಅಧ್ಯಯನ ಕುರಿತಾಗಿದ್ದು, ಇಲಾಖೆಯ ವ್ಯಾಪ್ತಿಗೆ ಒಳಪಡುವ ಅಂತರ್ಜಲ ನಿರ್ದೇಶನಾಲಯದಿಂದ ಅಧ್ಯಯನ ಕೊಳವೆಬಾವಿಗಳ ಸನಿಹದಲ್ಲಿರುವ ಕೊಳವೆಬಾವಿಗಳಿಂದ ಅಂತರ್ಜಲ ಮಾದರಿಗಳನ್ನು ಸಂಗ್ರಹಿಸಿ 14 ಘಟಕಗಳನ್ನು (14 Drinking Water Para meters) ಮಾತ್ರ ವಿಶ್ಲೇಷಣೆ ಕೈಗೊಳ್ಳಲಾಗುತ್ತಿದೆ. ಆದರೆ ಕುಡಿಯುವ ನೀರಿನಲ್ಲಿರುವ Arsenic ಮತ್ತು ಇತರೆ ಘಟಕಗಳ ವಿಶ್ಲೇಷಣೆಯನ್ನು ಈ ಇಲಾಖೆಯ ವತಿಯಿಂದ ಕೈಗೊಳ್ಳಲಾಗುತ್ತಿಲ್ಲ.

Please discuss
Chemist
CE

ಗ್ರಾಮೀಣ ಪ್ರದೇಶಗಳಲ್ಲಿ ಕುಡಿಯುವ ನೀರನ್ನು ತಮ್ಮ ಇಲಾಖೆಯ ವತಿಯಿಂದ ಸರಬರಾಜು ಮಾಡುತ್ತಿರುವುದರಿಂದ, ನೀರಿನ ವಿಶ್ಲೇಷಣೆ ಹಾಗೂ ಕುಡಿಯುವ ನೀರು ಸರಬರಾಜು ಕೊಳವೆಬಾವಿಗಳ ಅಂತರ್ಜಲ ಗುಣಮಟ್ಟ ವಿಶ್ಲೇಷಣೆ ಮಾಡುವುದು ತಮ್ಮ ಇಲಾಖೆಯ ಕಾರ್ಯವ್ಯಾಪ್ತಿಗೆ ಒಳಪಡುವುದರಿಂದ ಹಾಗೂ ಮಾನ್ಯ ರಾಷ್ಟ್ರೀಯ ನ್ಯಾಯ ಮಂಡಳಿಗೆ ಅಂತರ್ಜಲ ವಿಶ್ಲೇಷಣೆಯಲ್ಲಿ ನಿಗದಿಪಡಿಸಿದ ಮಾನದಂಡಕ್ಕಿಂತ ಅಧಿಕ ಫ್ಲೂರೈಡ್, ಆರ್ಸನಿಕ್ ಕಂಡು ಬರುವಂತಹ ಪ್ರದೇಶಗಳಲ್ಲಿ ಬದಲಿ ನೀರು ಸರಬರಾಜು ವ್ಯವಸ್ಥೆಯನ್ನು ಕೈಗೊಂಡಿರುವ ಕುರಿತು ಸಹ ಮಾನ್ಯ ರಾಷ್ಟ್ರೀಯ ನ್ಯಾಯ ಮಂಡಳಿಗೆ ಮಾಹಿತಿ ನೀಡಬೇಕಾಗಿರುವುದರಿಂದ, ಅರ್ಜಿ ಸಂಖ್ಯೆ:728/2023ರ ಕುರಿತು ಅಗತ್ಯ ಕ್ರಮ ಕೈಗೊಂಡು, ಕೈಗೊಂಡ ಕ್ರಮದ ಮಾಹಿತಿಯನ್ನು ರಾಷ್ಟ್ರೀಯ ನ್ಯಾಯ ಮಂಡಳಿಗೆ ಜರೂರಾಗಿ ಒದಗಿಸುವಂತೆ ಕೋರಿ ಸಣ್ಣ ನೀರಾವರಿ ಇಲಾಖೆಗೆ ಸಂಬಂಧಿಸಿದ ಮಾಹಿತಿಯನ್ನು ಇದರೊಂದಿಗೆ ಲಗತ್ತಿಸಿ ಮಾನ್ಯ ರಾಷ್ಟ್ರೀಯ ನ್ಯಾಯ ಮಂಡಳಿಯ ಅರ್ಜಿ ಸಂಖ್ಯೆ:728/2023ನ್ನು ಮರ್ಜಾಯಿಸಲಾಗಿದೆ.

Fr discuss
Submit

ವಂದನೆಗಳೊಂದಿಗೆ,

ತಮ್ಮ ವಿಶ್ವಾಸಿ,

Geologist/ WRIS

07 JUN 2024

10/6/24

ಇವರಿಗೆ:
ಶ್ರೀಮತಿ. ಉಮಾ ಮಹದೇವನ್, ಭಾ.ಆ.ಸೇ
ಸರ್ಕಾರದ ಅಪರ ಮುಖ್ಯಕಾರ್ಯದರ್ಶಿ (ಪಂ.ರಾಜ್),
ಬಹುಮಹಡಿ ಕಟ್ಟಡ,
ಬೆಂಗಳೂರು

31 MAY 2024

1104 File No. MID//AJA/2024-MID_SERV-MINOR IRRIGATION DEPARTMENT SEC (Computer No. 1294473) 27791/2024/O/o SECRETARY

ಕರ್ನಾಟಕ ಸರ್ಕಾರ

ಸಂಖ್ಯೆ:ಅಜನಿ/ತಾಂತ್ರಿಕ/NGT-694/57/2023-24/2533

ನಿರ್ದೇಶಕರ ಕಛೇರಿ,
ಅಂತರ್ಜಲ ನಿರ್ದೇಶನಾಲಯ,
2ನೇ ಮಹಡಿ, ಕೆ.ಎಸ್.ಎಫ್.ಸಿ ಭವನ,
#1/1, ತಿಮ್ಮಯ್ಯ ರಸ್ತೆ, ಬೆಂಗಳೂರು-52,
ದಿನಾಂಕ: 30.01.2024.
ಇ-ಮೇಲ್: gwdkar@gmail.com
ಫೋನ್ ನಂ: 080-22268732.

ಇವರಿಗೆ,
ಸರ್ಕಾರದ ಕಾರ್ಯದರ್ಶಿಗಳು,
ಸಣ್ಣ ನೀರಾವರಿ ಮತ್ತು ಅಂತರ್ಜಲ ಅಭಿವೃದ್ಧಿ ಇಲಾಖೆ,
ವಿಕಾಸ ಸೌಧ, ಬೆಂಗಳೂರು.

ಮಾನ್ಯರೆ,

ವಿಷಯ : ಮಾನ್ಯ ರಾಷ್ಟ್ರೀಯ ಹಸಿರು ನ್ಯಾಯ ಮಂಡಳಿಯ ಪ್ರಕರಣ ಸಂಖ್ಯೆ: O.A No.694/2023 ಹಾಗೂ 728/2023ಕ್ಕೆ ಸಂಬಂಧಿಸಿದಂತೆ ಅಂತರ್ಜಲ ನಿರ್ದೇಶನಾಲಯದ ಮಾಹಿತಿಯನ್ನು ನೀಡುವ ಕುರಿತು.

ಉಲ್ಲೇಖ: ಸರ್ಕಾರದ ಪತ್ರ ಸಂಖ್ಯೆ: MID 07 AJA 2024 ದಿನಾಂಕ: 18.01.2024.

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ಮೇಲ್ಕಂಡ ವಿಷಯ ಮತ್ತು ಉಲ್ಲೇಖಕ್ಕೆ ಸಂಬಂಧಿಸಿದಂತೆ, ಮಾನ್ಯ ರಾಷ್ಟ್ರೀಯ ಹಸಿರು ನ್ಯಾಯ ಮಂಡಳಿಯ ಪ್ರಕರಣ ಸಂಖ್ಯೆ: O.A No.694/2023ಕ್ಕೆ ಸಂಬಂಧಿಸಿದಂತೆ ಅಂತರ್ಜಲ ನಿರ್ದೇಶನಾಲಯಕ್ಕೆ ಸಂಬಂಧಿಸಿದ ಮಾಹಿತಿಯನ್ನು ಅನುಬಂಧ-1ರಲ್ಲಿ ನೀಡಿದೆ.

ಮುಂದುವರೆದು, O.A No.728/2023ಕ್ಕೆ ಸಂಬಂಧಿಸಿದಂತೆ ಅಂತರ್ಜಲ ನಿರ್ದೇಶನಾಲಯದಿಂದ ಅಧ್ಯಯನ ಕೊಳವೆಬಾವಿಗಳ ಸನೀಹದಲ್ಲಿರುವ ಕೊಳವೆಬಾವಿಗಳಿಂದ ಅಂತರ್ಜಲ ಮಾದರಿಗಳನ್ನು ಸಂಗ್ರಹಿಸಿ 14 ಘಟಕಗಳನ್ನು (14 drinking water Para meters) ಮಾತ್ರ ವಿಶ್ಲೇಷಣೆ ಕೈಗೊಳ್ಳಲಾಗುತ್ತಿದೆ. ಆದರೆ Arsenic ಮತ್ತು ಇತರೆ ಘಟಕಗಳ ವಿಶ್ಲೇಷಣೆಯನ್ನು ಕೈಗೊಳ್ಳುತ್ತಿರುವುದಿಲ್ಲ.

ಸದರಿ O.A No.728/2023ಕ್ಕೆ ಸಂಬಂಧಿಸಿದಂತೆ ಗ್ರಾಮೀಣ ನೀರು ಸರಬರಾಜು ಮತ್ತು ನೈರ್ಮಲ್ಯ ಇಲಾಖೆ ಹಾಗೂ ನಗರಾಭಿವೃದ್ಧಿ ಇಲಾಖೆ ಇವರು ಗ್ರಾಮೀಣ ಪ್ರದೇಶಗಳಲ್ಲಿ ಮತ್ತು ನಗರ ಪ್ರದೇಶಗಳಲ್ಲಿ ಕುಡಿಯುವ ನೀರನ್ನು ಸರಬರಾಜು ಮಾಡುತ್ತಿರುವುದರಿಂದ ಸಂಪೂರ್ಣ ನೀರಿನ ವಿಶ್ಲೇಷಣೆ ಮಾಡುವುದು ಎರಡು ಇಲಾಖೆಗಳ ಕಾರ್ಯವ್ಯಾಪ್ತಿಯಲ್ಲಿರುತ್ತದೆ. ಅದರಂತೆ ಕುಡಿಯುವ ನೀರು ಸರಬರಾಜು ಕೊಳವೆಬಾವಿಗಳ ಅಂತರ್ಜಲ

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ಗುಣಮಟ್ಟವನ್ನು ವಿಶ್ಲೇಷಣೆ ಕೈಗೊಳ್ಳುತ್ತಿರುತ್ತಾರೆ. ಸದರಿ ಅಂತರ್ಜಲ ವಿಶ್ಲೇಷಣೆಯಲ್ಲಿ ನಿಗದಿಪಡಿಸಿದ ಮಾನದಂಡಕ್ಕಿಂತ ಫ್ಲೋರೈಡ್, ಆರ್ಸನಿಕ್ ಕಂಡು ಬರುವಂತಹ ಪ್ರದೇಶಗಳಲ್ಲಿ ಬದಲಿ ಸರಬರಾಜು ವ್ಯವಸ್ಥೆಯನ್ನು ಕೈಗೊಳ್ಳಲಾಗಿರುವ ಬಗ್ಗೆ ಮಾಹಿತಿಯನ್ನು ನೀಡಬೇಕಾಗಿರುತ್ತದೆ.

ಆದ್ದರಿಂದ O.A No.728/2023ಕ್ಕೆ ಸಂಬಂಧಿಸಿದಂತೆ ಪ್ರಕರಣವನ್ನು ಗ್ರಾಮೀಣ ನೀರು ಸರಬರಾಜು ಮತ್ತು ನೈರ್ಮಲ್ಯ ಇಲಾಖೆ ವರ್ಗಾಯಿಸಬಹುದಾಗಿದೆ ಎಂಬ ಅಭಿಪ್ರಾಯದೊಂದಿಗೆ ಅಂತರ್ಜಲ ನಿರ್ದೇಶನಾಲಯಕ್ಕೆ ಸಂಬಂಧಪಟ್ಟ ಮಾಹಿತಿಯನ್ನು ಇದರೊಂದಿಗೆ ಲಗತ್ತಿಸಿ ಕಳುಹಿಸಿದೆ.

ತಮ್ಮ ವಿಶ್ವಾಸಿ,

ನಿರ್ದೇಶಕರು,
ಅಂತರ್ಜಲ ನಿರ್ದೇಶನಾಲಯ,
ಬೆಂಗಳೂರು.

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Item No. 16 Court No. 1

BEFORE THE NATIONAL GREEN TRIBUNAL
PRINCIPAL BENCH, NEW DELHI

Original Application No. 728/2023

In re: News item appearing in Hindustan dated 30.11.2023 titled "Arsenic found in groundwater in 25 States, fluoride in 27 States: Govt."

Date of hearing: 15.02.2024

CORAM: HON'BLE MR. JUSTICE PRAKASH SHRIVASTAVA, CHAIRPERSON
HON'BLE MR. JUSTICE SUDHIR AGARWAL, JUDICIAL MEMBER
HON'BLE DR. A. SENTHIL VEL, EXPERT MEMBER

Respondent: Mr. Gigi. C. George, Adv. for CGWA
Mr. Kaushal Gautam, AAG with Ms. Vansika Singh, Adv. for the State of Uttarakhand & UKPCB
Mr. Nishe Rajen Shonker, Adv. for the State of Kerala
Mr. Amresh Bind & Ms. Richa Kapoor, Advs. for GNCTD
Mr. Rahul Khurana, Adv. for the State of Haryana
Mr. Pukhrambam Ramesh Kumar & Ms. Anupama Ngangom, Advs. for the State of Manipur (Through VC)
Mr. Vishal Prasad, Adv. for the State of Chhattisgarh (Through VC)
Ms. Rukhmini Bohde & Mr. Amlaan Kumar, Adv. for the State of Madhya Pradesh (Through VC)

ORDER

1. This original application was registered *suo moto* on the basis of the report disclosing that that Arsenic was detected in ground water in part of 230 Districts and 25 States and Fluoride in 469 Districts and 27 States. The Tribunal in the previous proceeding had considered the seriousness of the issue of presence of toxic elements like Arsenic and Fluoride in groundwater, contaminating it and causing serious toxic effect to the human body. Accordingly, the Tribunal had impleaded all the States through their competent authorities and issued notice to them.

2. The report on behalf of the CGWA dated 06.02.2024 has been filed but on the perusal of the report, we find that the averment contained therein are mostly theoretical and general in nature. No concrete steps have been reflected in the report by the CGWA disclosing the action taken to remediate the problem. As a nodal Ministry, the report should have

disclosed on number of vulnerable locations indicating remedial measures taken in terms of installing Arsenic and Fluoride removal plants or having assured alternate water supply.

3. It has been reported that CGWB has 16 chemical laboratories in different States of the country for water sample analysis out of which 10 laboratories are NABL accredited. The total number of samples analysed in these chemical laboratories are in the range of 27500-32500 annually, analysing 15 major chemical parameters which include pH, EC, Ca, Mg, Tll, Na, K, F, CO_3, HCO_3, SO_4, Cl, NO_3, SiO_2, PO_4 and heavy/trace elements (Fe, Mn, Cu, Cd, Cr, Pb, As & U) on need basis.

4. We have received the reports on behalf of States of Uttar Pradesh, Bihar, Punjab, Madhya Pradesh, Tripura, Manipur, Haryana, Chhattisgarh, Uttarakhand and Government of NCT Delhi but report from other States is awaited. On the perusal of the report filed by NCT of Delhi we find that even the sample testing facility is not available as in the chart contained on page 238, in respect of some of labs, it has been mentioned that four months of time will be required for procurement of kits and allied units for testing.

5. Hence, we grant six weeks' time to CGWA to file a fresh report clearly keeping in view the observations made above and also disclosing the action which has been taken at the ground level by CGWA to remediate the problem. We also direct the other States/Union Territories, who have not filed, to file their response within six weeks.

6. List the matter on 26th April, 2024.

Prakash Shrivastava, CP

1108

- 248 -

Sudhir Agarwal, JM

Dr. A. Senthil Vel, EM

February 15, 2024
Original Application No. 728/2023
HB.

8

Item No. 16 Court No. 2

BEFORE THE NATIONAL GREEN TRIBUNAL
PRINCIPAL BENCH, NEW DELHI

Original Application No. 728/2023

In re: News item appearing in Hindustan dated 30.11.2023 titled "Arsenic found in groundwater in 25 States, fluoride in 27 States: Govt."

Date of hearing: 20.12.2023

CORAM: HON'BLE MR. JUSTICE SUDHIR AGARWAL, JUDICIAL MEMBER
HON'BLE DR. A. SENTHIL VEL, EXPERT MEMBER

Respondent:Mr. Gigi. C. George, Adv. for CGWA

ORDER

1. This original application under Section 14 and 15 of National Green Tribunal Act, 2010 (hereinafter referred to as '**NGT Act, 2010**') has been registered by exercising *suo moto* jurisdiction based on the newspaper report published in Business Standard under the heading "Arsenic found in groundwater in 25 States, fluoride in 27 States: Govt.". The report says that Arsenic has been detected in ground water in parts of 230 Districts and 25 States and fluoride in 469 Districts and 27 States and statement to this effect was made by Union Minister of State for Jal Shakti and Rajya Sabha. It is also stated that ground water contamination reported by Central Ground Water Board (hereinafter referred to as '**CGWB**') is mostly geogenic in nature and does not show significant change over the years. The newspaper item states that studies indicate occurrence of arsenic and fluoride in ground water beyond permissible limits set by the Bureau of Indian Standards for human consumption in isolated pockets of various States and Union Territories.

2. On the advance notice issued to Central Ground Water Authority (hereinafterreferred to as '**CGWA**'), it has submitted its report dated

18.12.2023 wherein presence of arsenic in various Districts and 25 States and fluoride in various Districts and 27 States is admitted. It is also admitted that both the chemicals/metals have very serious toxic effects on human body and health and cause health hazards. Relevant extracts from the report is reproduced as under:-

> ***"2. Monitoring and Studies on Ground Water Quality By CGWB***
>
> *Water being State subject, study on ground water quality and making available safe water to public falls under States' mandate. Being the apex organization for ground water, Central Ground Water Board (CGWB) generates ground water quality data on a regional scale during various scientific studies and ground water quality monitoring throughout the country. The periodic monitoring of water quality is done by CGWB once in every year during the pre-monsoon season in which water samples are collected from about 17500 water quality monitoring stations of CGWB spread over the country and chemical analysis is carried out. The water quality monitoring stations comprise of various sources of ground water viz. dugwells, borewells, tubewells, piezometers and springs etc. CGWB has 16 chemical laboratories in different states of the country for water sample analysis, out of which 10 laboratories are NA131, accredited. The total number of samples analysed in these chemical laboratories are in the range of 27500-32500 annually. The laboratories of CGWB analyse the ground water samples for 15 major chemical parameters which include (pH, EC, Ca, Mg, Tll, Na, K., F, CO3, ITCO3, SO4, Cl, NO3, SiO2, PO4) and heavy/trace elements (Fe, Mn, Cu, Zn, Cd, Cr, Pb, As& U) on need basis.*
>
> *Apart from routine regional scale ground water quality monitoring CGWB has also taken up various studies on ground water quality and contamination of ground water as mentioned below:*
>
> - *Under the National Aquikr Mapping Programme (NAQUIM) of CGWI3, special attention is being given to the aspect of ground water quality including contamination by toxic substances such as Arsenic (As)and Fluoride (F) in ground water.*
> - *CGWB along with National Institute of Hydrology (NII-1) prepared a report on " Mitigation and Remedy of Ground Water menace in India: A Vision Document" in 2010.*
> - *The study on identification of Arsenic hotspots throughout the country has been started from 2015 by CGWB. Since then, periodic monitoring of As is being done in the identified hot spot states.*
> - *An MoU was signed between CGWB & GSI on 05-01-2022 for five years. Study on Uranium, Lead, Arsenic, Fluoride and Mercury*

contamination of Ground Water the parts of Punjab, Haryana, Andhra Pradesh, Uttar Pradesh, Bihar, Chhattisgarh, Jharkhand and Assam will be taken up. The studies taken up regarding Arsenic and Fluoride contamination are as follows:

- Study on Uranium, Lead, Arsenic, Fluoride and Mercury Contamination of Ground Water in the industrial area of North Guwahati, Kamrup, Assam.
- Reassessment of Arsenic contamination in Patna & Bhojpur District, Bihar.
- Tracing the source of Uranium in ground water resources of Biharsarif and Roh block in Nawada district of Bihar.
- Geo-environmental appraisal of Fluoride contamination and assessment of toxic heavy metals in Bagbahara area, Mahasamund district, Chhattisgarh.
- Assessment of fluoride contamination in surface and groundwater and its management in Jharkhand.
- Study on Uranium, Fluoride contamination of Ground Water in Mathura, Hathras and Aligarh Districts, Uttar Pradesh.

3. Arsenic (As) contamination of Ground Water in India

Arsenic is a naturally occurring trace element found in rocks, soils and the water in contact with them. Arsenic has been recognized as a toxic element and is considered a human health hazard. The maximum permissible limit of Arsenic for drinking purpose is 0.01 mg/L (or 10 ppb) as per BIS (Bureau of Indian Standards) Drinking Water Standards (IS 10500:2012). The BIS permissible limit of Arsenic was revised from 0.05 mg/L (50 ppb) to 0.01 mg/L (10 ppb) in the year 2015.

Arsenic hotspots of India

The occurrence of Arsenic in ground water was first reported in 1980 in West Bengal in India. Occurrence of Arsenic in groundwater, in excess to the permissible limit of 10 ppb in the Ganges-Brahmaputra fluvial plains in India covering seven states namely, West Bengal, Jharkhand, Bihar, Uttar Pradesh in flood plain of Ganga River; Assam and Manipur in flood plain of Brahamaputra and Imphal rivers and Rajnandgaon in Chhatishgarh. The most affected areas are on the eastern side of Bhagirathi River in the districts of Malda, Murshidabad, Nadia, North 24 Parganas and South 24 Parganas and western side of the districts of Howrah, Hugli and Bardhman. The occurrence of Arsenic in the states of Bihar, West Bengal and Uttar Pradesh is in alluvial formations The occurrence of Arsenic in ground water is mainly in the aquifers upto 100 m depth. The deeper aquifers are free from Arsenic contamination. In the state of Chhattisgarh, it is in the volcanic rocks exclusively confined to N-S trending Dongargarh-Kotri ancient rift zone. It has also been reported in Golaghat, Jorhat, Lakhimpur, Nagaon, Nalbari, Sibsagar, Sonitpur district of Assam.

Central Ground Water Board is in the process of continuously updating its database on the locations of Arsenic contamination

based on its annual quality data. The number of district included in the list has increased since the permissible limit was revised from 50 ppb to 10 ppb by BIS in 2015. The state-wise districts where cases of Arsenic > 0.01 mg/L have been recorded in ground water aregiven in Table-1.

Table-1: Districts having Arsenic >0.01 mg/L, in Ground Water in Different States of India

Sl. No.	State	Parts of Districts having As > 10 ppb (0.01 mg/1)	No of Districts
1.	Andhra Pradesh	Ananthapur, East Godavari, Guntur, Krishna, Kurnool, Nellore, Prakasam	7
2.	Assam	Baksha, Barpeta, Bongaigaon, Cachar, Darrang, Dhemaji, Dibrugarh, Dhubri, Goalpara, Golaghat, Hailakandi, Jorhat, Kamrup, Karimganj, Lakhimpur, Morigaon, Nagaon, Nalbari, Sivsagar, Sonitpur, Bixwanth	21
3.	Bihar	Araria, Begusarai, Bhagalpur, Bhojpur, Buxar, Darbhanga, Katihar, Khagaria, Kishanganj,Lakhisarai , Munger, Patna, Purnea, Samastipur, Saran, Vaishali, E.Champaran, Gopalganj, Sheohar, Supaul, Madhepura,Muzaffarpur, Saharsa, Siwan, W. Champaran, Sitamarhi, Madhubani.	27
4.	Chhattisgarh	Rajnandgon, Raipur, Raigarh, Koriya	4
5.	Delhi	East Delhi, North East Delhi, South east Delhi, Central, Nazul Land	5
6.	Gujarat	Amreli, Anand, Bharuch, Bhavnagar, Dahod, Gandhinagar, Kachchh, Mehesana, Patan, Rajkot, Surendranagar, Vadodara	12
7.	Haryana	Ambala, Bhiwani, faridabad, Fatehabad, Hissar, Jhajjar, Jind, Karnal, Panipat, Rohtak, Sirsa, Sonepat, Yamunanagar, Mahendergarh, Palwal, Panchkula Rewari, Kaithal	18
8.	Himachal Pradesh	Kangra	1
9.	Jammu & Kashmir	Jammu, Kathua, Rajouri	3
10.	Jharkhand	Sahebganj, Lohardaga, Godda, Dhanbad	4
11.	Karnataka	Raichur, Gadag, Yadgir	3
12.	Kerala	Kollam	1
13.	Madhya Pradesh	Betul,Burhanpur, Chhindwara, Dhar, Khandwa, Mandsaur, Morena, Neemuch, Umaria	9
14.	Manipur	Bishnapur, Thoubal	2
15.	Odisha	Bhadrak, Gajapati, Ganjam, Jagatsinghpur, Kendrapara	5
16.	Punjab	Mansa, Amritsar, Bhatinda, Fazilka, Ferozpur,Gurdaspur,	17

		Hoshiarpur,Kapurthala, Ropar, Faridkot, Nawanshahar, Sangrur, TaranTaran, SAS Nagar, Pathankot, Patiala, Chandigarh	
17.	Rajasthan	Ganganagar, Pali, Bikaner, Hanumana, Jhunjhunu, Churu, Hanumangarh, Jodhpur, Sirohi, Tonk	10
18.	Tamil Nadu	Ariyalur, Perambalur, Dindigul, Cuddalore, Nagapattinam, Ramnathapuram, Tiruvallur, Tirunelveli, Thiruvarur, Trichchirappalli, Tuticorin, Sivaganga, Chennai, Dharmapuri	14
19.	Telangana	Nalgonda	1
20.	Tripura	North Tripura, Gomati and South Tripura	3
21.	Uttar Pradesh	Bahraich, Balia, Balrampur, Bareilly, Basti,Bijnor, Chandauli, Ghazipur, Gonda, Gorakhpur, LakhimpurKheri, Meerut, Mirzapur, Moradabad, Rai Bareilly, SantKabirNagar, Shajahanpur, Siddarthnagar, SantRavidas Nagar, Unnao, Azamgarh, Rampur, Badaun, Deoria, Jhansi, Kausambi, Kushinagar, Pilibhit, Banda, Sitapur, HardoiMuzaffarnagar,Sultanpur, Faizabad, Pratapgarh, Maunath Bhanjan, Barabanki, Maharajgang, Nagar,Ayodhya, Bulandsahr, Firozabad, Farrukhabad, Hapur, Kannauj	45
22.	Uttarakhand	Dehradun, Udham Singh Nagar, Haridwar, Almora, Uttarkashi	5
23.	West Bengal	Purba Bardhaman, Dakshin Dinajpur, Hooghly, Howrah, Malda, Murshidabad, Nadia, N-24 Parganas, S. 24 Parganas, Coochbehar, Uttar Dinajpur	11
24.	Daman & Diu	Diu	1
25.	Puducherry	Pondicherry	1
	Total	**25 States/UTs**	**230 Districts**

Thus there are 230 districts in 25 states/UTs across the country where instances of one or more Arsenic contamination have been detected.

4. Fluoride (F) contamination of Ground Water in India

Fluorine is the most electronegative and reactive of all elements that occur naturally within many types of rock. It exists in the form of fluorides in a number of minerals of which fluorspar, cryolite, fluorite and fluorapatite are the most common. The fluoride found in groundwater is naturally occurring from the breakdown of rocks and soils or weathering and deposition of atmospheric particles. Most of the fluorides are sparingly soluble and are present in ground water in small amounts.

It is well known that small amounts of fluoride (less than 1.0 mg/L) have proven to be beneficial in reducing tooth decay. Community water supplies commonly are treated with NO or fluorosilicates to maintain fluoride levels ranging from 0.8 to 1.2 mg/l, to reduce the incidence of dental carries. However, high concentrations such as 1.5 mg/l of h and above have resulted in staining of tooth enamel while at still higher levels of fluoride ranging between 5.0 and 10 mg/l, further pathological changes such as stiffness of the back and difficulty in performing natural movements may take place.

BIS has recommended an upper desirable limit of 1.0 mg/l, of r as desirable concentration of fluoride in drinking water, which can be extended to 1.5 mg/l, of F in case no alternative source of water is available. Water with concentration of fluoride more than 1.5 mg/L, are not suitable for drinking purposes.

The fluoride content in groundwater from observation wells in a major part of the country is found to be less than 1.0 mg/L. The distribution of ground water samples with fluoride concentration more than 1.5 mg/L at several locations in the States of Andhra Pradesh, Gujarat, Karnataka, Madhya Pradesh, Rajasthan, Chhattisgarh, Haryana, Orissa, Punjab, Tamil Nadu, Kerala, Telangana, Haryana, Uttar Pradesh West Bengal, Bihar, Delhi, Jharkhand, Maharashtra, and Assam West Bengal where the fluoride in ground water exceeds 1.5 mg/L. The state wise districts whereinstances of Arsenic > 0.01 mg/L in ground water have been recordedaregiven in ***Table-2.***

Table-2: Districts having localized occurrence of Fluoride (>1.5mg/L) in groundwater in India

Sl. No.	State	Parts of Districts having Fluoride (>1.5mg/L)	No of Districts
1.	Andhra Pradesh	Allun Sitharama Raju, Ananthapur, Annamayya, Bapatla, Chittoor, Guntur, Krishna, Kurnool, NTR District, Palnadu, Prakasam, Sirkakulam, SPS Nellore, Sri BalajiDist, Sri Satyasai District, Visakhapatnam, Vizianagaram, West Godavari, YSR, Kadapa.	19
2.	Assam	Bongaigaon, Cachar, Dhubri, Dibrugarh, Goalpara,Hailakandi, Kamrup, KarbiAnglong, Lakhimpur, Nougaon, Golaghat, Karimganj, Sibasagar, Jorhat, Sonitpur, Morigaon, Darrang	17
3.	Bihar	Aurangabad, Banka, Bhagalpur, Gaya, Jamui, Kaimur(Bhabua), Munger, Nawada, Rohtas, Jahanabd, Lakhisarai, Sheikhpura, Nalanda, Saharsa, Supaul, Samastipur, Sheikhpura, Nalanda, Muzaffarpur	19
4.	Chhattisgarh	Bastar,Balod, Balrampur, Bemetra, Bijapur, Durg,Kanker, Kondagaon, Korba, Korea, Raigarh, Surajpur, Surguja, Jashpur, Dhamtari, Mahasamund, Rajnandgaon, Bilaspur, Raipur, Mungeli, Janjgir - Champa, Raigarh,Gariyabandh	23
5.	Delhi	East Delhi,New Delhi, North West Delhi, Central ,South Delhi, South West Delhi, North Delhi, West Delhi	8
6.	Gujarat	Ahmedabad, Amreli, Anand,Aravalli, Banaskantha, Bharuch, Bhavnagar, Chota Udaipur, Dahod, Gandhinagar, Jamnagar, Junagadh, Kachchh, Kheda,Mehesana, Panchmahals, Patan, Porbandar,	30

		Rajkot, Sabarkantha, Surendranagar, Vadodara, Navsari, Surat, Val sad, Bhaul, Morvi, Dev Bhumi Dwarka, Gir Somnath, Mahisagar	
7.	Haryana	Ambala, Bhiwani, Fatehabad, Faridabad, Gurgaon, Hissar, Jhajjar, Jind, Kaithal, Karnal, Kurukshetra, Mahendergarh, Panchkula, Palwal, Panipat, Rewari, Rohtak, Sirsa, Sonipat, Yamuna Nagar, Mewat	21
8.	Himachal Pradesh	Sirmour, Una	2
9.	Jammu & Kashmir	Jammu, Kathua, Udhampur, Samba	4
10.	Jharkhand	Bokaro, Chatra, Deoghar, Dhanbad, Garhwa, Giridih, Godda, Gumla, Jamtara, Koderma, Pakur, Palamu, Ramgarh, Ranchi, Sahebganj, Khunti, Latehar	17
11.	Karnataka	Bagalkot, Bangalore-Rural, Bangalore-Urban, Belgaum, Bellary, Bidar, Bijapur, Chikaballapur Chamarajanagar, Chikmagalur, Chitradurga, Davanagere, Dharwad, Dakshina Kannada, Gadag, Gulburga, Hassan, Haveri, Kolar, Koppal, Mandya, Mysore, Raichur, Ramnagara, Shimoga, Tumkur, Yadgir, Uttara Kannada, Udupi, Kodagu, Vijayanagara	31
12.	Kerala	Palakkad, Alappuzha, Idukki, Ernakulum, Thiruvananthpuram,Malappuram	6
13.	Madhya Pradesh	Alirajpur, Balaghat, Barwani, Betul, Bhind, Bhopal,Chhatarpur, Chhindwara, Datia, Dewas, Dhar, Dindori, Guna, Gwalior, Harda, Jabalpur, Jhabua, Khargon, Mandla, Mandsaur, Morena, Narsinhpur, Neemuch, Panna, Raisen, Rajgarh, Ratlam, Sagar, Satna, Sehore, Seoni, Shandol, Shajapur, Sheopur, Sidhi, Shivpuri, Singrauli, Ujjain, Vidisha, Anuppur, Indore, Khandwa, Tikkamgarh, Umaria	44
14.	Maharashtra	Ahmednagar, Amravati, Beed, Chandrapur, Bhandara, Dhule, Gadchiroli, Gondia,Jalna, Nagpur, Nanded, Parbhani, Ratnagiri, Sangli, Satara, Sindhudurg, Solapur, Wardha, Washim, Yavatmal, Hingoli, Nandurbar	22
15.	Manipur	Thoubal	1
16.	Meghalaya	East Jaintia, West Garo Hills, Ri Bhoi, North Garo Hills, Khowai	5
17.	Nagaland	Dimapur, Phek, Kohima	3
18.	Odisha	Angul, Balasore, Bhadrak, Bargarh, Bolangir, Boudh, Cuttack, Deogarh, Dhenkanal, Jajpur, Kandhamal, Keonjhar, Khurda, Mayurbhanj, Nayagarh, Nuapada, Ganjam, Jagatsinghpur, Kalahandi, Koraput, Puri, Rayagada, Sambalpur, Sonepur, Sundargarh, Gajapati	26
19.	Punjab	Amritsar, Barnala, Bhatinda, Fazilka, Faridkot, Fatehgarh Sahib, Firozpur, Gurdaspur, Jalandhar, Ludhiana, Mansa, Moga, Muktsar, Pathankot, Patiala, Ropar, Sangrur, SAS Nagar (Mohali), Tarn Taran	19
20.	Rajasthan	Ajmer, Alwar, Banswara, Bartner, Bharatpur, Baran, Bhilwara, Bikaner, Bundi, Chittaurgarh, Churu, Dausa, Dhaulpur, Dungarpur, Ganganagar, Hanumangarh, Jaipur, Jaisalmer, Jalore, Jhalawar Jhunjhunu, Jodhpur, Karauli, Kota, Nagaur, Pali, Pratapgarh, Rajsamand, Sirohi, Sikar, Sawai Madhopur, Tank, Udaipur	33
21.	Tamil Nadu	Coimbatore, Dharmapuri, Dindigul, Erode, Karur, Kancheepuram, Krishnagiri, Namakkal, Madurai, Puddukottai, Ramanathanpuram, Salem, Sivagangai, Theni, Thiruvannamalai,Tiruchirapally, Thirunelveli, Tirupur, Vellore, Cuddalore, Perambalur, Thanjavur, Thiruvarur, Tuticorin, Virudhunagar, Tiruvallur, Madurai,	30

		Chennai, Kanyakumari,	
22.	Telangana	Adilabad, Bhadradri,Hanamkonda, Hyderabad, Jagtial, Jangaon,Karimnagar,Khammam,Komarambheem,Mahabubabad,Mahabubnagar, Mancherial, Medak,Medchal,Mulugu,Nagarkurnool, Nalgonda, Narayanpur, Nirmal,Nizamabad, Peddapalle, Rajanna,Rangareddy, Sangareddy, Siddipet,Suryapet, Vikarabad,Warangal, Yadadri.	29
23.	Tripura	Unakoti, Khowai and North Tripura.	3
24.	Uttar Pradesh	Agra, Aligarh, Allahabad , Auraiya, Azamgarh, Barata , Bulandshahar, Chitrakoot, Etah, Etawah, Farrukhabad, Fatehpur, Firozabad, G B Nagar, Ghazipur, Gonda, Ghaziabad, Hamirpur, Hathras, Jaunpur, Kannauj , Kanpur Nagar, Kasganj (Kashiram Nagar), Lalitpur, Mahoba, Mainpuri, Mathura, MaunathBhanjan, Pratapgarh, Rai Bareli, Shajahanpur, Sonbhadra, Sultanpur, Varanasi and Unnao, Chandauli, Gonda, Hardoi, Sitapur, Jalaun, Amroha,Kanpur Dehat, Rampur	43
25.	Uttarakhand	Uttarkashi	1
26.	West Bengal	Bankura, Bardhaman, Birbhum, Dakshindinajpur, Malda, Purulia, Uttardinajpur, South 24 Praganas, Nadia Murshidabad, Paschim Medinipore, Paschim Bardaman	12
27.	DNH, Daman & Diu	Dadra and Nagar Haveli	1
	Total	**27 States/UTs**	**469 Districts**

Thus there are 469 districts in 27 states/UTs across the country where instances of one or more Fluoride contamination have been detected.

5. Mitigation of Ground Water Contamination by As and F

The studies on arsenic and fluoride contamination indicate that occurrence of these contamination in various parts of the country are mostly geogenic in nature, which means these constituents are already in the rock and soil matrix and they get in to the ground water through various chemical processes. There is no conclusive evidence regarding increase in concentration of these contaminants over time. However, when the contaminant is in the ground water, it has the tendency to spread along with the flow of ground water.

Various steps have been taken by the Central Government for facilitating ground water quality improvement/ remediation of contamination in the country, as given below:

1. *Data on ground water quality available with CGWB are being shared with concerned State Governments for taking necessary remedial measures such as prohibition of contaminated sources of ground water for drinking purposes and finding alternate sources for drinking water supply.*

2. *CGWB constructs wells for Exploration of Ground Water. Successful contamination free wells are handed over to the State Governments for gainful utilization.*

3. *Under the National Aquifer Mapping Programme* ***(NAQUIM)*** *of CGWB, special attention is being given to the aspect of ground water quality including contamination by toxic substances such as Arsenic in ground water. Further, under NAQUIM, CGWB constructs arsenic safe exploratory wells in arsenic affected parts of the States of West Bengal, Bihar and Uttar Pradesh. The arsenic safe deeper aquifer zones have been identified and wells have been constructed tapping the arsenic safe deeper aquifers using innovative cement sealing technique. So far, 522 exploratory wells tapping arsenic safe aquifers have been constructed under NAQUIM programme including 40 in Bihar, 188 in West Bengal and 294 in Uttar Pradesh. In addition, the innovative cement sealing technique of CGWB has been shared with the state agencies to utilize to construct arsenic free wells.*

4. *Awareness generation programs/ workshop on various aspects of ground water including preventing ground water pollution and safe use of contaminated water are being conducted by CGWB periodically.*

5. *Department of Water Resources, River Development and Ganga Rejuvenation, Ministry of Jal Shakti has issued guidelines for control and regulation of groundwater extraction with pan India applicability notified on 24 September 2020. The guidelines include clauses on 'Measures to be adopted to ensure prevention from pollution in the plant premises of polluting industries/projects'. It is pointed out that ground water in and around polluting industries like Tannery, Slaughter Houses, Dye, Chemical, Coal washery, other hazardous units, etc. and is generally observed to be polluted. In order to prevent further deterioration of ground water quality in such places, it is essential to take necessary measures for well head protection, such as Tube well/ bore well to be constructed at the place which is hygienically maintained, RCC (Reinforced Concrete Cement) grouting around tubewell, no recharge measures within the plant premises etc."*

3. From the report we find that while presence of toxic elements like arsenic and fluoride in ground water, contaminating it and also causing serious toxic effects to human body are admitted but no effective steps have been taken by CGWA, though under law, it is the body responsible for regulating ground water. Report says that water is the subject of State and therefore, CGWA on its own is not capable of taking any serious action in matter but this contention has been rejected long back by the Supreme Court in MC Mehta vs. UOI, (1997) 11 SCC 312 and order of

this Tribunal dated 25.02.2022 in OA 176/2015, Shailesh Singh vs. Hotel Holiday Regency. We are surprised that after such a long time, even today, CGWA has the audacity of shirking away from its own statutory responsibility and obligations and taking such flimsy grounds which have already been rejected by the Apex Court itself.

4. Be that at it maysince, various States are involved inthe matter, we find it appropriate to implead them as they all are necessary parties and hear the matter after notice to them.

5. Let following be impleaded as respondents:-

1. State of Andhra Pradeshthrough Chief Secretary, Amaravati, 1st Block, 1st Floor, A.P Secretariat Office, Velagapudi-522023;
2. State of Assamthrough Chief Secretary, Dispur, Block- C, 3rd Floor, Assam Sachivalaya, Dispur, Guwahati-781006;
3. State of Bihar through Chief Secretary, Patna, Main Secretariat, Patna-800015;
4. State of Chhattisgarh through Chief Secretary, Raipur, Mahanadi Bhawan, Mantralaya, Naya Raipur-492002;
5. UT Delhi (Delhi) through Chief Secretary, Delhi Secretariat, IP Estate, New Delhi-110002;
6. State of Gujarat (Gandhinagar) through Chief Secretary, 1st Block, 5th Floor, Sachivalaya, Gandhinagar-382010;
7. State of Haryana (Chandigarh) through Chief Secretary, 4th Floor, Haryana Civil Secretariat, Sector-1, , Chandigarh-160019;
8. State of Himachal Pradesh (Shimla) through Chief Secretary,
9. UT Jammu & Kashmir through Chief Secretary Government of Himachal Pradesh, H.P. Secretariat, Shimla-171002;
10. State of Jharkhand (Ranchi) through Chief Secretary, 1st Floor, Project Building,Dhurwa, Ranchi-834004;
11. State of Karnataka (Bengaluru) through Chief Secretary, Room No. 320, 3rd Floor, Vidhana Soudha, Bengaluru-560001;
12. State of Kerala (Thiruvananthapuram) through Chief Secretary, Government of Kerala, Secretariat, Thiruvananthapuram-695001;
13. State of Madhya Pradesh(Bhopal) through Chief Secretary, MP Mantralaya, Vallabh Bhavan, Bhopal-462004;
14. State of Manipur(Imphal) through Chief Secretary, South Block, Old Secretariat, Imphal-795001;
15. State of Odisha(Bhubaneswar) through Chief Secretary, General Administration Department, Odisha Secretariat, Bhubaneswar-751001;
16. State of Punjab(Chandigarh) through Chief Secretary, Chandigarh-160001;

17. State of Rajasthan (Jaipur) through Chief Secretary, Secretariat, Jaipur-302005;
18. State of Tamil Nadu (Chennai) through Chief Secretary, Secretariat, Chennai-600009;
19. State of Telangana(Hyderabad) through Chief Secretary, Block C, 3rd Floor, Telangana, Secretariat, Khairatabad, Hyderabad;
20. State of Tripura (Agartala) through Chief Secretary, New Secretariat Complex, PO:Secretariat, Agartala-799010;
21. State of Uttar Pradesh (Lucknow) through Chief Secretary, 1st Floor, Room No. 110, Lalbahadur Sastri Bhawan, Uttar Pradesh Secretariat, Lucknow-226001;
22. State of Uttarakhand (Dehradun) through Chief Secretary, 4 Subhash Road, Uttarakhand Secretariat, Dehradun-248001;
23. State of West Bengal (Kolkata) through Chief Secretary, Nabanna, 13th Floor, 325, Sarat Chatterjee Road, Mandirtala, Shibpur, Howrah-711102;
24. UT DNH Daman & Diu (Daman) through Chief Secretary, Daman & Diu; Secretariat, Fort Area, Moti Daman, Daman (U.T.) - 396220
25. UT Puducherry (Pondicherry) through Chief Secretary, Chief Secretariat, Goubert Avenue, -605001;
26. State of Maharashtra (Mumbai) through Chief Secretary, CS Office Main Building, Mantralaya, 6th Floor, Madame Cama Road, Mumbai-400032;
27. State of Meghalaya (Shillong) through Chief Secretary, Main Secretariat Building, Rilang Building, Room No. 321, Meghalaya Secretariat, Shillong-793001;
28. State of Nagaland (Kohima) through Chief Secretary, Civil Secretariat, Kohima-797004;
29. CGWA through Member Secretary,18/11, Jamnagar House, Man Singh Road, New Delhi-110011;
30. MoEF&CC through its Secretary, Indira Paryavaran Bhawan, Jor Bagh Road, New Delhi-110003.

6. We may also notice at this stage that the problem of contamination of ground water due to arsenic in the context of certain Districts of State of UP and some other States like Assam, Bihar, Jharkhand, Karnataka, Punjab and West Bengal was considered by this Tribunal in O.A. No. 384/2019, Mrs. Sunita Pandey & Anr. vs. Union of India & Ors. & while disposing of the matter finally vide judgment dated 01.02.2021, the Tribunal directed as under:-

> *"16. In view of the above, let further steps in the matter be taken by the concerned States which may be monitored by the MoJS at the National level and by the Chief Secretaries of the concerned States, particularly in West Bengal and Punjab. The Chief Secretary, UP may sort out inter-departmental responsibilities and ensure compliance with regard to dismantling of hand pumps in arsenic*

affected habitations, along with action on other recommendations of the Oversight Committee. The CGWA, the CPCB and concerned State PCBs/PCCs may monitor water quality in the affected areas and compile the relevant data and place on a common portal for future reference and remedial action.

Due attention may be given to cover other geogenic contaminants like fluoride, nitrate and other contaminants harmful to human and animal health as well as for irrigation. CPCB and SPCBs/PCCs may give emphasis to remediate identified contaminated sites having potential threats to groundwater contamination as directed vide order dated 29.01.2021 in OA No. 804/2018, Rajive Narayan & Anr. vs. Union of India & Ors.

MoJS may, in contaminated areas where there is geogenic contamination, explore possibility of rain water harvesting systems for recharging and dilution of the contaminated water and also avoiding excessive abstraction of groundwater, so that building of contaminants does not take place."

7. The issue raised in the present matter with regard to presence of arsenic and fluoride in ground water in such large number of States and Districts is very serious and requires urgent preventive and protective steps by all concerned authorities.

8. Let Notices be issued to all the above respondents.Response may be filed by above respondents within one month after receipt of notice,by e-mail at judicial-ngt@gov.in preferably in the form of searchable PDF/ OCR Support PDF and not in the form of Image PDF.

9. List this matter on 15.02.2024.

Sudhir Agarwal, JM

Dr. A. Senthil Vel, EM

December 20, 2023
Original Application No. 728/2023
SN

Item No.13 Court No. 1

BEFORE THE NATIONAL GREEN TRIBUNAL
PRINCIPAL BENCH, NEW DELHI

Original Application No. 728/2023

News Item titled "arsenic found in groundwater in 25 States fluoride in 27 states: Gov" appearing in Hindustan dated 30.11.2023

Date of hearing: 26.04.2024

CORAM: HON'BLE MR. JUSTICE PRAKASH SHRIVASTAVA, CHAIRPERSON
HON'BLE DR. A. SENTHIL VEL, EXPERT MEMBER

Respondent: Mr. Gigi. C. George & Mr. Dheeraj Singh, Advs. for CGWA
Mr. Kaushal Gautam & Ms. Pooja Singh, Adv. for the State of Uttarakhand & UKPCB
Mr. Nishe Rajen Shonker & Mr. Alim Anvar, Advs. for the State of Kerala
Ms. Richa Kapoor, Ms. Eesha Sharma & Ms. Atika Singh, Advs. for GNCTD
Mr. Rahul Khurana, Adv. for the State of Haryana
Mr. Pukhramban Ramesh Kumar & Ms. Rajkumari Divyasana, Advs. for the State of Manipur
Mr. Vinayak Sharma, Adv. for the State of Chhattisgarh [Through VC]
Mr. Shashank Bajpai, Ms. Stuti Karwal, Ms. Ishita Khurana & Mr. Shakun S. Shukla, Advs. for the State of Odisha
Mr. Jogy Scaria & Ms. Beena Victor, Advs. for KSPCB
Mr. Neeraj & Mr. Rudra Paliwal, Advs. for the State of Uttarakhand [Through VC]

ORDER

1. In this original application, registered *suo moto*, issue of presence of arsenic and fluoride in the groundwater in different areas of the States is involved. Newspaper report on the basis of which original application was registered had disclosed that the arsenic was detected in groundwater in parts of 230 districts and 25 States and fluoride in 469 districts and 27 States.

2. Tribunal by order dated 20.12.2023 had impleaded all the States/ Union Territories and had issued notice to them.

3. Responses on behalf of 16 States/Union Territories have been received and from others it is awaited. Let the same be filed within a period of eight weeks.

4. Report dated 20.04.2024 has been filed by Central Ground Water Authority (CGWA) disclosing that CGWA vide letters dated 15.03.2024 and 18.03.2024 had directed concerned Principal Secretaries/ Secretaries of States/Union Territories to ensure supply of arsenic/fluoride free drinking water and had called for the action taken report but the action taken report from only 12 States/Union Territories have been received and from others it is awaited. We find from the earlier report of CGWA dated 06.12.2023 and present report (dated 20.04.20240 that there are methods known for removal of arsenic and floride but they have not been put to use on a larger scale or in the form of package modules for adoption at household level. CGWA should file very categorical report to this effect.

5. The CGWA will send the reminder and take further action to obtain the report from the States/Union Territories from whom it is awaited.

6. In the fresh report of CGWA, details of States and Blocks where sampling was carried out and arsenic was found beyond the permissible limit, have been disclosed as under:-

"Table 1.1 Occurrence of Arsenic in 25 States/UT sampling carried out by Regional Offices of CGWB.

S. No.	State	Total Samples	Samples above Permissible Limit*	% Samples * above permissible limit	Total Blocks	Blocks with one or more sample above Permissible limit	%Blocks with arsenic above permissible limit
1	Andhra Pradesh	588	23	4%	667	34	5%
2	Assam	440	21	5%	245	14	6%
3	Bihar	607	66	11%	535	67	13%
4	Chhattisgarh	917	16	2%	146	7	5%
5	Daman & Diu	6	0	0%	2	0	0%
6	NCT of Delhi	95	3	3%	34	3	9%
7	Gujarat	596	1	<1%	252	<1%	<1%
8	Telangana	345	2	<1%	612	2	<1%
9	Uttar Pradesh	1392	95	7%	836	70	8%
10	HP	140	1	<1%	10	1	10%

11	J & K	215	2	<1%	20	2	10%
12	Karnataka	119	4	3%	234	3	<1%
13	Haryana	465	6	<1%	143	5	3%
14	Punjab	346	4	<1%	154	11	7%
15	Jharkhand	397	2	<1%	263	2	<1%
16	Kerala	347	0	0%	152	0	0%
17	Madhya Pradesh	1033	0	0%	353	0	0%
18	Manipur	21	0	0%	9	1	5%
19	Odisha	1114	4	<1%	314	4	<1%
20	Rajasthan	595	3	<1%	302	3	1%
21	Tamil Nadu	1208	15	<1%	313	11	4%
22	Tripura	71	0	0%	59	0	0%
23	Uttarakhand	200	10	5%	18	7	39%
24	West Bengal	930	70	8%	345	41	12%
25	Puducherry	7	1	14%	8	1	13%
	Overall	**12187**	**348**	**3%**	**6018**	**287**	**5%**

- Permissible Limit: 100ppb (parts per billion) or 0.01mg/l

5	Daman	22	1	5%	2	1	50%
6	Gujarat	660	78	12%	252	54	21%
7	Haryana	465	51	11%	143	39	27%
8	Himachal Pradesh	140	7	5%	10	6	60%
9	J&K	273	2	1%	20	2	10%
10	Jharkhand	397	10	3%	263	10	4%
11	Karnataka	345	61	18%	234	36	15%
12	Kerala	347	5	1%	152	5	3%
13	Madhya Pradesh	1143	15	1%	317	12	4%
14	Maharashtra	1567	30	2%	353	20	6%
15	Manipur	21	1	5%	9	1	11%
16	Meghalaya	36	0	0%	39	0	0%
17	Nagaland	7	0	0%	52	0	0%
18	NCT of Delhi	95	15	16%	34	10	29%
19	Odisha	1283	30	2%	314	22	7%
20	Punjab	338	4	1%	153	22	14%
21	Rajasthan	809	211	26%	302	107	35%
22	Tamil Nadu	1199	117	10%	313	80	26%
23	Telangana	892	166	19%	612	137	22%
24	Tripura	71	0	0%	59	0	0%
25	Uttar Pradesh	1386	78	6%	836	57	7%
26	Uttarakhand	200	1	1%	18	1	6%
27	West Bengal	712	5	1%	345	5	1%

- Permissible limit 1.5mg/l

7. These are the hot spots where the CGWA is required to focus and take remedial action but, in the report no such remedial action is reflected.

8. Hence, CGWA will disclose in the next report, remedial action which has been taken at the places where the samples have been found to be beyond the prescribed limit and outcome of such an action.

9. In the report, though, details of the States/Blocks where arsenic level is found to be beyond the limits have been disclosed but, so far as, presence of fluoride in the groundwater is concerned, no such tabulated information is disclosed. Hence, in the next report for all the concerned States and Blocks details in tabulated forms will be disclosed.

10. Hence, we direct as under:-

i. Remaining States to file the response within 8 weeks.

ii. CGWA to file the report in terms of observations made above and specifically covering status of commissioning and operation of Arsenic and Floride remediation system at household level in areas having excessive Arsenic and Floride beyond permissible level and also tabulated status on Floride.

11. List on 07.08.2024.

Prakash Shrivastava, CP

Dr. A. Senthil Vel, EM

April 26, 2024
Original Application No. 728/2023
JG.

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RURAL DRINKING WATER AND SANITATION DIVISION BAGALKOT

Fluoride Affected Villages And Alternate source provided Details 2023-24

Sl No	District Name	Taluka name	Gram Panchyata	Village Name	No. of source affected by Fluoride	No. of source affected by Arsenic	Scheme ID with Alternate source provided	
							MVS	WPP
1	Bagalkote	Badami	Adagal	Adagal	2	_	_	WPP00245
2	Bagalkote	Badami	Fakir-budhihal	Chinchalakatti	8	_	_	WPP00294
3	Bagalkote	Badami	Fakir-budhihal	Hanamaneri[g]	1	_	_	WPP00301
4	Bagalkote	Badami	Cholachagudda	Cholachagudda	3	_	_	WPP00190
5	Bagalkote	Badami	HULLIKERI INAM	KADAPATTI S.K	1	_	_	WPP00490
6	Bagalkote	Badami	HULLIKERI INAM	GUBBERAKOPPA	1	_	_	WPP00283
7	Bagalkote	Badami	HULLIKERI INAM	MANINAGAR	2	_	_	WPP00282
8	Bagalkote	Badami	HULLIKERI INAM	YANKANCHI	2	_	_	WPP00281
9	Bagalkote	Badami	HULLIKERI INAM	HULLIKERI INAM	2	_	_	WPP00276
10	Bagalkote	Badami	HALAKURKI	Hiremuchalagudda	5	_	_	WPP00231
11	Bagalkote	Badami	HALAKURKI	Chikkamuchchalagudda	1	_	_	WPP00232
12	Bagalkote	Badami	HALAKURKI	Halakurki	5	_	_	WPP00228
13	Bagalkote	Badami	Kenduru	Kendur	1	_	_	WPP00340
14	Bagalkote	Badami	Adagal	Kabbalageri	1	_	_	WPP00246
15	Bagalkote	Badami	Kenduru	Kutakanakeri	3	_	_	WPP00341
16	Bagalkote	Badami	Pattadakal	Bhadra Nayakan Jalihal	1	_	_	WPP00259
17	Bagalkote	Badami	Pattadakal	Pattadakall	5	_	_	WPP00226
18	Bagalkote	Badami	Nandikeshwar	Govanaki	1	_	_	WPP00202
19	Bagalkote	Badami	Nandikeshwar	Nelwagi	4	_	_	WPP00225
20	Bagalkote	Badami	Nandikeshwar	Nandikeshwar	4	_	_	WPP00224
21	Bagalkote	Badami	Mangalore	Gonal	1	_	_	WPP00255
22	Bagalkote	Badami	Hosur	Anantagiri	1	_	_	WPP00314
23	Bagalkote	Badami	Hosur	Nasagunni	4	_	_	WPP00315
24	Bagalkote	Badami	Hosur	Hosur	3	_	_	WPP00274
25	Bagalkote	Badami	Mustigeri	Hanamasagar	1	_	_	WPP00241
26	Bagalkote	Badami	Mustigeri	KARADIGUDDA SN	6	_	_	WPP00238

27	Bagalkote	Badami	Mustigeri	Mustigeri	2	-	-	WPP00240
28	Bagalkote	Badami	Mamatageri	KALLAPUR.S.K	7	-	-	WPP00269
29	Bagalkote	Badami	Mamatageri	Tappasakatti	6	-	-	WPP20232
30	Bagalkote	Badami	Mamatageri	Ugalawat	4	-	-	WPP00277
31	Bagalkote	Badami	Mamatageri	Mamatageri	1	-	-	WPP00268
32	Bagalkote	Badami	Narasapur	Narasapur	3	-	-	WPP00353
33	Bagalkote	Badami	Alur-sk	Beeranur	1	-	-	WPP00709
34	Bagalkote	Badami	Alur-sk	Talakawad	1	-	-	WPP00708
35	Bagalkote	Badami	KULAGERI CROSS	Somanakoppa	4	-	-	WPP21903
36	Bagalkote	Badami	KULAGERI CROSS	Kulageri	2	-	-	WPP00234
37	Bagalkote	Badami	KULAGERI CROSS	KHANAPUR SK	1	-	-	WPP00235
38	Bagalkote	Badami	Alur-sk	ALUR SK	1	-	-	WPP00707
39	Bagalkote	Badami	Kakanur	Karalakoppa	1	-	-	WPP00251
40	Bagalkote	Badami	Kakanur	Kakanur	1	-	-	WPP00264
41	Bagalkote	Badami	Haligeri	Haligeri	5	-	-	WPP00251
42	Bagalkote	Badami	Belur	Dhanakashirur	3	-	-	WPP00195
43	Bagalkote	Badami	Belur	Belur	2	-	-	WPP00189
44	Bagalkote	Badami	Kataraki	Budihal	1	-	-	WPP00250
45	Bagalkote	Badami	Kataraki	Thaminal	2	-	-	WPP00248
46	Bagalkote	Badami	Kataraki	Neeralagi	1	-	-	WPP00249
47	Bagalkote	Badami	Kataraki	Jakanur	1	-	-	WPP00286
48	Bagalkote	Badami	Cholachagudda	Nagaral Sb	2	-	-	WPP00192
49	Bagalkote	Badami	Muttalageri	YARAGOPPA SB	3	-	-	WPP00197
50	Bagalkote	Badami	Muttalageri	Aladakatti	1	-	-	WPP00188
51	Bagalkote	Badami	Alur-sk	Govanakoppa	3	-	-	WPP00252
52	Bagalkote	Badami	Kittali	Kalas	2	-	-	WPP00204
53	Bagalkote	Badami	Narasapur	Bolawalakoppa	4	-	-	WPP00356
54	Bagalkote	Badami	Neelagund	TIMMAPUR S.N.	4	-	-	WPP00361
55	Bagalkote	Badami	Kainakatti	Jangawad	3	-	-	WPP00307
56	Bagalkote	Badami	Kainakatti	Hosakoti	1	-	-	WPP00310
57	Bagalkote	Badami	Fakir-budhihal	Naranur	4	-	-	WPP00213
58	Bagalkote	Badami	Fakir-budhihal	Fakeerabudihal	1	-	-	WPP00295
59	Bagalkote	Badami	Anawal	Kalabandakeri	2	-	-	WPP00311
60	Bagalkote	Badami	Kainakatti	Kadarakoppa	3	-	-	WPP00303
61	Bagalkote	Badami	Anawal	Anawal	3	-	-	WPP00311
62	Bagalkote	Badami	Neerabudhihal	Jalageri	7	-	-	WPP00338

-266-

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63	Bagalkote	Badami	Neerabudhihal	Yandigeri	2	_	_	WPP00305
64	Bagalkote	Badami	Neerabudhihal	Neerabudihal	4	_	_	WPP00304
65	Bagalkote	Badami	Hulageri	Malagi	3	_	_	WPP00199
66	Bagalkote	Badami	Hulageri	Agasarakoppa	6	_	_	WPP00206
67	Bagalkote	Badami	Hulageri	YARAGOPPA INAM	1	_	_	WPP00197
68	Bagalkote	Badami	Sulikeri	Kerakalamatti	1	_	_	WPP00299
69	Bagalkote	Badami	Sulikeri	Kagalagomba	6	_	_	WPP00298
70	Bagalkote	Bagalkote	Sheegikeri	Durgadevinagar	1	_	_	WPP00023
71	Bagalkote	Bagalkote	Timmapur	Basavanagar	5	_	_	WPP00075
72	Bagalkote	Bagalkote	Rampur	Mastihal	2	_	_	WPP00054
73	Bagalkote	Bagalkote	Hosur	Sitimani	4	_	_	WPP00073
74	Bagalkote	Bagalkote	Hosur	Hosur	2	_	_	WPP00271
75	Bagalkote	Bagalkote	Rampur	Rampur	12	_	_	WPP20298
76	Bagalkote	Bagalkote	Kadalimatti	Jadramakunti	1	_	_	WPP00175
77	Bagalkote	Bagalkote	Kadalimatti	Mudapaljivi	4	_	_	WPP00089
78	Bagalkote	Bagalkote	Bilkerur	Achanur	4	_	_	WPP00080
79	Bagalkote	Bagalkote	Kadalimatti	Kadalimatti	6	_	_	WPP00087
80	Bagalkote	Bagalkote	Bhagavati	Kirasur	1	_	_	WPP00007
81	Bagalkote	Bagalkote	Benakatti	Mannikatti	1	_	_	WPP20294
82	Bagalkote	Bagalkote	Bhagavati	Bhagavati	1	_	_	WPP00045
83	Bagalkote	Bagalkote	Timmapur	Bodanayakdinni	3	_	_	WPP00056
84	Bagalkote	Bagalkote	Timmapur	Timmapur	1	_	_	WPP20243
85	Bagalkote	Bagalkote	HIREGULABAL	HIRE-HODLUR	2	_	_	WPP00094
86	Bagalkote	Bagalkote	HIREGULABAL	CHICK HODLUR	1	_	_	WPP00094
87	Bagalkote	Bagalkote	HIREGULABAL	HIREMURAMATTI	1	_	_	WPP00091
88	Bagalkote	Bagalkote	HIREGULABAL	CHIKKGULABAL	1	_	_	WPP00094
89	Bagalkote	Bagalkote	HIREGULABAL	MUTTATTI	1	_	_	WPP00092
90	Bagalkote	Bagalkote	HIREGULABAL	Hiregulabal	2	_	_	WPP20297
91	Bagalkote	Bagalkote	Chikkamyageri	Handaragala	3	_	_	WPP00097
92	Bagalkote	Bagalkote	Chikkamyageri	Chick Myageri	1	_	_	WPP00096
93	Bagalkote	Bagalkote	Hosur	Nagaral	2	_	_	WPP00070
94	Bagalkote	Bagalkote	Hosur	Nagasampagi	2	_	_	WPP00072
95	Bagalkote	Bagalkote	Kadampur	Sindagi	2	_	_	WPP00109
96	Bagalkote	Bagalkote	Kadampur	Yankanchi	1	_	_	WPP00281
97	Bagalkote	Bagalkote	Kadampur	Kadampur	1	_	_	WPP00105
98	Bagalkote	Bagalkote	Murnal	Bannidinni	2	_	_	WPP00015

99	Bagalkote	Bagalkote	Murnal	Kesanur	2	"	"	WPP00014
100	Bagalkote	Bagalkote	Murnal	Veerapur	5	"	"	WPP00031
101	Bagalkote	Bagalkote	Murnal	Muranal	7	"	"	WPP00032
102	Bagalkote	Bagalkote	Seemikeri	Simikeri	2	"	"	WPP00009
103	Bagalkote	Bagalkote	Gaddankeri	Durganagar	2	"	"	WPP00004
104	Bagalkote	Bagalkote	Gaddankeri	Gaddankeri	8	"	"	WPP00001
105	Bagalkote	Bagalkote	Yadahalli	Chebbi	2	"	"	WPP00017
106	Bagalkote	Bagalkote	Yadahalli	Yadahalli	1	"	"	WPP00778
107	Bagalkote	Bagalkote	Neeralakeri	Muchakhandi	4	"	"	WPP00130
108	Bagalkote	Bagalkote	Sheegikeri	Sigikeri	10	"	"	WPP00023
109	Bagalkote	Bagalkote	Neeralakeri	Niralkeri	1	"	"	WPP00139
110	Bagalkote	Bagalkote	MUGALOLLI	Sangondi	3	"	"	WPP00047
111	Bagalkote	Bagalkote	Bevinamatti S H	Mallapur	1	"	"	WPP00026
112	Bagalkote	Bagalkote	MUGALOLLI	MUGALALLI	6	"	"	WPP00047
113	Bagalkote	Bagalkote	BENNUR	Illal	3	"	"	WPP00081
114	Bagalkote	Bagalkote	BENNUR	Talagihal	4	"	"	WPP00069
115	Bagalkote	Bagalkote	BENNUR	Siraguppi	2	"	"	WPP00444
116	Bagalkote	Bagalkote	BENNUR	BENNUR	1	"	"	WPP00067
117	Bagalkote	Bagalkote	Bevoor	Bevoor	4	"	"	WPP00126
118	Bagalkote	Bagalkote	Bilkerur	Sangapur	5	"	"	WPP00058
119	Bagalkote	Bagalkote	Hallur	Bhairamatti	1	"	"	WPP00079
120	Bagalkote	Bagalkote	Hallur	Hallur	1	"	"	WPP00077
121	Bagalkote	Bagalkote	Chikkshellikeri	Kalasakopp	2	"	"	WPP00065
122	Bagalkote	Bagalkote	Chikkshellikeri	Hire-shellikeri	1	"	"	WPP00066
123	Bagalkote	Bagalkote	Chikkshellikeri	Chickka-shellikeri	3	"	"	WPP00064
124	Bagalkote	Bagalkote	Devanal	Hire-sansi	2	"	"	WPP00020
125	Bagalkote	Bagalkote	Devanal	DEVANAL	1	"	"	WPP00021
126	Bagalkote	Bagalkote	Tulasigeri	Tulasigeri	2	"	"	WPP00034
127	Bagalkote	Bagalkote	Khajjidoni	Ankalagi	1	"	"	WPP00087
128	Bagalkote	Bagalkote	Khajjidoni	Khajjidoni	3	"	"	WPP00007
129	Bagalkote	Bilagi	Honnihal	Badaradinni Puk	1	"	"	WPP00158
130	Bagalkote	Bilagi	Korthi	Dhavaleshwar	1	"	"	WPP00457
131	Bagalkote	Bilagi	Honnihal	Yatanatti Rc	1	"	"	WPP00157
132	Bagalkote	Bilagi	Badagandi	Rolli Rc	2	"	"	WPP00175
133	Bagalkote	Bilagi	Arakeri	DURGAPURA	1	"	"	WPP00145
134	Bagalkote	Bilagi	Kataraki	Shiraguppi	1	"	"	WPP00444

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135	Bagalkote	Bilagi	Kataraki	Kataraki	2	_	_	WPP00122
136	Bagalkote	Bilagi	Heggur	Heggur Rc	6	_	_	WPP00160
137	Bagalkote	Bilagi	Teggi	Teggi	4	_	_	WPP00324
138	Bagalkote	Bilagi	Sunag	Tolamatti	1	_	_	WPP20263
139	Bagalkote	Bilagi	Sunag	Sunag	1	_	_	WPP00038
140	Bagalkote	Bilagi	Nagarale	Kontikal	3	_	_	WPP00132
141	Bagalkote	Bilagi	Nagarala	Nagaral	3	_	_	WPP00141
142	Bagalkote	Bilagi	Siddapur	Siddapur	3	_	_	WPP00152
143	Bagalkote	Bilagi	Kundaragi	Kundaragi	2	_	_	WPP20277
144	Bagalkote	Bilagi	Korthi	Korthi Rc	4	_	_	WPP00138
145	Bagalkote	Bilagi	Heggur	Muttaladinni Rc	1	_	_	WPP00172
146	Bagalkote	Bilagi	Kandagal	Kandagal	1	_	_	WPP00146
147	Bagalkote	Bilagi	Inam-hanchinal	Giriganv	1	_	_	WPP20255
148	Bagalkote	Bilagi	Honnihal	Mannikeri	1	_	_	WPP20260
149	Bagalkote	Bilagi	Honnihal	Honnihal Lt	1	_	_	WPP00142
150	Bagalkote	Bilagi	Anagawadi	Tummaramatti	3	_	_	WPP00008
151	Bagalkote	Bilagi	Chikkalagundi	Koppa Sk	2	_	_	WPP20278
152	Bagalkote	Bilagi	Badagi	Badagi	3	_	_	WPP00178
153	Bagalkote	Bilagi	Badagi	Budhihal Sg	3	_	_	WPP00177
154	Bagalkote	Bilagi	Janamatti	Janamatti	1	_	_	WPP00063
155	Bagalkote	Bilagi	Anagawadi	Anagawadi Rc	1	_	_	WPP00007
156	Bagalkote	Bilagi	BUDIHAL-SH	Kovalli	3	_	_	WPP00007
157	Bagalkote	Bilagi	BUDIHAL-SH	BUDHIHAL SH	2	_	_	WPP00118
158	Bagalkote	GULEDAGUDDA	NAGARAL SP	SUBBALAHUNASHI	1	_	_	WPP00343
159	Bagalkote	GULEDAGUDDA	NAGARAL SP	NAGARAL SP	1	_	_	WPP00344
160	Bagalkote	Hungund	Hire Badawadagi	Chittawadgi	2	_	_	WPP00733
161	Bagalkote	Hungund	Kudal Sangam	KUDAL SANGAM	2	_	_	WPP00381
162	Bagalkote	Hungund	Rakkasagi	Kalagonal	1	_	_	WPP00776
163	Bagalkote	Hungund	Chittaragi	Chittaragi	1	_	_	WPP00774
164	Bagalkote	Hungund	Ganjihal	Ganjihal	1	_	_	WPP00713
165	Bagalkote	Hungund	Belagali	Huvanur	1	_	_	WPP00769
166	Bagalkote	Hungund	Kudal Sangam	Varagodadinni	1	_	_	WPP00714
167	Bagalkote	Hungund	Belagali	Kirasur	1	_	_	WPP00046
168	Bagalkote	Hungund	Rakkasagi	Honnarahalli	1	_	_	WPP00121
169	Bagalkote	Hungund	Rakkasagi	Chickyaranakeri	1	_	_	WPP00742
170	Bagalkote	Hungund	DANNUR	Adihal	1	_	_	WPP00796

171	Bagalkote	Hungund	DANNUR	Iaddalagi	2	_	_	WPP00570
172	Bagalkote	Hungund	Sulibhavi	Sulibhavi	4	_	_	WPP00782
173	Bagalkote	ILKAL	KANDAGAL	KANDGAL	1	_	_	WPP00146
174	Bagalkote	ILKAL	NANDAWADAGI	NANDAWADAGI	1	_	_	WPP00313
175	Bagalkote	ILKAL	KARADI	KARADI	1	_	_	WPP00755
176	Bagalkote	ILKAL	JAMBALADINNI	TUMBA	1	_	_	WPP00789
177	Bagalkote	ILKAL	BALAKUNDI	ISHWARNAGAR	6	_	_	WPP00588
178	Bagalkote	ILKAL	BALAKUNDI	BALAKUNDI	10	_	_	WPP00386
179	Bagalkote	ILKAL	HIREKODAGALI	GUDUR SB	4	_	_	WPP00585
180	Bagalkote	ILKAL	CHIKANAL	BHIMANAGAD	1	_	_	WPP00785
181	Bagalkote	Mudhol	Ingalagi	Yadahalli	1	_	_	WPP00664

-269-

QUALITY MANAGER
R.D.W & S DIVISION LABORATORY
BAGALKOT-587101

EXECUTIVE ENGINEER
Rural Drinking Water &
Sanitation Division Bagalkot

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RURAL DRINKING WATER & SANITATION DEPARTMENT, DIVISION BALLARI

Details of Fluoride affected sources &the remediation measure taken **04.06.2024**

Sl No	District Nam	Taluka name	Gram Panchyata	Village Name	No. of source affected by Fluoride	No. of source affected by Arsenic	Scheme ID with Alternate source provided	
1	Ballari	Ballari	Amarapura	Amarapura	1	0	0	WPP09503
2	Ballari	Ballari	Amarapura	Asundi	1	0	0	WPP09504
3	Ballari	Ballari	Amarapura	Kakkabevinahalli	1	0	0	WPP09662
4	Ballari	Ballari	Amarapura	Tegginabudhihal	1	0	0	WPP09501
5	Ballari	Ballari	B.d.halli	B.d.halli	2	0	0	WPP09543
6	Ballari	Ballari	Chellagurki	Chellagurki	1	0	6192147	WPP09598
7	Ballari	Ballari	Chellagurki	Joladarashi	1	0	6192147	WPP00800
8	Ballari	Ballari	Sanganakallu	Sanganakallu	1	0	0	WPP09664
9	Ballari	Ballari	Shankarabande	Shankarabande	1	0	7513039	WPP09531
10	Ballari	Ballari	Shankarabande	Bobbakunte	1	0	7738966	WPP09532
11	Ballari	Ballari	Shankarabande	Ibrahimpura	1	0	7513039	WPP08882
12	Ballari	Ballari	Shankarabande	Tolamamidi	1	0	0	WPP09591
13	Ballari	Ballari	Siriwara	Siriwara	1	0	0	WPP09651
14	Ballari	Ballari	Sridharagadda	Sridharagadda	1	0	7512916	WPP09507
15	Ballari	Ballari	Yettinabudihal	Yettinabudihal	1	0	0	WPP09536
16	Ballari	Ballari	Yettinabudihal	Kammarchedu	1	0	0	WPP09537
17	Ballari	Kampli	Devalapura	Devalapura	1	0	0	WPP09634
18	Ballari	Kampli	Nelludi	Nelludi	3	0	0	WPP00812
19	Ballari	Kampli	Suggenahalli	Suggenahalli	2	0	0	WPP09028
20	Ballari	Kurugodu	Dammuru	Singadevanahalli	1	0	0	WPP00816
21	Ballari	Kurugodu	Kolur	Kolur	1	0	0	WPP09579
22	Ballari	Kurugodu	Siddammanahalli	Siddammanahalli	1	0	7513086	WPP09595
23	Ballari	Kurugodu	Somasamudra	Somasamudra	1	0	0	WPP09575
24	Ballari	Kurugodu	Yelubenchi	Thimalapura	1	0	7513030	WPP09399
25	Ballari	Siruguppa	Balakundi	Balakundi	1	0	0	WPP09127
26	Ballari	Siruguppa	Kududarahal	Nagalapura	2	0	0	WPP09138
27	Ballari	Siruguppa	Muddatanur	Malapur	1	0	7541038	WPP20687
28	Ballari	Siruguppa	Ravihal	Mitte Sugur	1	0	4912218	WPP20697
29	Ballari	Sandur	H.K Halli	Huchenahalli	22	0	0	WPP09325
30	Ballari	Sandur	Vittalapura	Tumuti	2	0	0	WPP09369

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31	Ballari	Sandur	Anthapura	Marutla	1	0	0	WPP09367
32	Ballari	Sandur	Anthapura	Kodalu	1	0	0	WPP09381
33	Ballari	Sandur	Anthapura	Lingadahalli	2	0	0	WPP09366
34	Ballari	Sandur	Anthapura	Anthapura	2	0	0	WPP09367
35	Ballari	Sandur	Anthapura	Chickkaanthapura	1	0	0	WPP09382
36	Ballari	Sandur	Vaddu	Vaddu	4	0	0	WPP09390
37	Ballari	Sandur	Vaddu	S.basapura	2	0	0	WPP09393
38	Ballari	Sandur	Thaluru	Taluru	1	0	0	WPP09391
39	Ballari	Sandur	Thaluru	Joga	2	0	0	WPP09392
40	Ballari	Sandur	Bommagatta	Seliappanahalli	1	0	0	WPP09313
41	Ballari	Sandur	Yerrayyanahalli	Yerriahanahalli	1	0	0	WPP09306
42	Ballari	Sandur	Chornur	Chornur	1	0	0	WPP09383
43	Ballari	Sandur	Nidagurthi	Nidagurthi	2	0	0	WPP09327
44	Ballari	Sandur	H K Halli	C.k. Halli	30	0	0	WPP09327
45	Ballari	Sandur	Bandri	Bandri	20	0	0	WPP09049
46	Ballari	Sandur	H K Halli	H.k. Halli	68	0	0	WPP09323
47	Ballari	Sandur	Bannihatti	S. Gangalapura	2	0	0	WPP09365
48	Ballari	Sandur	Taranagar	Taranagar	7	0	0	WPP09364
49	Ballari	Sandur	Krishnanagar	Dowlatpur	11	0	0	WPP09361
50	Ballari	Sandur	Krishnanagar	Krishnanagar	4	0	0	WPP21961
51	Ballari	Sandur	Bhujanganagar	Muraripur	8	0	0	WPP21960
52	Ballari	Sandur	Yeshwanthanagar	Somalapura	4	0	0	WPP09303
53	Ballari	Sandur	Yeshwanthanagar	Yeshwanthanagar	14	0	0	WPP09301
54	TOTAL				246	0	10	53

Executive Engineer
RDWS Division Ballari
Ballari-583104

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Sl No	District Name	Taluka name	Gram Panchyata	Village Name	No. of source affected by Fluoride	No. of source affected by Arsenic	Scheme ID with Alternate source provided	
							MVS	WPP
1	Belagavi	Belagavi	Ambewadi	Ambewadi	1	-	-	WPP Water is being Supplied Scheme id 7735/GA
			Hosavantamuri	Hosavantamuri	1	-	-	WPP Water is being supplied scheme ID 7490168
2		Khanapur	-	-	-	-	-	-
3		kittur	-	-	-	-	-	-
4		Bailahongal	-	-	-	-	-	-
5		Ramadurg	-	-	-	-	-	-
6		Savadatti	-	-	-	-	-	-
7		Yaragatti	-	-	-	-	-	-
Total								

Executive Engineer
RDW&SD Belagavi

-272-

33

Sl No	Division Name	Taluka name	Gram Panchyata	Village Name	No. of source affected by Fluoride	No. of source affected by Arsenic	Scheme ID with Alternate source provided	
							MVS	WPP
1	Chikodi	Athani	Khilegoan	Ajur	2	-	-	WPP Water is being Supplied Scheme ID-7736226
2		Athani	Suttatti	Suttatti	2	-	-	WPP Water is being Supplied Scheme ID-6646144
3		Athani	Kokatanur	Kokatanur	1	-	-	WPP Water is being Supplied Scheme ID-7736107
4		Kagawad	Kempawad	Kempawad	1	-	-	WPP Water is being Supplied Scheme ID-7736275
5		Chikod	-	-	-	-	-	-
6		Nippani	-	-	-	-	-	-
7		Raybag	-	-	-	-	-	-
8		Gokak	-	-	-	-	-	-
9		Hukkeri	-	-	-	-	-	-
10		Mudalagi	-	-	-	-	-	-
Total			-	-	6	-	-	-

Executive Engineer
R.D.W.&S. Dn. Chikodi.

Arsenic and Fluoride contamination details with measures taken

Sl No	District Name	Taluka name	Gram Panchyata	Village Name	No. of source affected by Fluoride	No. of source affected by Arsenic	Scheme ID with Alternate source provided	
							MVS	WPP
1	Bangalore Rural	Doddaballapura	NIL					
2		Nelamangala						
3		Hoskote						
4		Devanahalli						

Sl No	District Name	Taluka name	Gram Panchyata	Village Name	No. of source affected by Fluoride	No. of source affected by Arsenic	Scheme ID with Alternate source provided	
							MVS	WPP
1	Bangalore Urban	0	0	0	0	0	0	0

36

-275-

ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
ಗ್ರಾಮೀಣ ಕುಡಿಯುವ ನೀರು ಮತ್ತು ನೈರ್ಮಲ್ಯ ವಿಭಾಗ
ಬೆಂಗಳೂರು (ನಗರ) ಜಿಲ್ಲೆ

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Bidar District -Flouride Content Villages list

Sl No	District Name	Taluka name	Gram Panchyata	Village Name	No. of source affected by Flouride	No. of source affected by Arsenic	Scheme ID with Alternate source provided	
							MVS	WPP
1	BIDAR	BIDAR	AMALAPUR	GORNALLI B	1	0	-	YES
2	BIDAR	CHITGUPPA	BEMALKHEDA	BEMALKHEDA	2	0	-	YES
3	BIDAR	BHALKI	AMBESANGAVI	WALSANG	4	0	-	YES
4	BIDAR	BHALKI	BALUR	BALUR	2	0	-	BW
5	BIDAR	BHALKI	BALUR	JAINAPUR	1	0	-	BW
6	BIDAR	BHALKI	KANAJI	KANAJI	1	0	-	BW
7	BIDAR	BASAVAKALYAN	NIRGUDI	NIRGUDI	1	0	-	BW
8	BIDAR	HUMNABAD	MANIKNAGAR	MOLHKERA	1	0	-	BW

Executive Engineer
R.D.W. & S. Division
BIDAR

RURAL DRINKING WATER AND SANITATION DEPARTMENT, CHAMARAJANAGARA.

Arsenic and Fluoride contamination details

Sl No	District Name	Taluka name	Gram Panchyata	Village Name	No. of source affected by Fluoride	No. of source affected by Arsenic	Scheme ID with Alternate source provided	
							MVS	WPP
1	Chamarajanagara	Chamarajanagara	-	-	0	-	NA	NA
		Gundlupete	-	-	0	-	NA	NA
		Hanuru	-	-	0	-	NA	NA
		Kollegal	-	-	0	-	NA	NA
		Yelanduru	-	-	0	-	NA	NA

Executive Engineer
RDW&SD Chamarajanagara Division
Chamarajanagara

Government Karnataka
Rural Drinking Water And Sanitation Division
District Water Quality Testing Laboratory, Chikkaballapur

Sl No	District Name	Taluka name	Gram Panchyata	Village Name	No. of source affected by Fluoride	No. of source affected by Arsenic	Alternate source provided	
							MWS	WPP
1	Chikkaballapur	Chikkaballapur	KUPPAHALLY	TUMUKALAHALLI	1	0	NA	YES
2	Chikkaballapur	Chikkaballapur	GOLLAHALLY	KETHENAHALLY	3	0	NA	YES
3	Chikkaballapur	Chikkaballapur	AVALAGURKI	LINGASHETTIPURA	1	0	NA	YES
4	Chikkaballapur	Chikkaballapur	THIPPENAHALLY	ANKANAGONDHI	2	0	NA	YES
5	Chikkaballapur	Chikkaballapur	KONDENAHALLY	KANITHAHALLY	1	0	NA	YES
6	Chikkaballapur	Chikkaballapur	DIBBURU	GANGAREKALUVE	4	0	NA	YES
7	Chikkaballapur	Chikkaballapur	HOSAHUDYA	JATHAVARA HOSAHALLY	2	0	NA	YES
8	Chikkaballapur	Chikkaballapur	DHODDAPAYALAGURKI	DASARENAHALLY	1	0	NA	NO
9	Chikkaballapur	Chikkaballapur	DHODDAPAYALAGURKI	SAMASENA HALLY	1	0	NA	YES
10	Chikkaballapur	Chikkaballapur	PERESANDRA	YELAGALAHALLY	1	0	NA	YES
11	Chikkaballapur	Chikkaballapur	PERESANDRA	KUTHANAHALLY	1	0	NA	YES
12	Chikkaballapur	Chikkaballapur	PERESANDRA	PERESANDRA	1	0	NA	YES
13	Chikkaballapur	Chikkaballapur	ARURU	KAKALACHINTE	2	0	NA	YES
14	Chikkaballapur	Chikkaballapur	KAMMAGUTTAHALLY	UDAGIRI NALLAPPANAHALLY	1	0	NA	NO
15	Chikkaballapur	Chikkaballapur	KAMMAGUTTAHALLY	NAGASANA HALLY	3	0	NA	NO
16	Chikkaballapur	Chikkaballapur	MANDIKAL	GUDISIHALLY	2	0	NA	NO
17	Chikkaballapur	Chikkaballapur	MANDIKAL	YERRA PAPANAHALLY	1	0	NA	NO
18	Chikkaballapur	Chikkaballapur	MANDIKAL	BACHENAHALLY	1	0	NA	NO
19	Chikkaballapur	Chikkaballapur	HAROBANDE	MARASANAHALLY	1	0	NA	YES
20	Chikkaballapur	Chikkaballapur	HAROBANDE	HAROBANDE	2	0	NA	YES
21	Chikkaballapur	Sidlaghatta	KUNDALAGURKI	ROPPARALAHALLI	3	0	NA	YES
22	Chikkaballapur	Sidlaghatta	KUNDALAGURKI	RACHANAHALLI	2	0	NA	YES
23	Chikkaballapur	Sidlaghatta	KUNDALAGURKI	KACHAHALLI	1	0	NA	YES
24	Chikkaballapur	Sidlaghatta	KUNDALAGURKI	GANGAPURA	1	0	NA	YES
25	Chikkaballapur	Sidlaghatta	HANDIGANAHALA	KESHAVAPURA	1	0	NA	YES
26	Chikkaballapur	Sidlaghatta	HANDIGANAHALA	HANDIGANAHALLI	5	0	NA	YES
27	Chikkaballapur	Sidlaghatta	DHODDATEKALAHALLI	MADDENAHALLI	1	0	NA	NO
28	Chikkaballapur	Sidlaghatta	PALICHURLU	MUMMANAHALLI	1	0	NA	NO
29	Chikkaballapur	Sidlaghatta	PALICHURLU	SADDAHALLI	2	0	NA	NO
30	Chikkaballapur	Sidlaghatta	PALICHURLU	SOMANAHALLI	3	0	NA	NO
31	Chikkaballapur	Sidlaghatta	PALICHURLU	THARABAHALLI	1	0	NA	NO
32	Chikkaballapur	Sidlaghatta	PALICHURLU	PALLICHURLU	1	0	NA	YES
33	Chikkaballapur	Sidlaghatta	J VENKATAPURA	BYRASANDRA	1	0	NA	YES

S.No	District Name	Taluka Name	Gram Panchyats	Village Name	No. of voters affected by Acquisition	No. of voters affected by Acquisition	Alternate source provided	
							MVS	WPT
34	Chikkaballapur	Sidlaghatta	GANIGUNTE	GANIGUNTE	2	0	NA	YES
35	Chikkaballapur	Sidlaghatta	JANGAMKOTE	ARUBUBARAHALLI	1	0	NA	YES
36	Chikkaballapur	Sidlaghatta	JANGAMKOTE	JANGAMKOTE	3	0	NA	YES
37	Chikkaballapur	Sidlaghatta	DIBBURAHALLI	JARAGAHALLI	1	0	NA	YES
38	Chikkaballapur	Sidlaghatta	DIBBURAHALLI	SITHAHALLI	1	0	NA	NO
39	Chikkaballapur	Sidlaghatta	JANGAMKOTE	K.G CHIKKABALLA	1	0	NA	YES
40	Chikkaballapur	Chintamani	MURUGAMALLA	DUGANAREPALLI	1	0	NA	NO
41	Chikkaballapur	Chintamani	MUNAGANAHALLY	BIDDAGANAHALLI	1	0	NA	YES
42	Chikkaballapur	Chintamani	MINDIGAL	NALLARALLAHALLI	5	0	NA	NO
43	Chikkaballapur	Chintamani	MINDIGAL	DIGAVA MINDIGAL	9	0	NA	NO
44	Chikkaballapur	Chintamani	BURUDAGUNTE	BATTALAPURA	5	0	NA	NO
45	Chikkaballapur	Chintamani	BOOMISHETTIHALLY	AGRAHARA	1	0	NA	NO
46	Chikkaballapur	Chintamani	BURUDAGUNTE	BASAVAPURA	3	0	NA	NO
47	Chikkaballapur	Chintamani	BOOMISHETTIHALLY	GUDAMARLAHALLI	2	0	NA	YES
48	Chikkaballapur	Chintamani	CHINNASANDRA	DHODDIHALLY	1	0	NA	NO
49	Chikkaballapur	Chintamani	CHINNASANDRA	NARAYANAHALLY	1	0	NA	NO
50	Chikkaballapur	Chintamani	YEGAVAKOTE	KOTHAHUDYA	2	0	NA	YES
51	Chikkaballapur	Chintamani	YEGAVAKOTE	GUNTHUR GADDE	1	0	NA	NO
52	Chikkaballapur	Chintamani	YEGAVAKOTE	KONDAVENAKAPALLY	1	0	NA	NO
53	Chikkaballapur	Chintamani	YEGAVAKOTE	YEGAVAKOTE	1	0	NA	YES
54	Chikkaballapur	Chintamani	NADHIGANAHALLY	MUDDALAHALLY	1	0	NA	YES
55	Chikkaballapur	Chintamani	NADHIGANAHALLY	NIMMAKAYALAHALLY	1	0	NA	NO
56	Chikkaballapur	Chintamani	NADHIGANAHALLY	GOPALLI	1	0	NA	NO
57	Chikkaballapur	Chintamani	KORLAPARTHI	GAJUVARAPALLY	2	0	NA	YES
58	Chikkaballapur	Chintamani	KORLAPARTHI	M.MUDDALAHALLY	2	0	NA	NO
59	Chikkaballapur	Chintamani	KORLAPARTHI	KADIRENAHALLY	1	0	NA	YES
60	Chikkaballapur	Chintamani	KORLAPARTHI	K. GOLLAHALLY	2	0	NA	YES
61	Chikkaballapur	Chintamani	KORLAPARTHI	PAPA THIMMANAHALLY	2	0	NA	NO
62	Chikkaballapur	Chintamani	KORLAPARTHI	YERAMAREDDI HALLY	1	0	NA	YES
63	Chikkaballapur	Chintamani	KORLAPARTHI	SEEGALAGUTTA	1	0	NA	NO
64	Chikkaballapur	Chintamani	KORLAPARTHI	POLINAYAKANAHALLY	1	0	NA	NO
65	Chikkaballapur	Chintamani	KORLAPARTHI	DEVAGANAHALLY	1	0	NA	YES
66	Chikkaballapur	Chintamani	KORLAPARTHI	KORLAPARTHI	1	0	NA	YES
67	Chikkaballapur	Chintamani	BURUDAGUNTE	SALAMAKALAHALLY	13	0	NA	NO
68	Chikkaballapur	Chintamani	BURUDAGUNTE	CHIKKAKURUBARAHALLY	4	0	NA	NO

Sl No	District Name	Taluka name	Gram Panchayat	Village Name	No. of people affected in Families	No. of animals affected in Families	Whether house damaged	
							YES	NO
69	Chikkaballapur	Chintamani	BURUGAGUNTE	DHEGARAVARAPALLI	4	0	NA	NO
70	Chikkaballapur	Chintamani	BURUGAGUNTE	BASAVAPURA	1	0	NA	NO
71	Chikkaballapur	Chintamani	BURUGAGUNTE	BURAGAGUNTE	1	0	NA	YES
72	Chikkaballapur	Chintamani	YERRAGOLLE	CHOKKANAHALLY	2	0	NA	YES
73	Chikkaballapur	Chintamani	YERRAGOLLE	ULIBELE	1	0	NA	NO
74	Chikkaballapur	Chintamani	YERRAGOLLE	CHINTAMAKALA HALLY	1	0	NA	NO
75	Chikkaballapur	Chintamani	YERRAGOLLE	YERRAGOLLE	1	0	NA	YES
76	Chikkaballapur	Chintamani	CHILAKALANERPU	THULAVANUR	3	0	NA	YES
77	Chikkaballapur	Chintamani	CHILAKALANERPU	T.GOLLAHALLY	2	0	NA	YES
78	Chikkaballapur	Chintamani	CHILAKALANERPU	DEVAPALLY	2	0	NA	YES
79	Chikkaballapur	Chintamani	CHILAKALANERPU	HOSAHUDYA	3	0	NA	NO
80	Chikkaballapur	Chintamani	CHILAKALANERPU	BEEGALAHALLY	1	0	NA	NO
81	Chikkaballapur	Chintamani	CHILAKALANERPU	ENARAPALLI	5	0	NA	YES
82	Chikkaballapur	Chintamani	CHILAKALANERPU	MINCHALAHALLY	1	0	NA	YES
83	Chikkaballapur	Chintamani	CHILAKALANERPU	CHILAKALANERPU	2	0	NA	YES
84	Chikkaballapur	Chintamani	SHETTIHALLY	YESHAVANTHAPURA	1	0	NA	NO
85	Chikkaballapur	Chintamani	SHETTIHALLY	NELAMACHANAHALLY	1	0	NA	NO
86	Chikkaballapur	Chintamani	SHETTIHALLY	SHETTIHALLY	2	0	NA	YES
87	Chikkaballapur	Chintamani	KENCHARLAHALLY	MARABAHALLY	2	0	NA	NO
88	Chikkaballapur	Chintamani	KENCHARLAHALLY	GOWDANAHALLY	2	0	NA	NO
89	Chikkaballapur	Chintamani	MINDIGAL	YAGAVA GOLLAHALLI	6	0	NA	YES
90	Chikkaballapur	Chintamani	MURUGAMALLA	GUNDLAHALLI	2	0	NA	NO
91	Chikkaballapur	Chintamani	MURUGAMALLA	CHALAMAKOTA	1	0	NA	YES
92	Chikkaballapur	Chintamani	MURUGAMALLA	DODDA KARAKAMAKALAHALLY	2	0	NA	NO
93	Chikkaballapur	Chintamani	MURUGAMALLA	YERRAKOTE	3	0	NA	YES
94	Chikkaballapur	Chintamani	MURUGAMALLA	BYANAHALLY	2	0	NA	NO
95	Chikkaballapur	Chintamani	MURUGAMALLA	GUDARLAHALLI	2	0	NA	YES
96	Chikkaballapur	Chintamani	MURUGAMALLA	MURAGAMALLA	4	0	NA	YES
97	Chikkaballapur	Chintamani	MUNAGANAHALLY	KACHAHALLY	1	0	NA	NO
98	Chikkaballapur	Chintamani	MINDIGAL	GUDASALAHALLY	10	0	NA	NO
99	Chikkaballapur	Chintamani	BOOMISHETTIGALLY	BYARASANDRA	2	0	NA	NO
100	Chikkaballapur	Chintamani	BOOMISHETTIHALLY	UPPARLAHALLI	2	0	NA	NO
101	Chikkaballapur	Chintamani	MINDIGAL	BANDAKOTA	5	0	NA	NO
102	Chikkaballapur	Chintamani	BOOMISHETTIHALLY	SOMAYAJALAHALLI	2	0	NA	NO
103	Chikkaballapur	Chintamani	BOOMISHETTIHALLY	AJAPALLY	1	0	NA	YES

Sl.No	District Name	Taluka name	Gram Panchyata	Village Name	No. of seats allocated by Reservation	No. of seats allocated by Rotation	Alternate means provided	
							MVS	WPP
104	Chikkaballapur	Chintamani	BOOMISHETTIHALLY	KANISETTIHALLY	1	0	NA	NO
105	Chikkaballapur	Chintamani	BOOMISHETTIHALLY	SIDDEPALLY	3	0	NA	NO
106	Chikkaballapur	Chintamani	MINDIGAL	BATHALAHALLY	3	0	NA	NO
107	Chikkaballapur	Chintamani	KOTAGAL	N KOTHUR	3	0	NA	YES
108	Chikkaballapur	Chintamani	KOTAGAL	THIPPANAHALLY	2	0	NA	NO
109	Chikkaballapur	Chintamani	KOTAGAL	NARASAPURA	1	0	NA	YES
110	Chikkaballapur	Chintamani	KOTAGAL	K RAGUTTAHALLY	2	0	NA	NO
111	Chikkaballapur	Chintamani	KONAPALLI	MAHAMADH PURA	3	0	NA	YES
112	Chikkaballapur	Chintamani	KONAPALLI	SUBBARAYANA PETE	3	0	NA	NO
113	Chikkaballapur	Chintamani	KONAPALLI	KAVALAGANAHALLY	1	0	NA	YES
114	Chikkaballapur	Chintamani	KONAPALLI	KONAPALLY	1	0	NA	YES
115	Chikkaballapur	Chintamani	KATHARIGUPPE	KODIGENAHALLY	1	0	NA	NO
116	Chikkaballapur	Chintamani	KATHARIGUPPE	BAKTHARA HALLY	1	0	NA	YES
117	Chikkaballapur	Chintamani	KATHARIGUPPE	SRINIVASAPURA	2	0	NA	NO
118	Chikkaballapur	Chintamani	KATHARIGUPPE	LASKHMIDEVANAKOTE	3	0	NA	YES
119	Chikkaballapur	Chintamani	ANUR	MUDLACHINTALAPALLI	1	0	NA	NO
120	Chikkaballapur	Chintamani	ANUR	HOSUR	1	0	NA	NO
121	Chikkaballapur	Chintamani	ANUR	ANUR	1	0	NA	YES
122	Chikkaballapur	Chintamani	DHODDAGANJUR	KODADHAVADI	1	0	NA	NO
123	Chikkaballapur	Chintamani	DHODDAGANJUR	HADIGERI	1	0	NA	YES
124	Chikkaballapur	Chintamani	DHODDAGANJUR	SIDDIMATA	3	0	NA	NO
125	Chikkaballapur	Chintamani	DHODDAGANJUR	DHODDANETHA	1	0	NA	NO
126	Chikkaballapur	Chintamani	DHODDAGANJUR	CHEEMANAHALLY	1	0	NA	NO
127	Chikkaballapur	Chintamani	HIREKATTIGENAHALLY	MADANAKALLU	3	0	NA	YES
128	Chikkaballapur	Chintamani	HIREKATTIGENAHALLY	RACHAPURA	2	0	NA	YES
129	Chikkaballapur	Chintamani	HIREKATTIGENAHALLY	JANGAMAPURA	1	0	NA	NO
130	Chikkaballapur	Chintamani	HIREKATTIGENAHALLY	NERNAKALLU	2	0	NA	NO
131	Chikkaballapur	Chintamani	HIREKATTIGENAHALLY	CHENNAKESHAVAPURA	2	0	NA	YES
132	Chikkaballapur	Chintamani	HIREKATTIGENAHALLY	CHIKKAKATTIGENAHALLY	2	0	NA	NO
133	Chikkaballapur	Chintamani	HIREKATTIGENAHALLY	NIDAGURKI	1	0	NA	NO
134	Chikkaballapur	Chintamani	HIREKATTIGENAHALLY	KARADIGUTTA	2	0	NA	NO
135	Chikkaballapur	Chintamani	PERUMACHANAHALLY	KENDANAHALLY	1	0	NA	YES
136	Chikkaballapur	Chintamani	SANTHEKALLAHALLY	HERE PALYA	1	0	NA	NO
137	Chikkaballapur	Chintamani	SANTHEKALLAHALLY	AKKIMANGALA	1	0	NA	YES
138	Chikkaballapur	Chintamani	SANTHEKALLAHALLY	VADAKURU	2	0	NA	NO

	District Name	Taluka name	Gram Panchyats	Village Name				
140	Chikkaballapur	Chintamani	SANTHEKALAHALLY	SANTHEKALAHALLY	2	0	NA	YES
141	Chikkaballapur	Chintamani	KAIVARA	SUVARNAMUCHUKUPPETE	1	0	NA	YES
142	Chikkaballapur	Chintamani	KAIVARA	BANAVARLY	2	0	NA	YES
143	Chikkaballapur	Chintamani	KAIVARA	KAIVARA	1	0	NA	YES
144	Chikkaballapur	Chintamani	KURUBUR	MYLANDAHALLY	2	0	NA	YES
145	Chikkaballapur	Chintamani	KAGATHI	DEVASANDRA	1	0	NA	NO
146	Chikkaballapur	Chintamani	KAGATHI	BALAGAVARAHALLY	1	0	NA	NO
147	Chikkaballapur	Chintamani	MUGULAHALLY	MUGULAHALLY	7	0	NA	YES
148	Chikkaballapur	Chintamani	BATLAHALLY	BOGARAPALLI	1	0	NA	NO
149	Chikkaballapur	Chintamani	BATLAHALLY	KONAPURA	3	0	NA	NO
150	Chikkaballapur	Chintamani	BATLAHALLY	SOMAKALAHALLY	2	0	NA	NO
151	Chikkaballapur	Chintamani	BATLAHALLY	BATLAHALLY	2	0	NA	YES
152	Chikkaballapur	Chintamani	UPPARAPETE	KEMPADENHALLI	1	0	NA	NO
153	Chikkaballapur	Chintamani	UPPARAPETE	VADDAHALLY	1	0	NA	NO
154	Chikkaballapur	Chintamani	UPPARAPETE	UPPARAPETE	1	0	NA	YES
155	Chikkaballapur	Chintamani	MINDIGAL	BOOPANAHALLY	4	0	NA	NO
156	Chikkaballapur	Chintamani	KADADHALAMARI	KADADHALAMARI	1	0	NA	YES
157	Chikkaballapur	Bagepalli	YELLAMAPALLI	YELLAMAPALLI	1	0	NA	YES
158	Chikkaballapur	Bagepalli	YELLAMAPALLI	SHANKAVARAPALLI	1	0	NA	YES
159	Chikkaballapur	Bagepalli	THOLLAPALLI	SIGNAMPALLI	7	0	NA	YES
160	Chikkaballapur	Bagepalli	THOLLAPALLI	KOLLAVARIPALLI	1	0	NA	NO
161	Chikkaballapur	Bagepalli	THOLLAPALLI	VASANTHAPURA	5	0	NA	NO
162	Chikkaballapur	Bagepalli	SOMANTHAPURA	SOMANATHAPURA	1	0	NA	YES
163	Chikkaballapur	Bagepalli	SOMANTHAPURA	RACHAVARIPALLI	1	0	NA	NO
164	Chikkaballapur	Bagepalli	RASCHERVU	KOTTAMPALLI	7	0	NA	YES
165	Chikkaballapur	Bagepalli	RASCHERVU	RASCHERUVU	8	0	NA	YES
166	Chikkaballapur	Bagepalli	RASCHERVU	RAMASWAMYPALLI	2	0	NA	NO
167	Chikkaballapur	Bagepalli	PULIGAL	DARBARAVARIPALLI	1	0	NA	NO
168	Chikkaballapur	Bagepalli	PULIGAL	VANTEERVANDLAPALLI	2	0	NA	NO
169	Chikkaballapur	Bagepalli	PULIGAL	SAIBALAVARIPALLI	1	0	NA	YES
170	Chikkaballapur	Bagepalli	PULIGAL	OODAVARIPALLI	1	0	NA	NO
171	Chikkaballapur	Bagepalli	PULIGAL	RAMANPADI	2	0	NA	NO
172	Chikkaballapur	Bagepalli	PULIGAL	Ragimakalapalli	4	0	NA	NO
173	Chikkaballapur	Bagepalli	PULIGAL	PULIGAL	4	0	NA	YES
174	Chikkaballapur	Bagepalli	PULIGAL	MYKALAPALLI	2	0	NA	NO

Sl No	District Name	Taluka name	Gram Panchyata	Village Name	No. of MVS allocated by Forester	No. of MVS allocated by Ayurveda	Activities involved participated	
							MVS	WFP
174	Chikkaballapur	Bagepalli	PULIGAL	BELLALAMAPALLI	3	0	NA	YES
175	Chikkaballapur	Bagepalli	PATHAPALYA	SINGAPAGARAPALLI	2	0	NA	NO
176	Chikkaballapur	Bagepalli	PATHAPALYA	DEVARAJAPALLI	1	0	NA	YES
177	Chikkaballapur	Bagepalli	PATHAPALYA	PATHAKOTE	3	0	NA	NO
178	Chikkaballapur	Bagepalli	PATHAPALYA	GUJJAPALLI	2	0	NA	NO
179	Chikkaballapur	Bagepalli	PATHAPALYA	PATHAPALYA	3	0	NA	YES
180	Chikkaballapur	Bagepalli	PARAGODU	KONDAREDDIPALLI	1	0	NA	NO
181	Chikkaballapur	Bagepalli	PARAGODU	PARAGODU	1	0	NA	YES
182	Chikkaballapur	Bagepalli	PALYAKERE	Mandampalli	3	0	NA	NO
183	Chikkaballapur	Bagepalli	PALYAKERE	MUDDLAPALLI	2	0	NA	YES
184	Chikkaballapur	Bagepalli	PALYAKERE	RAMOJAPALLI	3	0	NA	YES
185	Chikkaballapur	Bagepalli	PALYAKERE	KOTHURPALLI	8	0	NA	NO
186	Chikkaballapur	Bagepalli	PALYAKERE	MACHANAHALLI	1	0	NA	NO
187	Chikkaballapur	Bagepalli	PALYAKERE	PALYAKERE	5	0	NA	YES
188	Chikkaballapur	Bagepalli	NAREMADDEPALLI	DODDIVARIPALLI	1	0	NA	YES
189	Chikkaballapur	Bagepalli	NAREMADDEPALLI	BESTALAPALLI	2	0	NA	YES
190	Chikkaballapur	Bagepalli	NAREMADDEPALLI	RECHANAYAKANAPALLI	1	0	NA	NO
191	Chikkaballapur	Bagepalli	NAREMADDEPALLI	JANGALAPALLI	1	0	NA	YES
192	Chikkaballapur	Bagepalli	NAREMADDEPALLI	NAREMADDAPALLI	3	0	NA	YES
193	Chikkaballapur	Bagepalli	NALLAPPAREDDIPALLI	NALLAPAREDDIPALLI	3	0	NA	YES
194	Chikkaballapur	Bagepalli	NALLAPPAREDDIPALLI	CHINNEPALLI	1	0	NA	YES
195	Chikkaballapur	Bagepalli	NALLAGUTTLAPALLI	PEDDUR	2	0	NA	NO
196	Chikkaballapur	Bagepalli	NALLAGUTTLAPALLI	GUNDLAPALLI	1	0	NA	YES
197	Chikkaballapur	Bagepalli	NALLAGUTTLAPALLI	Bathalaveerapalli	2	0	NA	YES
198	Chikkaballapur	Bagepalli	NALLAGUTTLAPALLI	RUPIGARIPALLI	4	0	NA	NO
199	Chikkaballapur	Bagepalli	NALLAGUTTLAPALLI	VENKATAPURA	2	0	NA	YES
200	Chikkaballapur	Bagepalli	NALLAGUTTLAPALLI	KONDIKONDA	7	0	NA	YES
201	Chikkaballapur	Bagepalli	NALLAGUTTLAPALLI	NALLAGUTTLAPALLI	1	0	NA	YES
202	Chikkaballapur	Bagepalli	MITTEMARI	MITTEMARI	4	0	NA	YES
203	Chikkaballapur	Bagepalli	MITTEMARI	CHINNOBAYAGARIPALLI	2	0	NA	YES
204	Chikkaballapur	Bagepalli	MITTEMARI	CHINNAMPALLI	1	0	NA	NO
205	Chikkaballapur	Bagepalli	MARAGANAKUNTE	DEVIKUNTE	1	0	NA	YES
206	Chikkaballapur	Bagepalli	MARAGANAKUNTE	CHINTAMANALLAPPANI	1	0	NA	YES
207	Chikkaballapur	Bagepalli	MARAGANAKUNTE	NARANASWAMYKOTE	1	0	NA	YES
208	Chikkaballapur	Bagepalli	MARAGANAKUNTE	MARAGANAKUNTE	3	0	NA	YES

	District Name	Taluka name	Gram Panchyata	Village Name	No. of source affected by Fluoride	No. of source affected by Arsenic	Alternate source provided	
							MVS	WPP
209	Chikkaballapur	Bagepalli	KOTHAKOTE	Penalagarthi	1	0	NA	YES
210	Chikkaballapur	Bagepalli	KOTHAKOTE	RAJAKARIDIVARIPALLI	1	0	NA	YES
211	Chikkaballapur	Bagepalli	KOTHAKOTE	HONNAMPALLI	3	0	NA	YES
212	Chikkaballapur	Bagepalli	KOTHAKOTE	MADAKAVARIPALLI	3	0	NA	YES
213	Chikkaballapur	Bagepalli	KOTHAKOTE	KOKUMPALLI	1	0	NA	NO
214	Chikkaballapur	Bagepalli	KOTHAKOTE	KOTHAKOTE	5	0	NA	YES
215	Chikkaballapur	Bagepalli	KANAGAMAKALAPALLI	BURAGAMADDU	3	0	NA	YES
216	Chikkaballapur	Bagepalli	KANAGAMAKALAPALLI	PAPINAYAKANAPALLI	1	0	NA	NO
217	Chikkaballapur	Bagepalli	KANAGAMAKALAPALLI	MADDALAKHANA	3	0	NA	NO
218	Chikkaballapur	Bagepalli	KANAGAMAKALAPALLI	KANGAMAKALAPALLI	2	0	NA	NO
219	Chikkaballapur	Bagepalli	JULAPALYA	SREEDHARAVARIPALLI	2	0	NA	YES
220	Chikkaballapur	Bagepalli	JULAPALYA	PAIPALYA	1	0	NA	YES
221	Chikkaballapur	Bagepalli	JULAPALYA	BODIKADIREPALLI	1	0	NA	NO
222	Chikkaballapur	Bagepalli	JULAPALYA	KANAMPALLI	3	0	NA	YES
223	Chikkaballapur	Bagepalli	POLINAYAKANAPALLI	ACHAGANAPALLI	2	0	NA	YES
224	Chikkaballapur	Bagepalli	POLINAYAKANAPALLI	BATHALAPALLI	1	0	NA	NO
225	Chikkaballapur	Bagepalli	JULAPALYA	JULAPALYA	6	0	NA	YES
226	Chikkaballapur	Bagepalli	POLINAYAKANAPALLI	DUGINAYAKANAPALLI	2	0	NA	NO
227	Chikkaballapur	Bagepalli	POLINAYAKANAPALLI	PULAKUNTLPALLI	1	0	NA	NO
228	Chikkaballapur	Bagepalli	JULAPALYA	VADIGERE	1	0	NA	YES
229	Chikkaballapur	Bagepalli	POLINAYAKANAPALLI	GUMMALAPALLI	1	0	NA	YES
230	Chikkaballapur	Bagepalli	JULAPALYA	NADAMPALLI	5	0	NA	YES
231	Chikkaballapur	Bagepalli	GULUR	SADOUPALLI	2	0	NA	YES
232	Chikkaballapur	Bagepalli	GULUR	GULUR	1	0	NA	YES
233	Chikkaballapur	Bagepalli	GORTHAPALLI	G. Cherlopalli	1	0	NA	YES
234	Chikkaballapur	Bagepalli	GORTHAPALLI	SAJJUPALLI	8	0	NA	NO
235	Chikkaballapur	Bagepalli	GORTHAPALLI	GORTHAPALLI	23	0	NA	YES
236	Chikkaballapur	Bagepalli	GANTAMAVARIPALLI	PATHABAGEPALLI	3	0	NA	YES
237	Chikkaballapur	Bagepalli	GANTAMAVARIPALLI	Pothepalli	7	0	NA	YES
238	Chikkaballapur	Bagepalli	GANTAMAVARIPALLI	YAGAVARANDLAKERE	3	0	NA	NO
239	Chikkaballapur	Bagepalli	GANTAMAVARIPALLI	GOWNIPALLY	1	0	NA	NO
240	Chikkaballapur	Bagepalli	GANTAMAVARIPALLI	HOSAHUDYA	3	0	NA	YES
241	Chikkaballapur	Bagepalli	GANTAMAVARIPALLI	YETIGADDAPALLI	2	0	NA	NO
242	Chikkaballapur	Bagepalli	GANTAMAVARIPALLI	ABAKAVARIPALLI	2	0	NA	NO
243	Chikkaballapur	Bagepalli	GANTAMAVARIPALLI	ADIGANAPALLI	1	0	NA	YES

Sl No	District Name	Taluka name	Gram Panchyata	Village Name	No of wards affected by Flooding	No of wards affected by Animals	Alternate source provided	
							MVS	WPP
244	Chikkaballapur	Bagepalli	GANTAMAVARIPALLI	PUTTAPARTHI	2	0	NA	NO
245	Chikkaballapur	Bagepalli	GANTAMAVARIPALLI	NAREPALLI	1	0	NA	NO
246	Chikkaballapur	Bagepalli	GANTAMAVARIPALLI	GANTAMAVARIPALLI	1	0	NA	NO
247	Chikkaballapur	Bagepalli	DEVARAGUDIPALLI	Makireddypalli	4	0	NA	YES
248	Chikkaballapur	Bagepalli	DEVARAGUDIPALLI	MALLASANDRA	1	0	NA	YES
249	Chikkaballapur	Bagepalli	DEVARAGUDIPALLI	KADAMANADARIPALLI	1	0	NA	NO
250	Chikkaballapur	Bagepalli	DEVARAGUDIPALLI	PEDDATHUNKEPALLI	2	0	NA	YES
251	Chikkaballapur	Bagepalli	DEVARAGUDIPALLI	KARKUR	1	0	NA	YES
252	Chikkaballapur	Bagepalli	DEVARAGUDIPALLI	DEVARAGUDIPALLI	1	0	NA	YES
253	Chikkaballapur	Bagepalli	CHELUR	SHERIHANKOTE	1	0	NA	NO
254	Chikkaballapur	Bagepalli	CHELUR	BYRAPPANAHALLI	10	0	NA	YES
255	Chikkaballapur	Bagepalli	CHELUR	NIMMAKAYALAPALLI	1	0	NA	NO
256	Chikkaballapur	Bagepalli	CHAKAVEL	CHAKAVELU	4	0	NA	YES
257	Chikkaballapur	Bagepalli	PALYAKERE	peddarajupalli	1	0	NA	NO
258	Chikkaballapur	Bagepalli	PULIGAL	NALLASANAMPALLY	1	0	NA	YES
259	Chikkaballapur	Bagepalli	PATHAPALYA	Kamasanepalli	2	0	NA	YES
260	Chikkaballapur	Bagepalli	PALYAKERE	KUNTAKINDAPALLY	2	0	NA	NO
261	Chikkaballapur	Bagepalli	MARAGANAKUNTE	Pokamakalapalli	1	0	NA	YES
262	Chikkaballapur	Bagepalli	NAREMADDEPALLI	DUGINAYAKANAPALLI	2	0	NA	NO
263	Chikkaballapur	Bagepalli	POLINAYAKANAPALLI	BOMMASANDRA	1	0	NA	NO
264	Chikkaballapur	Gauribidanur	NAKKALAHALLY	MUCHATLAHALLI	1	0	NA	NO
265	Chikkaballapur	Gauribidanur	B.BOMMASANDRA	MIDDILU	3	0	NA	NO
266	Chikkaballapur	Gauribidanur	MELYA	JAGAREDDYHALLI	2	0	NA	yes
267	Chikkaballapur	Gauribidanur	MINAKINAGURKI	HALEBUDHINANTANAHALLI	1	0	NA	NO
268	Chikkaballapur	Gauribidanur	MUDALODDU	M GOLLAHALLI	1	0	NA	yes
269	Chikkaballapur	Gauribidanur	HUDHUGUR	LAKKASANDRA	1	0	NA	NO
270	Chikkaballapur	Gauribidanur	VATADAHOSAHALLY	KRISHNARAJAPURA	2	0	NA	NO
271	Chikkaballapur	Gauribidanur	VATADAHOSAHALLY	THOKALAHALLY	2	0	NA	yes
272	Chikkaballapur	Gauribidanur	VATADAHOSAHALLY	BODABANDANAHALLY	1	0	NA	yes
273	Chikkaballapur	Gauribidanur	VATADAHOSAHALLY	CHIMAKALAHALLY	1	0	NA	yes
274	Chikkaballapur	Gauribidanur	VATADAHOSAHALLY	SABBANAHALLY	2	0	NA	yes
275	Chikkaballapur	Gauribidanur	VATADAHOSAHALLY	KEREOLAGINAHALLY	1	0	NA	yes
276	Chikkaballapur	Gauribidanur	VATADAHOSAHALLY	VATADAHOSAHALLY	1	0	NA	yes
277	Chikkaballapur	Gauribidanur	MUDUGERE	IEERIGEPETE	1	0	NA	yes
278	Chikkaballapur	Gauribidanur	MUDUGERE	HALEUPPARAHALLY	4	0	NA	yes

	District Name	Taluka name	Gram Panchyata	Village Name				
							MVS	WPP
279	Chikkaballapur	Gauribidanur	MUDALODDU	SADAREAHALLY	1	0	NA	yes
280	Chikkaballapur	Gauribidanur	MUDALODDU	MANIVALA	5	0	NA	yes
281	Chikkaballapur	Gauribidanur	MUDALODDU	JEELAKUNTE	2	0	NA	yes
282	Chikkaballapur	Gauribidanur	MUDALODDU	MUDALODDU	1	0	NA	NO
283	Chikkaballapur	Gauribidanur	NAKKALAHALLY	DEVASANAHALLY	2	0	NA	YES
284	Chikkaballapur	Gauribidanur	NAKKALAHALLY	HULIKUNTE	3	0	NA	YES
285	Chikkaballapur	Gauribidanur	NAKKALAHALLY	SURYANARAYAKAMAHALLY	6	0	NA	YES
286	Chikkaballapur	Gauribidanur	NAKKALAHALLY	NAKASAPURA	3	0	NA	YES
287	Chikkaballapur	Gauribidanur	NAKKALAHALLY	GOTTLAKUNTE	2	0	NA	YES
288	Chikkaballapur	Gauribidanur	NAKKALAHALLY	KATAMAKALLU	6	0	NA	YES
289	Chikkaballapur	Gauribidanur	NAKKALAHALLY	NAKKALAHALLY	9	0	NA	YES
290	Chikkaballapur	Gauribidanur	SONAGANAHALLY	NADUVALAHALLY	1	0	NA	YES
291	Chikkaballapur	Gauribidanur	SONAGANAHALLY	YARRAPOTHENAHALLY	1	0	NA	YES
292	Chikkaballapur	Gauribidanur	TARIDALU	SOMASHATTYHALLY	2	0	NA	YES
293	Chikkaballapur	Gauribidanur	TARIDALU	TARIDALU	1	0	NA	YES
294	Chikkaballapur	Gauribidanur	RAMAPURA	JODIBISILAHALLY	1	0	NA	YES
295	Chikkaballapur	Gauribidanur	RAMAPURA	HAMPASANDRA	1	0	NA	YES
296	Chikkaballapur	Gauribidanur	RAMAPURA	KUNDIHALLY	1	0	NA	YES
297	Chikkaballapur	Gauribidanur	RAMAPURA	RAMAPURA	3	0	NA	YES
298	Chikkaballapur	Gauribidanur	MINAKINAGURKI	DANDIGANHALLY	1	0	NA	YES
299	Chikkaballapur	Gauribidanur	MINAKINAGURKI	KAMBATHNAHALLY	2	0	NA	YES
300	Chikkaballapur	Gauribidanur	MINAKINAGURKI	MINAKINAGURKI	1	0	NA	YES
301	Chikkaballapur	Gauribidanur	MELYA	HUNSENAHALLY	1	0	NA	YES
302	Chikkaballapur	Gauribidanur	MELYA	VELAPI	2	0	NA	YES
303	Chikkaballapur	Gauribidanur	BYCHAPURA	VIRUPASANDRA	1	0	NA	YES
304	Chikkaballapur	Gauribidanur	BYCHAPURA	BADIMARALUR	1	0	NA	YES
305	Chikkaballapur	Gauribidanur	BEVINAHALLY	KAMAGANAHALLY	1	0	NA	YES
306	Chikkaballapur	Gauribidanur	B.BOMMASANDRA	SIDENAHALLY	1	0	NA	YES
307	Chikkaballapur	Gauribidanur	B.BOMMASANDRA	YARRANAGENAHALLY	2	0	NA	YES
308	Chikkaballapur	Gauribidanur	B.BOMMASANDRA	VENKATAPURA	3	0	NA	YES
309	Chikkaballapur	Gauribidanur	B.BOMMASANDRA	B.BOMMASANDRA	9	0	NA	YES
310	Chikkaballapur	Gauribidanur	ALAKAPURA	[illegible]	3	0	NA	YES
311	Chikkaballapur	Gauribidanur	ALAKAPURA	RAYAREKALAHALLY	1	0	NA	YES
312	Chikkaballapur	Gauribidanur	ALAKAPURA	ALAKAPURA	1	0	NA	YES
313	Chikkaballapur	Gauribidanur	PURA	BISILAHALLY	1	0	NA	YES

Sl No	District Name	Taluka name	Gram Panchyata	Village Name	No. of source affected by Rainfall	No. of source affected by Borewell	Alternate source provided	
							MWS	WPP
314	Chikkaballapur	Gauribidanur	PURA	BEERAMANGALA	1	0	NA	YES
315	Chikkaballapur	Gauribidanur	PURA	P.NAGENAHALLY	1	0	NA	NO
316	Chikkaballapur	Gauribidanur	NAMAGONDLU	JAKKENAHALLY	2	0	NA	YES
317	Chikkaballapur	Gauribidanur	NAMAGONDLU	BUDUGENAHALLY	1	0	NA	NO
318	Chikkaballapur	Gauribidanur	NAMAGONDLU	GUNDLAHALLY	2	0	NA	YES
319	Chikkaballapur	Gauribidanur	NAMAGONDLU	KADABURU	3	0	NA	YES
320	Chikkaballapur	Gauribidanur	NAMAGONDLU	NAMAGONDLU	2	0	NA	YES
321	Chikkaballapur	Gauribidanur	MANCHENAHALLY	MANCHENAHALLY	1	0	NA	YES
322	Chikkaballapur	Gauribidanur	KURUDI	RANGANAHALLY	1	0	NA	YES
323	Chikkaballapur	Gauribidanur	KURUDI	DRONAKUNTE	1	0	NA	YES
324	Chikkaballapur	Gauribidanur	RAMAPURA	HOSAIPPARAHALLY	1	0	NA	NO
325	Chikkaballapur	Gauribidanur	KURUDI	KURUDI	2	0	NA	YES
326	Chikkaballapur	Gauribidanur	KALLINAYAKANAHALLY	KALLINAYAKANAHALLY	1	0	NA	YES
327	Chikkaballapur	Gauribidanur	KADALAVENI	VYCHAKARAHALLY	1	0	NA	YES
328	Chikkaballapur	Gauribidanur	KADALAVENI	KADALAVENI	2	0	NA	YES
329	Chikkaballapur	Gauribidanur	JARABANDANAHALLY	MYLAGANAHALLY	1	0	NA	YES
330	Chikkaballapur	Gauribidanur	JARABANDANAHALLY	HEGGENAHALLY	1	0	NA	YES
331	Chikkaballapur	Gauribidanur	JARABANDANAHALLY	AK.GOLLAHALLY	1	0	NA	YES
332	Chikkaballapur	Gauribidanur	JARABANDANAHALLY	HANUMANTHAPURA	4	0	NA	YES
333	Chikkaballapur	Gauribidanur	JARABANDANAHALLY	BALAREDDYHALLY	1	0	NA	YES
334	Chikkaballapur	Gauribidanur	JARABANDANAHALLY	DINNENAHALLY	1	0	NA	YES
335	Chikkaballapur	Gauribidanur	HOSSUR	HOSSUR	1	0	NA	YES
336	Chikkaballapur	Gauribidanur	G.KOTHUR	NARLAHALLY	1	0	NA	YES
337	Chikkaballapur	Gauribidanur	G.KOTHUR	CHOLASETTYHALLY	1	0	NA	YES
338	Chikkaballapur	Gauribidanur	G.KOTHUR	KODIHALLY	2	0	NA	YES
339	Chikkaballapur	Gauribidanur	G.KOTHUR	G.KOTHUR	10	0	NA	YES
340	Chikkaballapur	Gauribidanur	GEDARE	KACHAMACHENAHALLY	1	0	NA	YES
341	Chikkaballapur	Gauribidanur	GEDARE	KENKERE	1	0	NA	YES
342	Chikkaballapur	Gauribidanur	GANGASANDRA	SAGANAHALLY	1	0	NA	YES
343	Chikkaballapur	Gauribidanur	GANGASANDRA	GANGASANDRA	4	0	NA	YES
344	Chikkaballapur	Gauribidanur	DODDAKURAGODU	H.NAGASANDRA	1	0	NA	YES
345	Chikkaballapur	Gauribidanur	DODDAKURAGODU	KUDUMALAKUNTE	4	0	NA	YES
346	Chikkaballapur	Gauribidanur	DODDAKURAGODU	DODDAKURAGODU	9	0	NA	YES
347	Chikkaballapur	Gauribidanur	D.PALYA	ANAGATTANAHALLY	2	0	NA	YES
348	Chikkaballapur	Gauribidanur	D.PALYA	BACHCHAREDDYHALLY	2	0	NA	YES

Sl No	Dist Name	Taluka name	Gram Panchyata	Village Name	No. of wards allocated by Election	No. of seats allocated to women	Reservation for post of Chairperson	
							MVS	WPP
349	Chikkaballapur	Gauribidanur	D.PALYA	VADDENAHALLY	3	0	NA	YES
350	Chikkaballapur	Gauribidanur	D.PALYA	D.PALYA	4	0	NA	YES
351	Chikkaballapur	Gauribidanur	THONDEBAVI	BELTHUR	1	0	NA	YES
352	Chikkaballapur	Gauribidanur	THONDEBAVI	KADHIRADEVARAHALLY	1	0	NA	YES
353	Chikkaballapur	Gauribidanur	THONDEBAVI	BOOMENAHALLY	3	0	NA	NO
354	Chikkaballapur	Gauribidanur	THONDEBAVI	THONDEBAVI	1	0	NA	YES
355	Chikkaballapur	Gauribidanur	CHIKKAKURAGODU	RAMACHANDRAPURA	1	0	NA	YES
356	Chikkaballapur	Gudibande	YELLODU	YARRAHALLI	2	0	NA	YES
357	Chikkaballapur	Gudibande	VARALAKONDA	BHATHALAHALLY	2	0	NA	YES
358	Chikkaballapur	Gudibande	HAMPASANDRA	KONDAREDDIHALLI	1	0	NA	YES
359	Chikkaballapur	Gudibande	HAMPASANDRA	KORENAHALLI	3	0	NA	yes
360	Chikkaballapur	Gudibande	HAMPASANDRA	CHANDUR	2	0	NA	YES
361	Chikkaballapur	Gudibande	HAMPASANDRA	BENNEPARTHI	3	0	NA	YES
362	Chikkaballapur	Gudibande	HAMPASANDRA	PULLISANIVADDU	3	0	NA	NO
363	Chikkaballapur	Gudibande	ULLODU	IDRAHALLI	2	0	NA	YES
364	Chikkaballapur	Gudibande	ULLODU	MACHAULAHALLI	2	0	NA	NO
365	Chikkaballapur	Gudibande	ULLODU	PULUVAMAKALAHALLI	1	0	NA	NO
366	Chikkaballapur	Gudibande	ULLODU	KARIGANTHIMANAHALLI	1	0	NA	YES
367	Chikkaballapur	Gudibande	ULLODU	RURAL GUDIBANDA	3	0	NA	YES
368	Chikkaballapur	Gudibande	ULLODU	CHOWTATHIMMANAHALLI	1	0	NA	YES
369	Chikkaballapur	Gudibande	ULLODU	SOMALAPURA	1	0	NA	NO
370	Chikkaballapur	Gudibande	ULLODU	BRAMHANARAHALLI	2	0	NA	NO
371	Chikkaballapur	Gudibande	ULLODU	NICHABANDANAHALLI	3	0	NA	YES
372	Chikkaballapur	Gudibande	ULLODU	GERUMARADHANAHALLI	1	0	NA	NO
373	Chikkaballapur	Gudibande	DAPPARTI	UPPARAHALLI	4	0	NA	YES
374	Chikkaballapur	Gudibande	DAPPARTI	BATHALAHALLI	3	0	NA	YES
375	Chikkaballapur	Gudibande	YELLODU	NULUGAMBA	2	0	NA	YES
376	Chikkaballapur	Gudibande	YELLODU	NULLASANDRA	5	0	NA	YES
377	Chikkaballapur	Gudibande	YELLODU	CHOWTAKUNTAHALLI	6	0	NA	YES
378	Chikkaballapur	Gudibande	YELLODU	YELLODU	17	0	NA	YES
379	Chikkaballapur	Gudibande	VARALAKONDA	POLAMPALLI	2	0	NA	YES
380	Chikkaballapur	Gudibande	VARALAKONDA	LAKSHMISAGARA	1	0	NA	YES
381	Chikkaballapur	Gudibande	VARALAKONDA	BOMMANAHALLI	2	0	NA	YES
382	Chikkaballapur	Gudibande	VARALAKONDA	GEDDAPANAHALLI	1	0	NA	NO
383	Chikkaballapur	Gudibande	VARALAKONDA	JANGALAHALLI	2	0	NA	NO

1150

-289-

Sl No	District Name	Taluka name	Gram Panchyata	Village Name	No. of source affected by chemicals	No. of source affected by bacteria	If bacteria source is contaminated	
							MVS	WPP
384	Chikkaballapur	Gudibande	VARALAKONDA	KAPPREDDIHALLI	2	0	NA	YES
385	Chikkaballapur	Gudibande	VARALAKONDA	VARALAKONDA	6	0	NA	YES
386	Chikkaballapur	Gudibande	THIRUMANI	KAMNALAHALLI	1	0	NA	NO
387	Chikkaballapur	Gudibande	DAPPARTI	GAVIKUNTAHALLI	1	0	NA	YES
388	Chikkaballapur	Gudibande	DAPPARTI	DAPPARTHI	2	0	NA	YES
389	Chikkaballapur	Gudibande	DAPPARTI	REDDIHALLI	4	0	NA	NO
390	Chikkaballapur	Gudibande	BEECHAGANAHALLY	BEECHAGANAHALLI	2	0	NA	YES

Quality Manager
D.W.S.T.Lab. Chikkaballapur

Executive Engineer
Rural Drinking Water And Sanitation Division
Chikkaballapur

Aresenic And Fluoride Contamination Details with Measure's Taken

Sl No	District Name	Taluk name	Gram Panchayath	Village Name	No. of source affected by Fluoride	No. of source affected by Arsenic	Scheme ID with Alternate source provided	
							MVS	WPP
1	Chikmagalur	Ajjampura	Mugali	Tammatadahalli	1	0	-	7369094
2	Chikmagalur	Chikmagalur	Sindigere	Sindigere	2	0	-	7366529
3	Chikmagalur	Chikmagalur	Bilekallahalli	Uddeboranahalli	1	0	-	Under MLA Grant
4	Chikmagalur	Chikmagalur	Bilekallahalli	Bilekallahalli	1	0	-	Under MLA Grant
5	Chikmagalur	Kadur	Thangli	Kanagondanahalli	1	0	-	7369604
6	Chikmagalur	Kadur	Mathighatta	Kuppalu	1	0	-	7760123
7	Chikmagalur	Kadur	Hochihalli	Hochihalli	1	0	-	7760235
8	Chikmagalur	Kadur	Chikkadevanuru	Chikkdevanuru	1	0	-	7369299
9	Chikmagalur	Kadur	Basur	Gowdanakattehalli	1	0	-	7760090

Executive Engineer
Rural Drinking Water & Sanitation Division
Chikmagalur

Scanned with CamScanner

Arsenic and Fluoride contamination details

Sl No	District Name	Taluka name	Gram Panchyata	Village Name	No. of source affected by Fluoride	No. of source affected by Arsenic	Scheme ID with Alternate source provided	
							MVS	WPP
1	Dakshina Kannada	0	0	0	0	0	NA	NA

Gmail

EE RWS MANGALORE <eerdwsd.dk@gmail.com>

Arsenic and Fluoride contamination details with measure's taken

1 message

WQMSP RDWSD <rdwsd.wqmsp1@gmail.com> 3 June 2024 at 14:27
To: EE RDWSD Bidar <eerdwsd.bdr1@gmail.com>, EE RDWSD Bijapur <ee.rdwsd.bjp@gmail.com>, EE RDWSD Chickmangalore <eerwsckm@gmail.com>, EE RDWSD Tumkur <eerwstmk@gmail.com>, EE RDWSD Udupi <eerdwsd.udp@gmail.com>, EE RDWSD Chamarajanagara <eerdwsd.chn@gmail.com>, EE RDWSD Chikkaballapur <eerdwsd.ckb2@gmail.com>, EE RDWSD Raichur <eerdwsd.rcr@gmail.com>, EE RDWSD Kodagu <eerdwsd.kdg@gmail.com>, EE RDWSD Vijayanagara <eerdwshpn@gmail.com>, EE RDWSD Bagalkote <eerwssdbagalkot@gmail.com>, EE RWS Hassan <eerdwsd.hsn@gmail.com>, EE RDWSD Yadgiri <eerdwsd.ydg@gmail.com>, EE RDWSD Gadag <ee.rws.gdg@gmail.com>, EE RDWSD Bangalore Rural <eerdwsd.bngr1@gmail.com>, EE RDWSD Davanagere <eerwsdvg@gmail.com>, EE RDWSD Mandya <eerwsmdy@gmail.com>, EE RDWSD Dakshina kannada <eerdwsd.dk@gmail.com>, EE Shimoga RWS <eesmgrdws@gmail.com>, EE RDWSD Uttara Kannada <eerdwsd.uk@gmail.com>, EE BelagaviRaikar <ee.rws.bgm@gmail.com>, EE RDWSD Ramanagara <eerdwsdrmgr2017@gmail.com>, EE RDWSD Kalaburgi <eerwssglb14@gmail.com>, EE RDWSD Haveri <eerwshvr@gmail.com>, EE RDWSD Dharwad <rwsddwd@rediffmail.com>, EE RDWSD Chitradurga <eerdwsd.chd@gmail.com>, EE RDWSD Koppal <eerwsskpl@gmail.com>, EE RDWSD Bangalore Urban <eerdwsd.bngu1@gmail.com>, EE RDWSD Chikkodi <ee.rdws.ckd@gmail.com>, EE RDWSD MYSORE <eerdwsd.mys@gmail.com>, EE RDWSD Bellary <eerdwsd.bly@gmail.com>

Dear sir/Madam,
To submit compliance report for the measurement taken to supply fluoride and arsenic free water, format is attached for your perusal and kindly fill the details as required in attachment, the same will be submitted to NGT by tomorrow 12:00 PM
kindly share filled data as soon as possible.
Regards,
WQMSP

Arsenic and fluoride affected habitation NGT issue.xlsx
17K

RURAL DRINKING WATER AND SANITATION DIVISION DAVANAGERE

Zillapanchayath Building, 2nd floor, Lokikere road, Davanagere-577005

Sl No	District Name	Taluka name	Gram Panchyata	Village Name	No. of source affected by Fluoride	No. of source affected by Arsenic	Scheme ID with Alternate source provided	
							MVS	WPP
1	Davanagere	Jagalur	Kyasenahalli	Kyasenahalli	1	-	-	7741574
2	Davanagere	Jagalur	Donnehalli	Honnamaradi	1	-	-	7741622
3	Davanagere	Harihara	Kumbaluru	Kumbaluru	2	-	1779516	8015084
4	Davanagere	Harihara	Salakatte	Mitlakatte	1	-	8123478	8015184
5	Davanagere	Harihara	Rajanahalli	Nagenahalli	2	-	8123478	8015184
6	Davanagere	Harihara	Kondajji	Kenchanahalli	1	-	5015716 (Scheme defunct but taken for Augumentation)	8015184
7	Davanagere	Harihara	Kondajji	Kondajji	1	-	5015716 (Scheme defunct but taken for Augumentation)	6660886
8	Davanagere	Harihara	Hanagavadi	Hanagavadi	1	-	8123478	0006659258
9	Davanagere	Davanagere	Bada	Bada	1	-	8123638	7741455
10	Davanagere	Davanagere	Attigere	Mallenahalli	1	-	8123764	8219556
11	Davanagere	Davanagere	Attigere	Attigere	1	-	8123764	7519576
12	Davanagere	Davanagere	Anaberu	Anaberu	1	-	8123638	7741451

Senior Analyst
Davanagere District Laboratory
Davanagere

Executive Engineer
Rural Drinking Water and Sanitation Division
Davanagere

Sl No	District Name	Taluka name	Gram Panchyata	Village Name	No. of source affected by Fluoride	No. of source affected by Arsenic	Scheme ID with Alternate source provided	
							MVS	WPP
1	Dharwad	-	-	-	0	-	-	-

Executive Engineer
Rural Drinking water and sanitation Division
Dharwad

Arsenic and Fluoride Affected Habitation in the year 2023-24

Sl No	District Name	Taluka name	Gram Panchyata	Village Name	No. of source affected by Fluoride	No. of source affected by Arsenic	Scheme ID with Alternate source provided	
							MVS	WPP
1	Hassan	Arasikere	BANAVARA	BANAVARA	1	0	-	8208876
2	Hassan	Arasikere	Hiriyur	Cheluvanahalli	1	0	-	8208876
3	Hassan	Arasikere	Shanegere	Shanegere	1	0	-	7743283
4	Hassan	Arasikere	Narasipura	Honakatta	1	0	-	7743328
5	Hassan	Arasikere	Murundi	Malenahalli	1	0	-	8208876
6	Hassan	Arasikere	Belagumba	Gollarahalli	1	0	-	8208876
7	Hassan	Arasikere	Aggunda	BOMMANAHALLI	1	0	-	7743303
8	Hassan	Arasikere	Aggunda	Karehalli	1	0	-	8208876
9	Hassan	Arasikere	Talalur	Talalur	1	0	-	8208876
10	Hassan	Arasikere	Talalur	Challapura	1	0	-	8208876
11	Hassan	Holenarsipur	Doddakunche	Banakuppe	2	0	5652011	-

ಕಾರ್ಯಪಾಲಕ ಇಂಜಿನಿಯರ್
ಗ್ರಾ. ಕು. ನೀ. ಮತ್ತು ನೈ. ಇಲಾಖೆ
ಹಾಸನ ವಿಭಾಗ, ಹಾಸನ

Arsenic and fluoride affected habitation NGT issue

Sl No	District Name	Taluka name	Gram Panchyata	Village Name	No. of source affected by Fluoride	Location	No. of source affected by Arsenic	Scheme ID with Alternate source provided		Remarks
								MVS	WPP	
1	Haveri	Haveri	Belavigi	Belavigi	2	Near Pirasaba Finjara Home	-	7564125	WPP15756	
2	Haveri	Haveri	Belavigi	Belavigi		Near Ningappa Hadimani Home	-	7564125	WPP15757	
3	Haveri	Haveri	Halagi	Maradur	1	Hosakittur road (Near Shivayogeppa desalli Land)	-		WPP15746	
4	Haveri	Haveri	Hosakittur	Hosakittur	1	Near Choutamani katti	-		WPP15744	
5	Haveri	Hanagal	Naregal	Vardi	1	Near Kodi Basaveshwar Temple	-		WPP15766	Other 2 borewells also used for drinking purpose 1) in side school premises 2) Near Huttappa temple
6	Haveri	Haveri	Mevundi	Teradahalli	4	Near Valamiki Samuduya Bhavana	-		WPP15758	
7	Haveri	Haveri	Mevundi	Teradahalli		Inside Kannada School	-		WPP15758	
8	Haveri	Haveri	Mevundi	Teradahalli		Near Janata Plot	-		WPP15758	
9	Haveri	Haveri	Mevundi	Teradahalli		Near Danda Oni	-		WPP15758	
10	Haveri	Haveri	Mevundi	Guyalagundi	2	Near Navagarama Uttara	-		WPP15654	
11	Haveri	Haveri	Mevundi	Guyalagundi		Near Navagarama Dakshina	-		WPP15654	
12	Haveri	Haveri	Mevundi	Mevundi	2	Near Library	-		WPP15655	
13	Haveri	Haveri	Mevundi	Mevundi		Near Siddaruda Matha	-		WPP15655	
14	Haveri	Savanur	Kunimellihalli	Kunimellihalli	2	Near Karabasappa Surad Land	-		WPP15730	
15	Haveri	Savanur	Kunimellihalli	Kunimellihalli		Near Naveen Annigeri Land	-		WPP15730	
16	Haveri	Savanur	Hesarur	Siddapura	4	Near Sankammadevi Temple	-		WPP15683	
17	Haveri	Savanur	Hesarur	Siddapura		Near Malleshappa Vallshetter Home	-		WPP15683	
18	Haveri	Savanur	Hesarur	Siddapura		Near Kannada School	-		WPP15683	
19	Haveri	Savanur	Hesarur	Siddapura		Near Smashan Gatti Road	-		WPP15683	

Executive Engineer
Division Haveri
EXECUTIVE ENGINEER
Rural Water & Sanitation
Division, Haveri

Sl No	District Name	Taluka Name	Gram Panchyat	Village Name	No. of source affected by Fluoride	No. of source affected by Arsenic	Scheme ID with Alternate source provided	
							MVS	WPP
1	Kalaburagi	Jewargi	Kellur	Halgadla	1	0	NO	NO
2	Kalaburagi	Jewargi	Kellur	Kellur	2	0	NO	NO
3	Kalaburagi	Jewargi	Hallura	Hallur	3	0	4884689	NO
4	Kalaburagi	Jewargi	Andola	Andola	2	0	NO	NO
5	Kalaburagi	Jewargi	Briyal B	Briyal B	1	0	445553	NO
6	Kalaburagi	Jewargi	Briyal B	Honnal	1	0	445553	NO
7	Kalaburagi	Jewargi	Kudi	Bariumi	1	0	NO	Yes
8	Kalaburagi	Jewargi	Ganwar	Muradagi SA	1	0	NO	NO
9	Kalaburagi	Shahabad	Bhankur	Bhankur	2	0	NO	NO
10	Kalaburagi	Shahabad	Bhankur	Muttaga	1	0	NO	NO
11	Kalaburagi	Yadrami	Maganagera	Kondagoli	1	0	NO	NO
12	Kalaburagi	Sedam	Ranjol	Amanwadi	1	0	NO	NO
13	Kalaburagi	Sedam	Ranjol	Chitkanpalli	1	0	NO	NO
14	Kalaburagi	Chincholi	Salebeernalli	Salebeernalli	1	0	NO	NO
15	Kalaburagi	Sedam	Sindhanmadu	Gundthalli (B)	2	0	NO	NO
16	Kalaburagi	Sedam	Kolkunda	Kolkunda	2	0	NO	NO
17	Kalaburagi	Afzalpur	Gudoor	Niloor	2	0	NO	NO
18	Kalaburagi	Afzalpur	Gudoor	Gudoor	4	0	NO	NO
19	Kalaburagi	Afzalpur	Atanoor	Atanoor	1	0	2422516	NO
20	Kalaburagi	Afzalpur	Mallabad	Matoli	1	0	NO	NO
21	Kalaburagi	Afzalpur	Ballurgi	Ballurgi	2	0	NO	NO
22	Kalaburagi	Afzalpur	Kallur	Hinchagera	1	0	2422533	NO
23	Kalaburagi	Afzalpur	Karajagi	Karajagi	2	0	NO	YES
24	Kalaburagi	Afzalpur	Nandarga	Diksanga k	5	0	NO	YES
25	Kalaburagi	Afzalpur	Nandarga	Jewargi b	2	0	NO	YES
26	Kalaburagi	Afzalpur	Revoor	Revoor b	2	0	NO	NO
27	Kalaburagi	Aland	Jidga	Jambaga J	1	0	NO	YES
28	Kalaburagi	Aland	Jidga	Jidga	2	0	NO	NO
29	Kalaburagi	Aland	Jidga	Shakapur	1	0	NO	NO
30	Kalaburagi	Aland	Nimbarga	Nimbarga	4	0	7559234	YES
31	Kalaburagi	Aland	Kodal Hangarga	Kodal Hangarga	6	0	NO	NO
32	Kalaburagi	Aland	Kadaganchi	Kadaganchi	5	0	MVS	NO
33	Kalaburagi	Aland	Bhusnoor	Bhusnoor	1	0	NO	YES
34	Kalaburagi	Aland	Darga Siroor	Darga Siroor	2	0	NO	NO

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35	Kalaburagi	Aland	Danga Sirsor	Kerboor	3	0	NO	YES
36	Kalaburagi	Aland	Duttargaon	Duttargaon	2	0	NO	NO
37	Kalaburagi	Aland	Mogha k	Ikkalki	1	0	NO	NO
38	Kalaburagi	Kalaburagi	Shrinivas Saradgi	Saradgi	1	0	NO	NO
39	Kalaburagi	Kalaburagi	Algood	Tondikal	1	0	NO	NO
40	Kalaburagi	Kalaburagi	Basavapattana	Kawalga k	3	0	NO	NO
41	Kalaburagi	Kalaburagi	Basavapattana	Aurad k	2	0	NO	NO
42	Kalaburagi	Kalaburagi	Basavapattana	Jogur	3	0	NO	NO
43	Kalaburagi	Kalaburagi	Ferozabad	Ferozabad	1	0	NO	NO
44	Kalaburagi	Kalaburagi	Ferozabad	Naduvinalli	1	0	NO	NO
45	Kalaburagi	Kalaburagi	Harsoor	Tawargera	1	0	NO	YES
46	Kalaburagi	Kalaburagi	Minajigi	Minajigi	1	0	NO	NO
47	Kalaburagi	Kalaburagi	Nandikur	Nadikur	3	0	NO	YES
48	Kalaburagi	Kalaburagi	Nandikur	Udnoor	3	0	NO	NO
49	Kalaburagi	Kalaburagi	Tajsultanpur	Tajsultanpur	2	0	NO	NO
50	Kalaburagi	Kamalapur	Okali	Warnihal	1	0	NO	NO
51	Kalaburagi	Kamalapur	Okali	Okali	4	0	NO	NO
52	Kalaburagi	Kamalapur	Okali	Rajnal	1	0	NO	NO
53	Kalaburagi	Kamalapur	Kurikota	Yankanchi	3	0	NO	NO
54	Kalaburagi	Kamalapur	Kurikota	Kurikota	2	0	NO	NO
55	Kalaburagi	Kamalapur	Kurikota	Sirdon	1	0	NO	NO
56	Kalaburagi	Kamalapur	Shrichand	Jawalga	1	0	NO	NO
57	Kalaburagi	Kamalapur	Shrichand	Kottarga	1	0	NO	NO
58	Kalaburagi	Kamalapur	Jeevanagi	Jeevanagi	1	0	NO	NO
59	Kalaburagi	Kamalapur	Holkunda	Dastapur	2	0	NO	NO
60	Kalaburagi	Kamalapur	Holkunda	Holkunda	7	0	NO	YES

Executive Engineer

Rural Drinking Water and Sanitation Division

Kalaburagi

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Kodagu District Fluoride and Arsenic affected source details report

Date: 06/06/2024

Sl No	District Name	Taluka name	Gram Panchyata	Village Name	No. of source affected by Fluoride	No. of source affected by Arsenic	Scheme ID with Alternate source provided	
							MVS	WPP
1	Kodagu	Somwarpet	–	–	Nil	Not tested	–	–
2	Kodagu	Kushalnagar	–	–	Nil	Not tested	–	–
3	Kodagu	Madikeri	–	–	Nil	Not tested	–	–
4	Kodagu	Ponnampete	–	–	Nil	Not tested	–	–
5	Kodagu	Virajpet	–	–	Nil	Not tested	–	–

Remar 1. No Fluoride conatamination found to till date.

2. Arsenic Parameter not tested in our RDWSD, Kodagu division and subdivision laboratories.

P. R. Suresh Kumar

Executive Engineer
Rural Drinking Water and Sanitation Division
Kodagu

CamScanner

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ಕರ್ನಾಟಕ ಸರ್ಕಾರ
ಗ್ರಾಮೀಣ ಕುಡಿಯುವ ನೀರು ಸಾಗೂ ನೈರ್ಮಲ್ಯ ವಿಭಾಗ
ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರ ಕಛೇರಿ, ಗ್ರಾ.ಕು.ನೀ&ನೈ.ವಿಭಾಗ, ಕೊರಡಿ ಸಂಖ್ಯೆ:ಎಸ್-11 ಮತ್ತು ಎಸ್-14,
ಜಿಲ್ಲಾಡಳಿತ ಭವನ, ಕೋಲಾರ-563101, ಇಮೇಲ್:eerdwsd.klr1@gmail.com

ಸಂಖ್ಯೆ:ಕಾಪಾಇ/ಗ್ರಾ.ಕು.ನಿ.&ನೈ.ಇ/ಕೋ.ವಿ/ಆಶಾ/ಕ್ಷಾ-6 /2024-25 ದಿನಾಂಕ:06.06.2024

ರವರಿಗೆ,

ನಿರ್ದೇಶಕರು,
WSSO, ಗ್ರಾಕುನೀ&ನೈ ಇಲಾಖೆ,
ಬೆಂಗಳೂರು.

ಮಾನ್ಯರೆ,

ವಿಷಯ :ಆರ್ಸೆನಿಕ್ ಮತ್ತು ಫ್ಲೋರೈಡ್ ಕಂಟಾಮಿನೇಷನ್ ಇರುವ ಜನವಸತಿಗಳ ಪಟ್ಟಿಯನ್ನು ಸಲ್ಲಿಸುವ ಬಗ್ಗೆ.

• • • •

ಮೇಲ್ಕಂಡ ವಿಷಯಕ್ಕೆ ಸಂಬಂಧಿಸಿದಂತೆ, ಕೋಲಾರ ಜಿಲ್ಲೆಯಲ್ಲಿ ಆರ್ಸೆನಿಕ್ ಮತ್ತು ಫ್ಲೋರೈಡ್ ಕಂಟಾಮಿನೇಷನ್ ಇರುವ ಜನವಸತಿಗಳ ಪಟ್ಟಿಯನ್ನು ಈ ಪತ್ರಕ್ಕೆ ಅಡಕವಿರಿಸಿ ತಮ್ಮ ಅವಗಾಹನೆಗಾಗಿ ಸಲ್ಲಿಸಿದೆ.

ತಮ್ಮ ವಿಶ್ವಾಸಿ,

ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು,
ಗ್ರಾಮೀಣ ಕುಡಿಯುವ ನೀರು ಮತ್ತು ನೈರ್ಮಲ್ಯ ವಿಭಾಗ,
ಕೋಲಾರ.

Details Of Fluoride Affected Sources & the Remedial Measures Taken.

Sl No	District Name	Taluka name	Gram Panchyata	Village Name	No. of source affected by Fluoride	No. of source affected by Arsenic	Scheme ID with Alternate source provided	
							MVS	WPP
1	2	3	4	5	6	7	8	9
1	Kolar	Kolar	Arahalli	KODIKANNURU	1	0	-	7403126
2	Kolar	Kolar	Shettahalli	Andrahalli	1	0	-	0004918621
3	Kolar	Kolar	Shettahalli	Medihala	1	0	-	7403127
4	Kolar	Kolar	Thotli	Urati Agrahara	1	0	-	7403575
5	Kolar	Kolar	Vakkaleri	Gurugunji Gurki	2	0	-	7753196
6	Kolar	Kolar	Kyalanoor	Kyalanoor	2	0	-	7403129
7	Kolar	Kolar	Arahalli	Joohalli	1	0	-	7403130
8	Kolar	Kolar	Arahalli	Hodalavadi	1	0	-	7403347
9	Kolar	Kolar	Arahalli	Seepura	1	0	-	7403348
10	Kolar	Kolar	Arahalli	Barandahalli	1	0	-	6364250
11	Kolar	Kolar	Doddahasala	Dimba	1	0	-	7753120
12	Kolar	Kolar	Doddahasala	Chikkahasala	1	0	-	7753122

Sl No	District Name	Taluka name	Gram Panchyata	Village Name	No. of source affected by Fluoride	No. of source affected by Arsenic	Scheme ID with Alternate source provided	
							MVS	WPP
1	2	3	4	5	6	7	8	9
13	Kolar	Kolar	Begli Hosahalli	Begli	1	0	-	7753119
14	Kolar	Kolar	Begli Hosahalli	Singondahalli	1	0	-	7403350
15	Kolar	Kolar	Begli Hosahalli	Begli Benjenahalli	1	0	-	7753117
16	Kolar	Kolar	Annihalli	Syanabhoganahalli	3	0	-	7753115
17	Kolar	Kolar	ARABI KOTHANUR	Guttahalli	2	0	-	7753112
18	Kolar	Kolar	ARABI KOTHANUR	Mangasandra	2	0	-	7403352
19	Kolar	Kolar	ARABI KOTHANUR	Chowdadenhalli	1	0	-	7753111
20	Kolar	Kolar	ARABI KOTHANUR	Bettani	1	0	-	0007403354
21	Kolar	Kolar	ARABI KOTHANUR	Arabi Kothanur	3	0	-	0004940935
22	Kolar	Kolar	Marjenahalli	Varadenahalli	1	0	-	7403356
23	Kolar	Kolar	Marjenahalli	Yelachipura	1	0	-	7403357
24	Kolar	Kolar	Marjenahalli	Chinnapura	1	0	-	7753127
25	Kolar	Kolar	Madderi	Jambapura	1	0	-	0004942944
26	Kolar	Kolar	Madderi	Kadripur	2	0	-	7753114

No	District Name	Taluka name	Gram Panchyata	Village Name	No. of source affected by Fluoride	No. of source affected by Arsenic	Scheme ID with Alternate source provided	
							MVS	WPP
1	2	3	4	5	6	7	8	9
27	Kolar	Kolar	Madderi	Pacharlahalli	2	0	-	7403359
28	Kolar	Kolar	Uragali	Talagundapurahalli	1	0	-	0004942622
29	Kolar	Kolar	Ammanallur	Bellahalli	1	0	-	7403360
30	Kolar	Kolar	Ammanallur	Chaldiganahalli	3	0	-	7753101
31	Kolar	Kolar	Ammanallur	Kadahalli	2	0	-	7753104
32	Kolar	Kolar	Ammanallur	Nachahalli	9	0	-	7753102
33	Kolar	Kolar	Shapur	Seeresandra	1	0	-	7403362
34	Kolar	Kolar	Shapur	Agrahara Somarasanahalli	1	0	-	7403363
35	Kolar	Malur	CHIKKA KUNTHURU	NAMBIGANAHALLI	1	0	-	0007490086
36	Kolar	Malur	Chikka Thirupathi	ALAMBODI	1	0	-	0007753212
37	Kolar	Malur	ARALERI	CHAKANAHALLI	1	0	-	0007403141
38	Kolar	Malur	K.g.halli	BASAPURA	1	0	-	0007753210
39	Kolar	Malur	K.g.halli	Halepalya	1	0	-	0007403142
40	Kolar	Malur	Tekal	GOPASANDRA	1	0	-	0007754219

-303-

Sl No	District Name	Taluka name	Gram Panchyata	Village Name	No. of source affected by Fluoride	No. of source affected by Arsenic	Scheme ID with Alternate source provided	
							MVS	WPP
1	2	3	4	5	6	7	8	9
41	Kolar	Malur	NUTAVE	HALEPALYA	1	0	-	0007403143
42	Kolar	Malur	BALIGANAHALLI	CHANNIGARAYAPURA	1	0	-	0007753205
43	Kolar	Malur	BALIGANAHALLI	CHALAGANAHALLI	1	0	-	0007403144
44	Kolar	Malur	KONDA SHETTIHALLI	PANAMAKANAHALLI	1	0	-	0007753208
45	Kolar	Malur	TRUNSI	NAGADENAHALLI	1	0	-	0007753206
46	Kolar	Malur	DINNAHALLI	KONDANAHALLI	1	0	-	0007403146
47	Kolar	Malur	DINNAHALLI	GANIGANAHALLI	1	0	-	0007753221
48	Kolar	Mulbagal	Nangli	Nangli	1	0	-	0004942961
49	Kolar	Bangarapet	Hunkunda	Mittamalahally	1	0	-	0007753220
50	Kolar	Bangarapet	CHIKKAAKKDAHALLI	Vatrakunte	1	0	-	7753211
51	Kolar	Bangarapet	Inorahosahalli	Dodda Anakandahalli	1	0	-	0007753214
52	Kolar	Bangarapet	Sulikunte	Mageri	4	0	-	0007753217
53	Kolar	Bangarapet	Sulikunte	Ramanayakanahalli	7	0	-	-
54	Kolar	Bangarapet	Sulikunte	MADAMANGALA	1	0	-	0007490018

Sl No	District Name	Taluka name	Gram Panchyata	Village Name	No. of source affected by Fluoride	No. of source affected by Arsenic	Scheme ID with Alternate source provided	
							MVS	WPP
1	2	3	4	5	6	7	8	9
55	Kolar	Bangarapet	Yelesandra	Garudakempanahally	1	0	-	0007403051
56	Kolar	Bangarapet	Yelesandra	Kadiripura	5	0	-	0004942861
57	Kolar	Bangarapet	Budikote	UKKUNDA	1	0	-	0004950764
58	Kolar	Bangarapet	Budikote	Budikote	1	0	-	0004941112
59	Kolar	Bangarapet	Doniimadagu	Buvanahalli	1	0	-	0004942423
60	Kolar	Bangarapet	Gullahally	Guttahally	1	0	-	0007753140
61	Kolar	Bangarapet	Gullahally	Pura	1	0	-	0007753194
62	Kolar	Bangarapet	Gullahally	Gullahally	1	0	-	0004942912
63	Kolar	K.G.F	RAMASAGARA	RAMASAGARA	1	0	-	0007753251
64	Kolar	K.G.F	BETHAMANGALA	BETHAMANGALA	2	0	-	0007753105
65	Kolar	K.G.F	SUNDARAPALYA	SUNDARAPALYA	1	0	-	0007753139
66	Kolar	K.G.F	GHATTA KAMADENA HALLI	GHATTA KAMADENA HALLI	1	0	-	0007753079
67	Kolar	K.G.F	GATTAMADAMANGALA	DODDAKALLAHALLI	2	0	-	0007753080
68	Kolar	K.G.F	MARIKUPPA	CHINNAGANAHALLY	3	0	-	0007753204

Sl No	District Name	Taluka name	Gram Panchyata	Village Name	No. of source affected by Fluoride	No. of source affected by Arsenic	Scheme ID with Alternate source provided	
							MVS	WPP
1	2	3	4	5	6	7	8	9
69	Kolar	K.G.F	MARIKUPPA	BALEEGANAHALLI	3	0	-	0007403273
70	Kolar	K.G.F	MARIKUPPA	KAMOBAMAPALLY	2	0	-	0007403275
71	Kolar	K.G.F	MARIKUPPA	BANAGERI	1	0	-	0007403274
72	Kolar	K.G.F	T. GOLLAHALLI	MADDINAKANAHALLY	2	0	-	0007403276
73	Kolar	K.G.F	PARANDAHALLI	A. KADIRENHALLI	1	0	-	0007753086
74	Kolar	K.G.F	PARANDAHALLI	MALLAMPALLI	4	0	-	0007403277
75	Kolar	K.G.F	PARANDAHALLI	BATUVARHALLI	4	0	-	0007753425
76	Kolar	K.G.F	PARANDAHALLI	MUDHEGOWDENHALLI	2	0	-	0007753144
77	Kolar	K.G.F	PARANDAHALLI	KAVERHALLI	4	0	-	0007753145

EXECUTIVE ENGINEER,
RDW&S DIVISION, KOLAR.

RURAL DRINKING WATER & SANITATION DEPARTMENT, GoK

KOPPAL DIVISION LABORATORY, FOR THE YEAR 2023-24

Fluoride affected Habitation

Sl No	District Name	Taluka name	Gram Panchyata	Village Name	No. of source affected by Fluoride	No. of source affected by Arsenic	Scheme ID with Alternate source provided	
							MVS	WPP
1	Koppal	Koppal	Kataraki gudlanoor	Belur	2	-	-	Available
2	Koppal	Koppal	Kataraki gudlanoor	dambralli	1	-	-	Available
3	Koppal	Koppal	Halageri	Halageri	2	-	-	Available
4	Koppal	Koppal	gondabal	halegondabal	1	-	-	Available
5	Koppal	Koppal	hiresindhogi	hiresindhogi	1	-	-	Available
6	Koppal	Koppal	bisaralli	bisaralli	2	-	-	Available
7	Koppal	Koppal	bisaralli	bikanalli	2	-	-	Available
8	Koppal	Koppal	bisaralli	Mainalli	1	-	-	Available
9	Koppal	koppal	halawarthi	kidadal	1	-	-	Available
10	Koppal	koppal	kinnal	kinnal	1	-	-	Available
11	Koppal	koppal	ojinahalli	chilagawadi	2	-	-	Available
12	Koppal	koppal	ojinahalli	yethanatti	2	-	-	Available
13	Koppal	koppal	ojinahalli	huchcheswar camp	2	-	-	Available
14	Koppal	koppal	ojinahalli	Naregal	2	-	-	Available

RURAL DRINKING WATER & SANITATION DEPARTMENT, GoK

KOPPAL DIVISION LABORATORY, FOR THE YEAR 2023-24

Fluoride Effected Habitation

Sl No	District Name	Taluka name	Gram Panchyata	Village Name	No. of source affected by Fluoride	No. of source affected by Arsenic	Scheme ID with Alternate source provided	
							MVS	WPP
15	Koppal	koppal	Kunikeri	kunikeri tanda	1	-	-	Available
16	Koppal	koppal	madinoor	madinoor	7	-	-	Available
17	Koppal	koppal	madinoor	mudlapur	2	-	-	Available
18	Koppal	koppal	madinoor	devalapur	2	-	-	Available
19	Koppal	koppal	Ginigeri	Ginigeri	2	-	-	Available
20	Koppal	koppal	Ginigeri	Hosa kanakpur tand	1	-	-	Available
21	Koppal	koppal	Budagumpa	Budagumpa	1	-	-	Available
22	Koppal	koppal	Budagumpa	Amarapur	1	-	-	-
23	Koppal	Koppal	Hatti	Raghunathanahalli	1	-	Available 8425997	Available
24	Koppal	Koppal	Chikkabommanal	Hirebommanal	1	-	-	Available
25	Koppal	Koppal	Hiresindogi	Budihal	1	-		Available
26	Koppal	Koppal	Madinoor	Madinoor	3	-		Available
27	Koppal	Gangavathi	Venkatagiri	Udamkal	1	-	Available 8427628	

RURAL DRINKING WATER & SANITATION DEPARTMENT, GoK

KOPPAL DIVISION LABORATORY, FOR THE YEAR 2023-24

Fluoride Affected Habitation

Sl No	District Name	Taluka name	Gram Panchyata	Village Name	No. of source affected by Fluoride	No. of source affected by Arsenic	Scheme ID with Alternate source provided	
							MVS	WPP
28	Koppal	Gangavathi	Venkatagiri	Gaddi	1	-	Available 8477628	Available
29	Koppal	Gangavathi	Chikkajanthakal	Ayodhya	1	-		Available
30	Koppal	Gangavathi	Chikkajanthakal	Hosalli	1	-		Available
31	Koppal	Gangavathi	Danapura	Hebbal	1	-		Available
32	Koppal	Gangavathi	Heroor	battara hanchinal	3	-		-
33	Koppal	Gangavathi	Heroor	gonal	1	-		Available
34	Koppal	gangavathi	sanapur	sanapur	1	-		Available
35	Koppal	gangavathi	kesaratti	battara narasapur	1	-		-
36	Koppal	gangavathi	sriramanagar	sriramanagar	2	-		Available
37	Koppal	gangavathi	jangamara kalgudi	jangamara kalgudi	2	-		Available
38	Koppal	gangavathi	basapatna	basapatna	2	-		Available
39	Koppal	Gangavathi	Vaddaratti	Vaddaratti	1	-	Available 8496436	Available

RURAL DRINKING WATER & SANITATION DEPARTMENT, GoK

KOPPAL DIVISION LABORATORY, FOR THE YEAR 2023-24

Fluoride affected Habitation

Sl No	District Name	Taluka name	Gram Panchyata	Village Name	No. of source affected by Fluoride	No. of source affected by Arsenic	Scheme ID with Alternate source provided	
							MVS	WPP
40	Koppal	Gangavathi	kesaratti	Marakumbi	3	-		Available
41	Koppal	Gangavathi	kesaratti	kesaratti	2	-		Available
42	Koppal	kanakagiri	basarihal	basarihal	4	-	Available	Available
43	Koppal	kanakagiri	basarihal	bylakampur	3	-		-
44	Koppal	Kanakagiri	Basarihal	Hulasanahatti	2	-		Available
45	Koppal	Kanakagiri	Gouripur	Adavibhavi	1	-		-
46	Koppal	Kanakagiri	Sulekal	Sulekal	1	-		-
47	Koppal	karatagi	gundur	gundur	2	-	Available 8189435	-
48	Koppal	karatagi	hulkihal	tondihal	3	-	Available 8497624	Available
49	Koppal	Karatagi	Ulenur	Eliganur	3	-	Available 8451505	Available
50	Koppal	Karatagi	Ulenur	Eliganur camp	1	-	Available 8451505	Available
51	Koppal	Karatagi	Ulenur	Ulenur	1	-	Available	Available

-310-

RURAL DRINKING WATER & SANITATION DEPARTMENT, GoK

KOPPAL DIVISION LABORATORY, FOR THE YEAR 2023-24

Fluoride Affected Habitation

Sl No	District Name	Taluka name	Gram Panchyata	Village Name	No. of source affected by Fluoride	No. of source affected by Arsenic	Scheme ID with Alternate source provided	
							MVS	WPP
52	Koppal	Karatagi	Mustur	Mustur	4	-		Available
53	Koppal	Karatagi	Baraguru	Kotnekal	1	-		Available
54	Koppal	Karatagi	Baraguru	Baraguru	1	-	Available	Available
55	Koppal	KUSHTAGI	Nilogal	Nilogal	1	-	-	DBOT Water has been
56	Koppal	KUSHTAGI	Nilogal	Rampura	1	-	-	DBOT Water has been
57	Koppal	KUSHTAGI	Nilogal	Basapura	1	-	-	DBOT Water has been
58	Koppal	KUSHTAGI	Tuggaladoni	Mittalakod	1	-	-	DBOT Water has been
59	Koppal	KUSHTAGI	J.GUDUDUR	J.GUDUDUR	1	-	-	DBOT Water has been
60	Koppal	KUSHTAGI	J.GUDUDUR	KONAPURA	1	-	-	DBOT Water has been

RURAL DRINKING WATER & SANITATION DEPARTMENT, GoK

KOPPAL DIVISION LABORATORY, FOR THE YEAR 2023-24

Fluoride Affected Habitation

Sl No	District Name	Taluka name	Gram Panchyata	Village Name	No. of source affected by Fluoride	No. of source affected by Arsenic	Scheme ID with Alternate source provided	
							MVS	WPP
61	Koppal	KUSHTAGI	MALAGITTI	PATTALACHINTI	1	-	-	DBOT Water has been
62	Koppal	KUSHTAGI	Habalakatti	HABALAKATTI	1	-	-	DBOT Water has been
63	Koppal	KUSHTAGI	YARAGERA	CHANDRAGIRI	1	-	-	DBOT Water has been
64	Koppal	KUSHTAGI	Benakanal	kurubanal	1	-	-	DBOT Water has been
65	Koppal	KUSHTAGI	jumalapura	jumalapura	1	-	-	DBOT Water has been
66	Koppal	KUSHTAGI	Hire mannapura	navalahalli	1	-	-	DBOT Water has been
67	Koppal	KUSHTAGI	BIJKAL	BIJKAL	2	-	-	DBOT Water has been
68	Koppal	KUSHTAGI	SANGANAL	SANGANAL	1	-	-	DBOT Water has been

DBOT Scheme ID 6678922

-312-

RURAL DRINKING WATER & SANITATION DEPARTMENT, GoK

KOPPAL DIVISION LABORATORY, FOR THE YEAR 2023-24

Fluoride Affected Habitation

Sl No	District Name	Taluka name	Gram Panchyata	Village Name	No. of source affected by Fluoride	No. of source affected by Arsenic	Scheme ID with Alternate source provided	
							MVS	WPP
69	Koppal	KUSHTAGI	Tumarikoppa	Gorebihal	1	-	-	DBOT Water has been
70	Koppal	KUSHTAGI	HULAGERA	HULAGERA	1	-	-	DBOT Water has been
71	Koppal	KUSHTAGI	Hire mannapura	Hanchinal	1	-	-	DBOT Water has been
72	Koppal	KUSHTAGI	Killarhatti	Killarhatti	1	-	-	DBOT Water has been
73	Koppal	KUSHTAGI	Killarhatti	kalamalli	1	-	-	DBOT Water has been
74	Koppal	KUSHTAGI	MENEDAL	BACHANAL	1	-	-	DBOT Water has been
75	Koppal	KUSHTAGI	MENEDAL	HULIYAPURA	2	-	-	DBOT Water has been
76	Koppal	KUSHTAGI	Bijkal	K.HOSURU	2	-	-	DBOT Water has been

RURAL DRINKING WATER & SANITATION DEPARTMENT, GoK

KOPPAL DIVISION LABORATORY, FOR THE YEAR 2023-24

Fluoride affected Habitation

Sl No	District Name	Taluka name	Gram Panchyata	Village Name	No. of source affected by Fluoride	No. of source affected by Arsenic	Scheme ID with Alternate source provided	
							MVS	WPP
77	Koppal	KUSHTAGI	jumalapura	sasvihal	1	-	-	DBOT Water has been
78	Koppal	KUSHTAGI	jumalapura	G.rampura	1	-	-	DBOT Water has been
79	Koppal	KUSHTAGI	jumalapura	Nandapura	2	-	-	DBOT Water has been
80	Koppal	KUSHTAGI	BILEKAL	BILEKAL	1	-	-	DBOT Water has been
81	Koppal	KUSHTAGI	Hanumasagara	Hanumasagara	1	-	-	DBOT Water has been
82	Koppal	KUSHTAGI	Hire nandihal	Kanakoppa	2	-	-	DBOT Water has been
83	Koppal	KUSHTAGI	KANDAKUR	KANDAKUR	1	-	-	DBOT Water has been
84	Koppal	KUSHTAGI	KANDAKUR	NEREBENCHI	1	-	-	DBOT Water has been

DBOT Scheme ID 6673922

RURAL DRINKING WATER & SANITATION DEPARTMENT, GoK

KOPPAL DIVISION LABORATORY, FOR THE YEAR 2023-24

Fluoride Affected Habitation

Sl No	District Name	Taluka name	Gram Panchyata	Village Name	No. of source affected by Fluoride	No. of source affected by Arsenic	Scheme ID with Alternate source provided	
							MVS	WPP
85	Koppal	KUSHTAGI	TALUVAGERA	NIDASHESI	2	-	-	DBOT Water has been
86	Koppal	KUSHTAGI	LINGADAHALLI	VIRUPAPURA	1	-	-	DBOT Water has been
87	Koppal	Yalaburga	Mataladinni	budukunti	1	-	-	DBOT Water has been
88	Koppal	Yalaburga	Gaddigeri	Madluru	1	-	-	DBOT Water has been
89	Koppal	Yalaburga	Sankanuru	Katral	1	-	-	DBOT Water has been
90	Koppal	yalburga	MUDHOL	MUDHOL	1	-	-	DBOT Water has been
91	Koppal	yalburga	Vajrabandi	Vajrabandi	1	-	-	DBOT Water has been
92	Koppal	yalburga	Bandi	Bandi	1	-	-	DBOT Water has been

DBOT Scheme ID 6612999

RURAL DRINKING WATER & SANITATION DEPARTMENT, GoK

KOPPAL DIVISION LABORATORY, FOR THE YEAR 2023-24

Fluoride Affected Habitation

Sl No	District Name	Taluka name	Gram Panchyata	Village Name	No. of source affected by Fluoride	No. of source affected by Arsenic	Scheme ID with Alternate source provided	
							MVS	WPP
93	Koppal	yalburga	Chik myageri	Chik myageri	1	-	-	DBOT Water has been
94	Koppal	yalburga	MURUDI	MURUDI	2	-	-	DBOT Water has been
95	Koppal	yalburga	MATALADINNI	PUTUGAMARI	2	-	-	DBOT Water has been
96	Koppal	yalburga	SANKANUR	KATRAL	1	-	-	DBOT Water has been
97	Koppal	Kukanur	Yare hanchinal	Binnala	3	-	-	DBOT Water has been
98	Koppal	Kukanur	Banapura	Lakamapura	1	-	-	DBOT Water has been
99	Koppal	Kukanur	MANDALAGERI	Mandalageri	1	-	-	DBOT Water has been
100	Koppal	Kukanur	MANDALAGERI	Betapanahalli	1	-	-	DBOT Water has been

DBOT Scheme ID 6672932

RURAL DRINKING WATER & SANITATION DEPARTMENT, GoK

KOPPAL DIVISION LABORATORY, FOR THE YEAR 2023-24

Fluoride Affected Habitation

Sl No	District Name	Taluka name	Gram Panchyata	Village Name	No. of source affected by Fluoride	No. of source affected by Arsenic	Scheme ID with Alternate source provided	
							MVS	WPP
101	Koppal	Kukanur	BENAKAL	Benakal	2	-	-	DBOT Water has been
102	Koppal	Kukanur	MANGALURU	Mangaluru	1	-	-	DBOT Water has been
103	Koppal	Kukanur	Hire bidnal	MUTTALA	2	-	-	DBOT Water has been
104	Koppal	Kukanur	Masabahanchinal	Gavral	2	-	-	DBOT Water has been
105	Koppal	Kukanur	ITAGI	ITAGI	2	-	-	DBOT Water has been
106	Koppal	Kukanur	NELZERI	VATAPARVI	1	-	-	DBOT Water has been

DBOT Scheme ID 6673933

ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
ಗ್ರಾ.ಕು.ನೀ & ನೈ. ವಿಭಾಗ ಕೊಪ್ಪಳ

Sl No	District Name	Taluka name	Gram Panchyata	Village Name	No. of source affected by Fluoride	No. of source affected by Arsenic	Scheme ID with Alternate source provided		
							MVS	WPP	BW
1	MANDYA	Krishnarajpet	Ganjigere	Maratikoppali	1	0		7886336	
2	MANDYA	Krishnarajpet	Sarangi	Chikkaharinahal li	1	0		5641754	
3	MANDYA	Krishnarajpet	Sarangi	Jottanapura	1	0			4093253
4	MANDYA	Krishnarajpet	Sarangi	Dasagolapura	1	0			4016678
5	MANDYA	Malvalli	Kyathanahalli	Doddabuvalli	1	0			8035934
6	MANDYA	Nagamangala	Honakere	Huraligangana Halli	1	0	BW -5238740	-	
7	MANDYA	Nagamangala	BOGADI	B.sriramana Halli	2	0	-	YES -6141359	
8	MANDYA	Nagamangala	BOGADI	Kalligundi	2	0	BW -56000729	-	
9	MANDYA	Nagamangala	Bheemanahalli	Beemana Halli	4	0	-	YES -7873166	
10	MANDYA	Nagamangala	Haradanahalli	Mylarapatna	2	0	BW -5628103	-	
11	MANDYA	Nagamangala	Palagrahara	Halthi	3	0	BW - 1770502	-	
12	MANDYA	Nagamangala	Anchechittanahalli	Kachena Halli	1	0	-	YES -8434704	
13	MANDYA	Nagamangala	Hulikere	Kelagere	1	0	BW-1777099	-	
14	MANDYA	Nagamangala	Hulikere	Mollaraja Pura	1	0	BW - 4008441	-	
15	MANDYA	Nagamangala	Kallinganahalli	Thirumalapura	1	0	-	YES -7302566	
16	MANDYA	Nagamangala	Kallinganahalli	Byrasandra	1	0	-	YES- 7661640	
17	MANDYA	Nagamangala	Kallinganahalli	Bettadakote	6	0	BW -7963464	-	
18	MANDYA	Nagamangala	Nelligere	Yale Kooppa	3	0	BW -7304458	-	
19	MANDYA	Nagamangala	Chunchanahalli	Chuchana Halli	1	0	-	YES- 5508552	
20	MANDYA	Pandavapura	Jakkanahalli	Sangapura	1	0		5800318	
21	MANDYA	Pandavapura	Sunkathannur	Nallahalli	1	0			7914501
22	MANDYA	Pandavapura	Narayanapura	Marmahalli	1	0		6674029	
23	MANDYA	Pandavapura	Narayanapura	Huligere	1	0	8157886		
24	MANDYA	Pandavapura	Chinakurali	Illenahalli	2	0			7756869
25	MANDYA	Pandavapura	Chinakurali	Doddabogansha li	2	0	8403707		
26	MANDYA	Pandavapura	Chinakurali	Chikkabogansha li	2	0			7600887
27	MANDYA	Pandavapura	Honaganahulli	Alpahalli	1	0			7913922
28	MANDYA	Pandavapura	Gummanahalli	Gummanahalli	1	0		6685325	
29	MANDYA	Shirangapattana	Mundagadore	Gobbaragala	1	0		5707506	
30	MANDYA	Shirangapattana	Tadagawadi	Tadagawadi	1	0		5722608	
31	MANDYA	Shirangapattana	Mundagadore	Mundagadore	1	0		5705387	

Executive Engineer
R.D.W & S.D
MANDYA

-318-

Source affected by Fluoride & Arsenic.

Sl No	District Name	Taluka name	Gram Panchayata	Village Name	No. of source affected by Fluoride	No. of source affected by Arsenic	Scheme ID with Alternate source provided	
							MVS	WPP
1	Mysuru	Mysuru	All Gramapanchayath	All Villages	0	0	0	0
2	Mysuru	Nanjangud	All Gramapanchayath	All Villages	0	0	0	0
3	Mysuru	T-Narsipura	All Gramapanchayath	All Villages	0	0	0	0
4	Mysuru	K R Nagara	All Gramapanchayath	All Villages	0	0	0	0
5	Mysuru	Saligrama	All Gramapanchayath	All Villages	0	0	0	0
6	Mysuru	Piriyapatna	All Gramapanchayath	All Villages	0	0	0	0
7	Mysuru	Hunsur	All Gramapanchayath	All Villages	0	0	0	0
8	Mysuru	H D kote	All Gramapanchayath	All Villages	0	0	0	0
9	Mysuru	Sarguru	All Gramapanchayath	All Villages	0	0	0	0

Executive Engineer
Rural Drinking Water & Sanitary Division
[illegible] Mysuru.

List Raichur, Manvi and Sirwar Villages where Fluoride found contaminated 2023-2024

Sl No	District Name	Taluka name	Gram Panchyata	Village Name	No. of source affected by Fluoride	No. of source affected by Arsenic	Scheme ID with Alternate source provided		
							MVS	WPP	Other Borewell
1	Raichur	Raichur	Yedlapur	Wadloor	10	–			7835504
2	Raichur	Raichur	Yedlapur	Ganjahalli	13	–			39922
3	Raichur	Raichur	Yedlapur	Heggasanahalli	2	–			8441336
4	Raichur	Raichur	Purtipli	Yedlapur	2	–			3740275
5	Raichur	Raichur	Deosugur	Deosugur	7	–			1751910
6	Raichur	Raichur	Kadloor	Rangapur	1	–			4836951
7	Raichur	Raichur	Kadloor	Haltimmapur	3	–			7835595
8	Raichur	Raichur	Kadloor	Arshanigi	6	–			6674293
9	Raichur	Raichur	Kadloor	Bevinbenchi	1	–			–
10	Raichur	Raichur	Manchalapur	Hospet	1	–			4836192
11	Raichur	Raichur	Manchalapur	Manchalapur	7	–			6674369
12	Raichur	Raichur	Jagirvenkatapur	Halvenkatapur	1	–			4833358
13	Raichur	Raichur	Jagirvenkatapur	Fathepur	11	–		7855515	
14	Raichur	Raichur	Jagirvenkatapur	Raghunath Halli	1	–			–
15	Raichur	Raichur	Jagirvenkatapur	Gonal	5	–		6674235	
16	Raichur	Raichur	Jagirvenkatapur	Muranpur	7	–			7548177
17	Raichur	Raichur	Jagirvenkatapur	Jagirvenkatapur	4	–			8442229
18	Raichur	Raichur	Kalmala	Kalmala	25	–		7548449	
19	Raichur	Raichur	Kalmala	Hunsihali Hoda	1	–		7835909	
20	Raichur	Raichur	Mamdapur	Aralibenchi	4	–			5543658
21	Raichur	Raichur	Mamdapur	Ashapur	6	–		6143708	
22	Raichur	Raichur	Mamdapur	Nelhal	12	–		7855533	
23	Raichur	Raichur	Mamdapur	Mamdapur	13	–		6674362	
24	Raichur	Raichur	Marchatal	Pesaldinni	1	–			–
25	Raichur	Raichur	Marchatal	Dinni	1	–			–
26	Raichur	Raichur	Heerapura	Heerapur	1	–			3740291
27	Raichur	Raichur	Purtipli	Alkoor	7	–		7855549	
28	Raichur	Raichur	Heerapura	Mudaldinni	1	–			–
29	Raichur	Raichur	Udamagal	Udamgal	4	–			6138482
30	Raichur	Raichur	Udamagal	Khanapur	2	–			38091
31	Raichur	Raichur	Purtipli	Turkandona	2	–			7864818
32	Raichur	Raichur	Udamagal	Naglapur	5	–			5230263
33	Raichur	Raichur	Purtipli	Purtipli	9	–		7548188	

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List Raichur, Manvi and Sirwar Villages where Fluoride found contaminated 2023-2024

Sl No	District Name	Taluka name	Gram Panchyata	Village Name	No. of source affected by Fluoride	No. of source affected by Arsenic	Scheme ID with Alternate source provided		Other Borewell
							MVS	WPP	
34	Raichur	Raichur	Heerapura	Kataknur	1	-			7835562
35	Raichur	Raichur	Bichal	B. Yedlapur	4	-			5027780
36	Raichur	Raichur	Heerapura	B.hanumapur	1	-		7910967	
37	Raichur	Raichur	Bichal	Gattubichal	6	-			5543201
38	Raichur	Raichur	Bichal	Bichal	1	-			2973125
39	Raichur	Raichur	Gillesugur	Dugnoor	4	-			7864778
40	Raichur	Raichur	Gillesugur	Karebudur	7	-			7833857
41	Raichur	Raichur	Gillesugur	Tungabhadra	4	-			6606334
42	Raichur	Raichur	Gillesugur	Gillesugur	5	-			5028186
43	Raichur	Raichur	Yeragera	Godihal	2	-			5710476
44	Raichur	Raichur	Yeragera	Yeragera	1	-			551499
45	Raichur	Raichur	Gunjahalli	Hanchinal	8	-			6606404
46	Raichur	Raichur	Gunjahalli	Gunjahalli	16	-	2417385		
47	Raichur	Raichur	Ganadhal	Ganadhal	2	-			7847086
48	Raichur	Raichur	Nadigaddi	Gangwar	1	-			7761236
49	Raichur	Raichur	TALMARI	TALMARI	8	-			5644389
50	Raichur	Raichur	Nadigaddi	Budadinni	1	-			4830236
51	Raichur	Raichur	Idapanur	Meerapur	1	-			7864776
52	Raichur	Raichur	Idapanur	Idapanur	4	-			8392388
53	Raichur	Raichur	Jambaldinni	Maldoddi	2	-			7835538
54	Raichur	Raichur	Linganakhandoddi	Masdoddi	1	-			6135734
55	Raichur	Raichur	Udamagal	Jalibenchi	1	-			7835919
56	Raichur	Raichur	Kamalapur	Anwer	1	-			4830268
57	Raichur	Raichur	Kamalapur	Gonwar	2	-			8438493
58	Raichur	Raichur	Kamalapur	Manjarla	2	-			4830302
59	Raichur	Raichur	Mittimalkapur	Maliyabad	9	-			7903809
60	Raichur	Raichur	Mittimalkapur	Devanpalli	10	-			6606898
61	Raichur	Raichur	Mittimalkapur	Mittimalkapur	10	-			5036136
62	Raichur	Raichur	Bijangera	Ijapur	2	-			5019757
63	Raichur	Raichur	Bijangera	Rajalbanda	1	-			7761241
64	Raichur	Raichur	Baidoddi	Wadwati	11	-			7761236
65	Raichur	Raichur	Baidoddi	Gousenagar	4	-			8439476
66	Raichur	Raichur	Baidoddi	Kadgamdoddi	2	-			8448092

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List Raichur, Manvi and Sirwar Villages where Fluoride found contaminated 2023-2024

Sl No	District Name	Taluka name	Gram Panchyata	Village Name	No. of source affected by Fluoride	No. of source affected by Arsenic	Scheme ID with Alternate source provided		
							MVS	WPP	Other Borewell
67	Raichur	Raichur	Baidoddi	Kurbadoddi	9	—			5417544
68	Raichur	Raichur	Baidoddi	Baidoodi	13	—			5229960
69	Raichur	Raichur	Chandrabanda	Palwaldoddi	1	—			5418014
70	Raichur	Raichur	Chandrabanda	Ganmoor	1	—			7864794
71	Raichur	Raichur	Athkoor	Dongarampur	1	—		6143073	
72	Raichur	Raichur	Athkoor	Kurvakurda	2	—			8440396
73	Raichur	Raichur	Athkoor	Kurvakula	1	—			8441345
74	Raichur	Raichur	Athkoor	Athkoor	3	—			6623535
75	Raichur	Raichur	Sagamkunta	Ibrahimdoddi	1	—			6607225
76	Raichur	Raichur	Sagamkunta	Mamadadoddi	1	—			
77	Raichur	Raichur	Sagamkunta	Sagamkunta	1	—			7555674
78	Raichur	Raichur	Shakwadi	Sanknoor	3	—			
79	Raichur	Raichur	Shakwadi	Shakwadi	1	—			5543723
	List of villages where Fluoride found contaminated 2023-2024								
80	Raichur	SIRWAR	GANADINNI	TUPDUR	7	—			
81	Raichur	SIRWAR	CHAGBHAVI	LAKKAMDINNI	1	—			7547205
82	Raichur	SIRWAR	HARAVI	DRAKSHI CAMP	3	—			6621141
83	Raichur	SIRWAR	HARAVI	HARAVI	38	—		7714093	
84	Raichur	SIRWAR	MADIGIRI	MADIGIRI	9	—			2549445
85	Raichur	SIRWAR	GANADINNI	HOKRANI	13	—			7839805
86	Raichur	SIRWAR	GANADINNI	BEVINOOR	7	—			4842907
87	Raichur	SIRWAR	GANADINNI	MACHANUR	9	—			7761711
88	Raichur	SIRWAR	GANADINNI	SINGADADINNI	2	—			7548392
89	Raichur	SIRWAR	GANADINNI	GANADINNI	1	—			7548313
90	Raichur	SIRWAR	ATHANUR	JAKKALDINNI	5	—			7393319
91	Raichur	SIRWAR	ATHANUR	SHAKAPUR	4	—			5229035
92	Raichur	SIRWAR	ATHANUR	ATHANUR	1	—			8039170
93	Raichur	SIRWAR	CHAGBHAVI	KADADINNI	1	—			7548499
94	Raichur	SIRWAR	CHAGBHAVI	JALAPUR	8	—			7849614
95	Raichur	SIRWAR	CHAGBHAVI	CHAGBHAVI	2	—			2589473
96	Raichur	SIRWAR	NAVALKAL	NARABANDA	5	—			
97	Raichur	SIRWAR	NAVALKAL	HUNCHED	4	—		8408770	
98	Raichur	SIRWAR	NAVALKAL	MURKIGUDDA	3	—			

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List Raichur, Manvi and Sirwar Villages where Fluoride found contaminated 2023-2024

Sl No	District Name	Taluka name	Gram Panchyata	Village Name	No. of source affected by Fluoride	No. of source affected by Arsenic	Scheme ID with Alternate source provided		Other Borewell
							MVS	WPP	
99	Raichur	SIRWAR	NAVALKAL	NAVALKAL	27	—			29757
100	Raichur	SIRWAR	MALLAT	NUGADONI	2	—			—
101	Raichur	SIRWAR	MALLAT	KURKUNDA	1	—			—
102	Raichur	SIRWAR	MALLAT	N.HOSUR	1	—			—
103	Raichur	SIRWAR	MALLAT	MALLAT	5	—			7192946
104	Raichur	SIRWAR	CHINCHARAKI	HUDA	1	—			—
105	Raichur	SIRWAR	CHINCHARAKI	BUDDINNI	1	—			—
List of villages where Fluoride found contaminated 2023-2024									
106	Raichur	Manvi	Sadapur	Seekal	2	—			—
107	Raichur	Manvi	Sadapur	Sadapur	3	—			5028734
108	Raichur	Manvi	Sunkeshwar	Bailmarched	1	—			4846238
109	Raichur	Manvi	Sunkeshwar	Sunkeshwar	7	—			6621246
110	Raichur	Manvi	Gorkal	Jukur	1	—			7841765
111	Raichur	Manvi	Gorkal	Gorkal	1	—			4842375
112	Raichur	Manvi	Kurdi	Kurdi	11	—			7576272
113	Raichur	Manvi	Kapgal	Bommanal	15	—			—
114	Raichur	Manvi	Kapgal	Bettadur	7	—			8439562
115	Raichur	Manvi	Kapgal	Kapgal	17	—			7711489
116	Raichur	Manvi	Sangapur	Sangapur	1	—			6674189
117	Raichur	Manvi	Nakkundi	Nakkundi	1	—			5019733
118	Raichur	Manvi	Aroli	Adavikhanapur	2	—			443677
119	Raichur	Manvi	Aroli	Aroli	6	—			75482
120	Raichur	Manvi	Pothnal	Jeenur Camp	1	—			7548358
121	Raichur	Manvi	Pothnal	Muddamguddi	1	—			—
122	Raichur	Manvi	Byagavata	Byagavata	1	—			5019702
123	Raichur	Manvi	Janekal	Amaravathi	1	—			4842334
124	Raichur	Manvi	Madlapur	Katarki	1	—			8407021

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List of Sindhanur & Maski Villages where Fluoride found contaminated 2023-2024

Sl No	District Name	Taluka name	Gram Panchyata	Village Name	No. of source affected by Fluoride	No. of source affected by Arsenic	Scheme ID with Alternate source provided		Other borewell
							MVS	WPP	
1	Raichur	Sindhnur	R.h. Camp - 1	Sindhanur Rual (d)	2	—		8450569	
2	Raichur	Sindhnur	Hedaginala	Chintanmanadoddi	1	—		7548478	
3	Raichur	Sindhnur	Mukunda	Mukunda	1	—			5605122
4	Raichur	Sindhnur	Salgunda	Salgunda	1	—			7914451
5	Raichur	Sindhnur	Roudakunda	Roudakunda	1	—			5629541
6	Raichur	Sindhnur	Channalli	Siddarampur	1	—			3823763
7	Raichur	Sindhnur	Bassapur .k	Bassapur . K	1	—			7549091
8	Raichur	Sindhnur	Gandhinagar	Gandhi Nagar	1	—			4827337
9	Raichur	Sindhnur	Jalihal	Jalihal	3	—			6619976
10	Raichur	Sindhnur	Somalaapur	Somalapur	1	—			5629552
11	Raichur	Sindhnur	Dhadesugur	Uppala	2	—			3841080
12	Raichur	Sindhnur	Dhadesugur	Kengal	1	—			5574708
13	Raichur	Sindhnur	Badarli	Badarli	1	—		7742210	
14	Raichur	Sindhnur	Alabanur	Belgurki	1	—		7742718	
15	Raichur	Sindhnur	Hosahalli Ej	Amarapura	2	—			1731380
16	Raichur	Sindhnur	Hosahalli Ej	Sasalmari	1	—			6622049
17	Raichur	Sindhnur	Virupapur	Aralahalli	1	—			6619860
18	Raichur	Sindhnur	Virupapur	Virupapur	3	—		7742776	
19	Raichur	Sindhnur	Kalamangi	Chickbergi	1	—			7546875
20	Raichur	Sindhnur	Kalamangi	Kalamangi	6	—			4849818
21	Raichur	Sindhnur	Devaragudi	Devaragudi	1	—			8392523
22	Raichur	Sindhnur	Jawalgera	Jawalgere	2	—		7742771	
23	Raichur	Sindhnur	Ragalparvi	Puldinni	1	—		8444210	
24	Raichur	Sindhnur	Ragalparvi	Ragalparvi	1	—		7855559	
List of MASKI villages where Fluoride found contaminated 2023-2024									
25	Raichur	MASKI	GOUDANBHAVI	BUDDINNI	1	—		8439439	
26	Raichur	MASKI	GOUDANBHAVI	GOUDANBHAVI	3	—		7742760	
27	Raichur	MASKI	BAPPUR	BAPPUR	2	—	(867)(165776)		
28	Raichur	MASKI	GUNDA	GUDIHAL	1	—		8439282	
29	Raichur	MASKI	TORANADINNI	MALKAPUR	1	—			8407104

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List of Sindhanur & Maski Villages where Fluoride found contaminated 2023-2024

Sl No	District Name	Taluka name	Gram Panchyata	Village Name	No. of source affected by Fluoride	No. of source affected by Arsenic	Scheme ID with Alternate source provided		Other borewell
							MVS	WPP	
30	Raichur	MASKI	HIREDINNI	CHICKDINNI	1	-			
31	Raichur	MASKI	HIREDINNI	GALIDURGAMMA CAMP	1	-			7719483
32	Raichur	MASKI	MEDIKINAL	ANTARAGANGI	1	-			7145839
33	Raichur	MASKI	MEDIKINAL	MEDIKINAL	1	-			6617163
34	Raichur	MASKI	TALEKHAN	HADAGALI TANDA	1	-			7879347
35	Raichur	MASKI	TALEKHAN	DESAIBHOGAPUR	1	-			6617246
36	Raichur	MASKI	TALEKHAN	BAGALAGUDDA	1	-			6135924
37	Raichur	MASKI	MARALADINNI	UASKIHAL	1	-			6634386
38	Raichur	MASKI	ANKASDODDI	ANKASDODDI	7	-			6621364

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List of Deodurga villages where Fluoride found contaminated 2023-2024

Sl No	District Name	Taluka name	Gram Panchyata	Village Name	No. of source affected by Fluoride	No. of source affected by Arsenic	Scheme ID with Alternate source provided		Other source
							MVS	WPP	
1	Raichur	Deodurga	Dondambli	Wagadambli	1	–			7548226
2	Raichur	Deodurga	Dondambli	Nagargunda	7	–			7547868
3	Raichur	Deodurga	Dondambli	Karkihalli	3	–			1726847
4	Raichur	Deodurga	Masarkal	Miyapur	3	–			7140114
5	Raichur	Deodurga	Masarkal	Masarkal	10	–			1737908
6	Raichur	Deodurga	Masarkal	Guntal	7	–			1737660
7	Raichur	Deodurga	Masarkal	Chickhonnakuni	3	–			5030303
8	Raichur	Deodurga	Karegudda	Karegudda	8	–			7904655
9	Raichur	Deodurga	Karegudda	Anjal	1	–			5030193
10	Raichur	Deodurga	Karegudda	Gopalapur	3	–			5030249
11	Raichur	Deodurga	K. Irabgera	Kothigudda	1	–			–
12	Raichur	Deodurga	K. Irabgera	Manasagal	5	–			7885367
13	Raichur	Deodurga	K. Irabgera	K. Irabgera	12	–			–
14	Raichur	Deodurga	K. Irabgera	G. Irabagera	3	–			–
15	Raichur	Deodurga	Kardigudda	Nilavangi	3	–			2969766
16	Raichur	Deodurga	Amarapur	Navilugudda	2	–			7548621
17	Raichur	Deodurga	Kardigudda	Mudgot	2	–			1737454
18	Raichur	Deodurga	Amarapur	Jambaladinni	1	–			7555627
19	Raichur	Deodurga	Kardigudda	Herundi	4	–			1732292
20	Raichur	Deodurga	Kardigudda	Bagur	5	–			6056124
21	Raichur	Deodurga	Koppar	Parathapur	4	–			7548028
22	Raichur	Deodurga	Koppar	Ramanal	6	–			–
23	Raichur	Deodurga	Koppar	KURKIHALLI (WB)	1	–			5232474
24	Raichur	Deodurga	Koppar	Koppar	5	–			3824951
25	Raichur	Deodurga	Koppar	Arashanagi	9	–			–
26	Raichur	Deodurga	Jerbandi	Yeramasal	4	–			5546761
27	Raichur	Deodurga	Jerbandi	Sugaral	4	–		7855506	
28	Raichur	Deodurga	Jerbandi	Jarabandi	7	–			4843592
29	Raichur	Deodurga	Jerbandi	Gundagurthi	8	–			4843523
30	Raichur	Deodurga	Jerbandi	Devargudda	10	–			–
31	Raichur	Deodurga	Jerbandi	Chickbudur	3	–			–
32	Raichur	Deodurga	Somanamaradi	Somanamardi	10	–			5231027
33	Raichur	Deodurga	Somanamaradi	Bhogiramangudda	8	–			7903170

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List of Deodurga villages where Fluoride found contaminated 2023-2024

Sl No	District Name	Taluka name	Gram Panchyata	Village Name	No. of source affected by Fluoride	No. of source affected by Arsenic	Scheme ID with Alternate source provided		Other source
							MVS	WPP	
34	Raichur	Deodurga	H. Siddapur	Bommanahalli	3	-			7576538
35	Raichur	Deodurga	Chinchodi	Yaregudda	3	-			7547861
36	Raichur	Deodurga	Chinchodi	Veergot	2	-			4843396
37	Raichur	Deodurga	Chinchodi	Lingadahalli	5	-			8037179
38	Raichur	Deodurga	Chinchodi	Bankaladoddi	8	-			3986347
39	Raichur	Deodurga	Chinchodi	Chinchodi	5	-			5072295
40	Raichur	Deodurga	Amarapur	SULADGUDDA	2	-			5617888
41	Raichur	Deodurga	Amarapur	Parapur	4	-			5549583
42	Raichur	Deodurga	Amarapur	Mukkanal	5	-			4843362
43	Raichur	Deodurga	Amarapur	Mandalagudda	4	-			2977527
44	Raichur	Deodurga	Mundargi	Mudargi	23	-			7884840
45	Raichur	Deodurga	Mundargi	Katamalli	4	-			2969646
46	Raichur	Deodurga	Mundargi	Huligudda	4	-			7548254
47	Raichur	Deodurga	Mundargi	Ganjalli	13	-			5549568
48	Raichur	Deodurga	Amarapur	Gajaldinni	3	-			3989803
49	Raichur	Deodurga	Mundargi	Devatgal	12	-			7855497
50	Raichur	Deodurga	Palkanmardi	Ooti	6	-			-
51	Raichur	Deodurga	Palkanmardi	Wandali	2	-			-
52	Raichur	Deodurga	Palkanmardi	Madarkal	5	-			-
53	Raichur	Deodurga	Palkanmardi	Mudalgunda	5	-			-
54	Raichur	Deodurga	Palkanmardi	Pujaridoddi	10	-			-
55	Raichur	Deodurga	Galag	Galag (wb)	4	-			5547600
56	Raichur	Deodurga	Galag	Chadakalagudda	2	-			1737917
57	Raichur	Deodurga	Somanamaradi	Mykaldoddi	8	-			3989033
58	Raichur	Deodurga	Ganadhal	Kakkaldoddi	5	-			629256
59	Raichur	Deodurga	Ganadhal	Kammaldinni	12	-			1733863
60	Raichur	Deodurga	Ganadhal	Ganadal	1	-			3988992
61	Raichur	Deodurga	Maladakal	Kardigudda	13	-			5036711
62	Raichur	Deodurga	Maladakal	Govindapalli	4	-			-
63	Raichur	Deodurga	Ramadurga	Sunkeshwral	3	-			-
64	Raichur	Deodurga	Ramadurga	Jinnapur	1	-			5231040
65	Raichur	Deodurga	Ramadurga	Amarapur	7	-			2969806
66	Raichur	Deodurga	Shavantagera	MADARKAL	3	-			-

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List of Deodurga villages where Fluoride found contaminated 2023-2024

Sl No	District Name	Taluka name	Gram Panchyata	Village Name	No. of source affected by Fluoride	No. of source affected by Arsenic	Scheme ID with Alternate source provided		Other source
							MVS	WPP	
67	Raichur	Deodurga	Hemanal	Khanapur	2	-			7841347
68	Raichur	Deodurga	Hemanal	Kallur	1	-			-
69	Raichur	Deodurga	Hemanal	Hemanal	5	-			5020265
70	Raichur	Deodurga	Hemanal	Honnatagi	9	-			-
71	Raichur	Deodurga	Hemanal	Basavanthapur	2	-			-
72	Raichur	Deodurga	Hemanal	Bommanal	5	-			5610895
73	Raichur	Deodurga	Hemanal	Appral	1	-			-
74	Raichur	Deodurga	Shavantagera	Hireraikumpi	3	-			-
75	Raichur	Deodurga	Gugal	Chickraikumpi	1	-			-
76	Raichur	Deodurga	Shavantagera	Shavantagera	13	-			7393724
77	Raichur	Deodurga	Hirebudur	Nagaral	1	-			-
78	Raichur	Deodurga	Hirebudur	Mashihal	3	-			6654348
79	Raichur	Deodurga	Shavantagera	Ingaldhal	2	-			-
80	Raichur	Deodurga	Hirebudur	Hirebudur	3	-			6654348
81	Raichur	Deodurga	Shavantagera	Hanchinal	2	-			-
82	Raichur	Deodurga	Hirebudur	Gopendevarhalli	1	-			7911170
83	Raichur	Deodurga	Hirebudur	Budinal	2	-			-
84	Raichur	Deodurga	Mustur	Jaradabandi	3	-			-
85	Raichur	Deodurga	Mustur	Tiggihal	3	-			-
86	Raichur	Deodurga	Mustur	Shivangi	3	-			4819303
87	Raichur	Deodurga	Mustur	Shakapur	4	-			-
88	Raichur	Deodurga	Mustur	Mustur	1	-			7651280
89	Raichur	Deodurga	Mustur	Gejjebhavi	2	-			-
90	Raichur	Deodurga	Mustur	Hungundabad	3	-			-
91	Raichur	Deodurga	Mustur	Chintalakunta	8	-			7548266
92	Raichur	Deodurga	Mustur	Aldarthi	9	-			5491507
93	Raichur	Deodurga	Nagadadinni	Tippaladinni	1	-			6616190
94	Raichur	Deodurga	J. Jadaldinni	Rekalamardi	7	-			26699
95	Raichur	Deodurga	J. Jadaldinni	Marakamadinni	4	-			7576537
96	Raichur	Deodurga	J. Jadaldinni	Jagatkal	3	-			-
97	Raichur	Deodurga	Alkod	Shavantagal	1	-			7841270
98	Raichur	Deodurga	Kyadigera	Kyadigera	61	-			8445220
99	Raichur	Deodurga	Bhumanagunda	Bhumanagunda	14	-			1753763

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List of Deodurga villages where Fluoride found contaminated 2023-2024

Sl No	District Name	Taluka name	Gram Panchyata	Village Name	No. of source affected by Fluoride	No. of source affected by Arsenic	Scheme ID with Alternate source provided		Other source
							MVS	WPP	
100	Raichur	Deodurga	Alkod	Akikumpi	2	-			-
101	Raichur	Deodurga	Alkod	Anwar	2	-			-
102	Raichur	Deodurga	Alkod	Alkoda Tanda	5	-			7884856
103	Raichur	Deodurga	Bhumanagunda	Mallapur	8	-			1752379
104	Raichur	Deodurga	Kothadoddi	Mallinaikanadoddi	7	-			-
105	Raichur	Deodurga	Kothadoddi	Malakamdinni	5	-			-
106	Raichur	Deodurga	Kothadoddi	Yalladoddi	3	-			-
107	Raichur	Deodurga	Kothadoddi	Kothadoddi	23	-			6615140
108	Raichur	Deodurga	Kothadoddi	Kachapur	3	-			-
109	Raichur	Deodurga	Kothadoddi	Karadona	4	-			-
110	Raichur	Deodurga	Kothadoddi	Honnakatamalli	4	-			-
111	Raichur	Deodurga	Kothadoddi	Hemanur	14	-			6634256
112	Raichur	Deodurga	Kothadoddi	Chikaladoddi	5	-			5237374
113	Raichur	Deodurga	Arkera	Arakera	3	-			5036719
List of Lingsugur villages where Fluoride found contaminated 2023-2024									
114	Raichur	Lingsugur	Hunur	Wandli	1	-			7576530
115	Raichur	Lingsugur	Hunur	Hunur	1	-			7902888
116	Raichur	Lingsugur	Hunur	Taleat	1	-			6617024
117	Raichur	Lingsugur	Rodalabanda (tawaga)	Mallapur	1	-			7760624
118	Raichur	Lingsugur	Rodalabanda (tawaga)	Yelagatta	2	-			3832505
119	Raichur	Lingsugur	Rodalabanda (tawaga)	Kaddaona	1	-			7760629
120	Raichur	Lingsugur	Bannigole	Adapur	2	-	7742091		
121	Raichur	Lingsugur	Bannigole	Hireyardihal	5	-			6616855
122	Raichur	Lingsugur	Bannigole	Bannigole	2	-	7554702		
123	Raichur	Lingsugur	Nagalapur	Vyakarnal	1	-			3991641
124	Raichur	Lingsugur	Nagalapur	Todaki	1	-			7546641
125	Raichur	Lingsugur	Nagalapur	Kumarkhed	3	-			8326168
126	Raichur	Lingsugur	Nagalapur	Chattar	4	-			6633446
127	Raichur	Lingsugur	Nagalapur	Heggapur	2	-			6619215

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List of Deodurga & Lingasugur Villages Where Fluoride found Contaminated 2023-2024

Sl No	District Name	Taluka name	Gram Panchyata	Village Name	No. of source affected by Fluoride	No. of source affected by Arsenic	Scheme ID with Alternate source provided		Other source
							MVS	WPP	
128	Raichur	Lingsugur	Nagalapur	Nagalapur	8	—			6619215
129	Raichur	Lingsugur	Nagalapur	Ulimeshwar	1	—			7760633
130	Raichur	Lingsugur	Nagalapur	Picklihal	2	—			7838078
131	Raichur	Lingsugur	Nagarahal	Nagarhal	5	—			554361
132	Raichur	Lingsugur	Nagarahal	Thumbalgaddi	2	—			7652094
133	Raichur	Lingsugur	Halkavatagi	Palgaldinni	3	—			7141669
134	Raichur	Lingsugur	Amadihal	Bellihal	1	—			4195442
135	Raichur	Lingsugur	Amadihal	Amdihal	3	—			5559857
136	Raichur	Lingsugur	Khairawadgi	Ashihal	1	—			7760871
137	Raichur	Lingsugur	Upparnandihal	Kannapur Hutti	3	—			7835159
138	Raichur	Lingsugur	Upparnandihal	Chicklekkihal	1	—	7192267		
139	Raichur	Lingsugur	Khairawadgi	Khairwadagi	1	—			8438540
140	Raichur	Lingsugur	Sarjapur	Sarjapur	1	—			6633631
141	Raichur	Lingsugur	Sarjapur	Kuppigudda	1	—			7838102
142	Raichur	Lingsugur	Mavinabhavi	Mavinbhavi	1	—			7576315
143	Raichur	Lingsugur	Mavinabhavi	Hunakunti	7	—			6655592
144	Raichur	Lingsugur	Chittapur	Chitapur	2	—			7393573
145	Raichur	Lingsugur	Anahosur	Anahosur	2	—			7834893
146	Raichur	Lingsugur	Neeranakera	Adavibhavi	1	—			7833561
147	Raichur	Lingsugur	Eachanal	Eachanal	1	—			6063605
148	Raichur	Lingsugur	Kalapur	Yalagaladinni	6	—			7547271
149	Raichur	Lingsugur	Honnalli	Gudadnal	3	—			2505590
150	Raichur	Lingsugur	Honnalli	Yardona	1	—			7904745
151	Raichur	Lingsugur	Kotha	Medinapur	4	—			1757430
152	Raichur	Lingsugur	Paidoddi	Gadagi	2	—			7194862
153	Raichur	Lingsugur	Paidoddi	Tanamankal	4	—			6617525
154	Raichur	Lingsugur	Paidoddi	Rayadurga	3	—			4846275
155	Raichur	Lingsugur	Paidoddi	Golpalli	3	—			—
156	Raichur	Lingsugur	Paidoddi	Yarajanthi	10	—			—
157	Raichur	Lingsugur	Paidoddi	Paidoddi	4	—			—

Executive Engineer
R.W.S. & S Division
RAICHUR

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Shivamogga District Fluoride and Arsenic Affected Habitation Details-2023-24

Sl No	District Name	Taluka name	Gram Panchyata	Village Name	No. of source affected by Fluoride	No. of source affected by Arsenic	Scheme ID with Alternate source provided		Remidial Action Taken
							MVS	WPP	
1	Shivamogga	Shivamogga	Umblebylu	Umblebylu I	1	0	Consider MVS Surface Water Source Work is Under Progress		Alternate Source
2	Shivamogga	Shivamogga	Umblebylu	Huralihalli	1	0			Alternate Source
3	Shivamogga	Shivamogga	Umblebylu	Kakanahsudi	2	0			Alternate Source
4	Shivamogga	Shivamogga	Umblebylu	Lingapura	1	0			Alternate Source
5	Shivamogga	Shivamogga	Umblebylu	Thotadakere	1	0			Alternate Source
6	Shivamogga	Hosanagara	Sonale	Nivane	1	0			Alternate Source
7	Shivamogga	Hosanagara	Mumbaru	Hiriyogi	1	0			Alternate Source
8	Shivamogga	Thirthalli	Konanduru	Konanduru	4	0			Alternate Source
9	Shivamogga	Thirthalli	Nonaburu	Mallesara	1	0			Alternate Source
10	Shivamogga	Thirthalli	Hadhigallu	Hadhigallu	1	0			Alternate Source

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Sl No	District Name	Taluka name	Gram Panchyata	Village Name	No. of source affected by Fluoride	No. of source affected by	Scheme ID with Alternate source	
							MVS	WPP
1	TUMAKURU	Tumkur	DEVALAPURA	BITTANAKURIKE	211	0		wpp installed
2	TUMAKURU	Tumkur	SEETHAKAL	GIDAGANAHALLI				wpp installed
3	TUMAKURU	Tumkur	HIREHALLI	CHIKKAHALLI				wpp installed
4	TUMAKURU	Tumkur	AREGUJJANHALLI	VITRAVATHANAHALLI				wpp installed
5	TUMAKURU	Tumkur	AREGUJJANHALLI	DURGADAHALLI				wpp installed
6	TUMAKURU	Tumkur	AREGUJJANHALLI	J.H. COLONY				wpp installed
7	TUMAKURU	Tumkur	AREGUJJANHALLI	VENAKATARAYANAPALYA				wpp installed
8	TUMAKURU	Kunigal	HALEVUR	LAXMIPURA				wpp installed
9	TUMAKURU	Kunigal	D.HOSAHALLI	D HOSAHALLI				wpp installed
10	TUMAKURU	Gubbi	MANCHALADORE	MATA				wpp installed
11	TUMAKURU	Gubbi	KALLURU	BILINANDI				wpp installed
12	TUMAKURU	Gubbi	KOPPA	KONANAKERE				wpp installed
13	TUMAKURU	Madhugiri	GANJALAGUNTE	K.G.THIPPAPURA				wpp installed
14	TUMAKURU	Madhugiri	CHIKKADALAVATA	TUMULU				wpp installed
15	TUMAKURU	Madhugiri	RANGAPURA	KOONAHALLI				wpp installed
16	TUMAKURU	Madhugiri	KOTAGARLAHALLI	VITALAPURA				wpp installed
17	TUMAKURU	Madhugiri	DABBEGATTA	HARIHARAPURA				wpp installed
18	TUMAKURU	Madhugiri	DABBEGATTA	DABBEGATTA				wpp installed
19	TUMAKURU	Madhugiri	DODDERI	GIRIYANAPALYA				wpp installed
20	TUMAKURU	Madhugiri	DODDERI	SANJIVAPURA				wpp installed
21	TUMAKURU	Madhugiri	DODDERI	BANAGARANAHALLI				wpp installed
22	TUMAKURU	Madhugiri	DODDERI	GIRIGONDANAHALLI				wpp installed
23	TUMAKURU	Madhugiri	DODDERI	DODDERI				wpp installed
24	TUMAKURU	Madhugiri	NERALEKERE	DASENAHALLI				wpp installed
25	TUMAKURU	Madhugiri	NERALEKERE	GADDETHIMMANAHALLI				wpp installed
26	TUMAKURU	Madhugiri	NERALEKERE	KATAGONDANAHALLI				wpp installed
27	TUMAKURU	Madhugiri	CHINNENAHLLI	CHINNENAHLLI				wpp installed
28	TUMAKURU	Madhugiri	HOSAKERE	AVARGALLU				wpp installed
29	TUMAKURU	Madhugiri	HOSAKERE	BASAVANAHALLI				wpp installed
30	TUMAKURU	Madhugiri	BEDATTUR	MALAGONDANAHALLI				wpp installed
31	TUMAKURU	Madhugiri	BEDATTUR	S.APPENAHALLI				wpp installed
32	TUMAKURU	Madhugiri	BEDATTUR	YAMMETHIMANAHALLI				wpp installed
33	TUMAKURU	Madhugiri	BEDATTUR	NARAPPANAHALLI				wpp installed
34	TUMAKURU	Madhugiri	BEDATTUR	BIDRIKERE				wpp installed
35	TUMAKURU	Madhugiri	BEDATTUR	BEDATTUR				wpp installed
36	TUMAKURU	Madhugiri	REDDIHALLI	AIYANAHALLI				wpp installed
37	TUMAKURU	Madhugiri	REDDIHALLI	LAKSHMIPURA				wpp installed
38	TUMAKURU	Madhugiri	REDDIHALLI	MALLANAYAKANAHALLI				wpp installed
39	TUMAKURU	Madhugiri	REDDIHALLI	REDDIHALLI				wpp installed
40	TUMAKURU	Madhugiri	DODDAYALKUR	THIPPAPURA				wpp installed
41	TUMAKURU	Madhugiri	DODDAYALKUR	DADAGONDANAHALLI				wpp installed
42	TUMAKURU	Madhugiri	DODDAYALKUR	SADASHALLI				wpp installed
43	TUMAKURU	Madhugiri	DODDAYALKUR	GOOLHALLI				wpp installed

44	TUMAKURU	Madhugiri	GARANI	CHILENALLY				wpp installed
45	TUMAKURU	Madhugiri	GARANI	CHANNAMALENAHALLI				wpp installed
46	TUMAKURU	Madhugiri	BRAMHASAMUDRA	GIREGOLIDANAHALLI				wpp installed
47	TUMAKURU	Madhugiri	BRAMHASAMUDRA	SHOBENAHALLI				wpp installed
48	TUMAKURU	Madhugiri	BRAMHASAMUDRA	MUDDANERALEKERE				wpp installed
49	TUMAKURU	Madhugiri	BRAMHASAMUDRA	BRAMHASAMUDRA				wpp installed
50	TUMAKURU	Madhugiri	KADAGATTUR	THIRUMALADEVIRAHALLI				wpp installed
51	TUMAKURU	Madhugiri	KODIGENAHALLI	JALIHALLI				wpp installed
52	TUMAKURU	Madhugiri	KODAGADALA	NITRAHALLI				wpp installed
53	TUMAKURU	Madhugiri	PURAVARA	OBALLAPURA				wpp installed
54	TUMAKURU	Madhugiri	PURAVARA	SHIVAPURA				wpp installed
55	TUMAKURU	Madhugiri	GANJALAGUNTE	MUDDENAHALLI				wpp installed
56	TUMAKURU	Madhugiri	GANJALAGUNTE	MALLENAHALLI				wpp installed
57	TUMAKURU	Madhugiri	MARUVEKERE	SOMPURA				wpp installed
58	TUMAKURU	Madhugiri	MARUVEKERE	BANAVENAHALLI				wpp installed
59	TUMAKURU	Madhugiri	MARUVEKERE	VENKATAPURA				wpp installed
60	TUMAKURU	Madhugiri	MARUVEKERE	THAVAKADHAHALLI				wpp installed
61	TUMAKURU	Madhugiri	MARUVEKERE	BANDREHALLI				wpp installed
62	TUMAKURU	Madhugiri	BUAVARA	KAMBATHANAHALLI				wpp installed
63	TUMAKURU	Madhugiri	BUAVARA	SOGENAHLLI				wpp installed
64	TUMAKURU	Madhugiri	BUAVARA	MARABAHALLI				wpp installed
65	TUMAKURU	Madhugiri	BUAVARA	BUAVARA				wpp installed
66	TUMAKURU	Madhugiri	CHINAKAVAJRA	CHINAKAVAJARA				wpp installed
67	TUMAKURU	Madhugiri	DABBEGATTA	VAJRADAHALLI				wpp installed
68	TUMAKURU	Madhugiri	DABBEGATTA	BELADAMADAGU				wpp installed
69	TUMAKURU	Madhugiri	D.V.HALLI	R.N.ROPPA				wpp installed
70	TUMAKURU	Madhugiri	SIDDAPURA	BASAVANAHALLI				wpp installed
71	TUMAKURU	Madhugiri	SIDDAPURA	VADERAHALLI				wpp installed
72	TUMAKURU	Madhugiri	SIDDAPURA	JADEGONDANAHALLI				wpp installed
73	TUMAKURU	Madhugiri	SIDDAPURA	SIDDAPURA				wpp installed
74	TUMAKURU	Koratagere	BUKKAPATANNA	VENKANNANAHALLI				wpp installed
75	TUMAKURU	Koratagere	AGRAHARA	KALLUGUTTAHALLI				wpp installed
76	TUMAKURU	Koratagere	KOLALA	YELACHAGERE				wpp installed
77	TUMAKURU	Koratagere	KOLALA	RANGAPURA				wpp installed
78	TUMAKURU	Koratagere	KOLALA	OMCHIHALLI				wpp installed
79	TUMAKURU	Koratagere	KOLALA	KOLLALA				wpp installed
80	TUMAKURU	Koratagere	CHINNAHALLI	PURADAHALLI				wpp installed
81	TUMAKURU	Koratagere	MAVATHURU	HURULIGERE				wpp installed
82	TUMAKURU	Koratagere	TEETA	MELEHALLI				wpp installed
83	TUMAKURU	Koratagere	TEETA	TEETA				wpp installed
84	TUMAKURU	Koratagere	TEETA	TUMBUGANAHALLI				wpp installed
85	TUMAKURU	Koratagere	TEETA	T.VENKATAPURA				wpp installed
86	TUMAKURU	Koratagere	HANCHIHALLI	THANNENAHALLI				wpp installed
87	TUMAKURU	Koratagere	HANCHIHALLI	G.NAGENAHALLI				wpp installed
88	TUMAKURU	Koratagere	HULLIKUNTE	KORATAGERE RURAL				wpp installed
89	TUMAKURU	Koratagere	KYAMENAHALLI	MALENAHALLI				wpp installed
90	TUMAKURU	Koratagere	VODDAGERE	YEITHIGANAHALLI				wpp installed
91	TUMAKURU	Koratagere	VODDAGERE	CHILAGONDANAHALLI				wpp installed

	TUMAKURU	Koratagere	VODDAGERE	GARAGADODDI				wpp installed
94	TUMAKURU	Koratagere	ARKERAMPURA	KURUBARAHALLI				wpp installed
94	TUMAKURU	Koratagere	BICHAPURA	GODRAHALLI				wpp installed
95	TUMAKURU	Koratagere	BICHAPURA	RAYAVARA				wpp installed
96	TUMAKURU	Koratagere	BICHAPURA	REDDIHALLI				wpp installed
97	TUMAKURU	Sira	BUKKAPATTANA	BUKKAPATTANA				wpp installed
98	TUMAKURU	Sira	DODDA AGRAHARA	DODDAAGRHARA				wpp installed
99	TUMAKURU	Sira	SEEBI	HUNGENALU				wpp installed
100	TUMAKURU	Sira	GOPALADEVARAHALLI	SIDDELAKKANA				wpp installed
101	TUMAKURU	Sira	CHINNENAHALLI	HALLADODDERE				wpp installed
102	TUMAKURU	Sira	CHINNENAHALLI	DASARAHALLI				wpp installed
103	TUMAKURU	Sira	YALADABAGI	KATAVEERANAHALLI				wpp installed
104	TUMAKURU	Sira	MAGODU	HALKUR				wpp installed
105	TUMAKURU	Sira	MAGODU	GIRINATHANAHALLI				wpp installed
106	TUMAKURU	Sira	MAGODU	BORASANDRA				wpp installed
107	TUMAKURU	Sira	MAGODU	GOLIGENAHALLI				wpp installed
108	TUMAKURU	Sira	MAGODU	MAGODU				wpp installed
109	TUMAKURU	Sira	HONNAGONDANAHALLI	HONNAGONDANAHALLI				wpp installed
110	TUMAKURU	Sira	KOTTA	OJAGUNTE				wpp installed
111	TUMAKURU	Sira	BARAGURU	KADIREHALLI				wpp installed
112	TUMAKURU	Sira	HULIKUNTTE	KOTTI				wpp installed
113	TUMAKURU	Sira	HULIKUNTTE	NEDAGATTE				wpp installed
114	TUMAKURU	Pavagada	Y.N. HOSAKOTE	Y.N. HOSAKOTE				wpp installed
115	TUMAKURU	Pavagada	PALAVALLI	VEERAMMANAHALLI				wpp installed
116	TUMAKURU	Pavagada	BYADANUR	BYADANUR				wpp installed
117	TUMAKURU	Pavagada	NAGALAMADIKE	PENDLIJEEVI				wpp installed
118	TUMAKURU	Pavagada	RAJAVANTI	CHIKKANAYAKANAHALLI				wpp installed
119	TUMAKURU	Pavagada	VADANAKALLU	VADANAKALLU				wpp installed
120	TUMAKURU	Pavagada	SIDDAPURA	SIDDAPURA				wpp installed
121	TUMAKURU	Pavagada	SASALAKUNTE	PENNOBANAHALLI				wpp installed
122	TUMAKURU	Pavagada	SASALAKUNTE	POLENAHALLI				wpp installed
123	TUMAKURU	Pavagada	SASALAKUNTE	SASALAKUNTE				wpp installed
124	TUMAKURU	Pavagada	KAMANADURGA	KAMANDURGA				wpp installed
125	TUMAKURU	Pavagada	BUDIBETTA	YATHINAHALLY				wpp installed
126	TUMAKURU	Pavagada	CHIKKAHALLY	THIMMAMMANAHALLY				wpp installed
127	TUMAKURU	Pavagada	RANGASAMUDRA	DODDENAHALLI				wpp installed
128	TUMAKURU	Pavagada	NALLIGANAHALLY	DEVARABETTA				wpp installed
129	TUMAKURU	Pavagada	NALLIGANAHALLY	BALAMMANAHALLY				wpp installed
130	TUMAKURU	Pavagada	NALLIGANAHALLY	NALLIGANAHALLY				wpp installed
131	TUMAKURU	Pavagada	NAGALAMADIKE	THIMMAMMANAHALLY				wpp installed
132	TUMAKURU	Pavagada	PONNASAMUDRA	B. ACCHAMMANAHALLI				wpp installed
133	TUMAKURU	Pavagada	ARASIKERE	ARASIKERE				wpp installed
134	TUMAKURU	Pavagada	KODAMADAGU	ARALIKUNTE				wpp installed
135	TUMAKURU	Tiptur	KUPPALU	KUPPALU				wpp installed

-334-

1	TUMAKURU	Tiptur	NAGARAGHATTA	BOCHIHALLI				wpp installed
137	TUMAKURU	Tiptur	BALUVANERALU	DASANAKATTE				wpp installed
138	TUMAKURU	Tiptur	BALUVANERALU	SURAGONDANAHALLI				wpp installed
139	TUMAKURU	Tiptur	BALUVANERALU	MALLIDEVIHALLI				wpp installed
140	TUMAKURU	Tiptur	BALUVANERALU	BALUVANERALU				wpp installed
141	TUMAKURU	Tiptur	MASAVANAGHATTA	MASAVANAGHATTA				wpp installed
142	TUMAKURU	Tiptur	DASARIGHATTA	GANGANAGHATTA				wpp installed
143	TUMAKURU	Tiptur	DASARIGHATTA	SASALAHALLI				wpp installed
144	TUMAKURU	Turuvekere	MAVINAKERE	RAJAPURA				wpp installed
145	TUMAKURU	Turuvekere	SORAVANAHALLI	JADIYA				wpp installed
146	TUMAKURU	Turuvekere	SORAVANAHALLI	HONAKERE				wpp installed
147	TUMAKURU	Turuvekere	SORAVANAHALLI	KEREVALGERE HALLI				wpp installed
148	TUMAKURU	Turuvekere	MUTHUGADAHALLI	DEVANAYAKANA HALLI				wpp installed
149	TUMAKURU	Turuvekere	MAYASANDRA	DODDSHETTIKERE				wpp installed
150	TUMAKURU	Turuvekere	MAYASANDRA	CHIKKASHETTIKERE				wpp installed
151	TUMAKURU	Turuvekere	MAYASANDRA	KALLUNAGATIHALLI				wpp installed
152	TUMAKURU	Turuvekere	MAYASANDRA	MAYASANDRA				wpp installed
153	TUMAKURU	Turuvekere	BAITHARAHOSAHALLI	VARAHASANDRA				wpp installed
154	TUMAKURU	Turuvekere	BAITHARAHOSAHALLI	MUTHSANDRA				wpp installed
155	TUMAKURU	Turuvekere	DABBEGHATTA	GOORALAMATA				wpp installed
156	TUMAKURU	Turuvekere	GONITUMKUR	DEVIHALLI				wpp installed
157	TUMAKURU	Chiknayakanhalli	SHETTIKERE	SHETTIKERE				wpp installed
158	TUMAKURU	Chiknayakanhalli	TEERTHAPURA	BARASIDLAHALLI				wpp installed
159	TUMAKURU	Chiknayakanhalli	TEERTHAPURA	KATRIKEHAL				wpp installed
160	TUMAKURU	Chiknayakanhalli	TEERTHAPURA	TEERTHAPURA				wpp installed
161	TUMAKURU	Chiknayakanhalli	HONNEBAGI	MARASANDRA				wpp installed
162	TUMAKURU	Chiknayakanhalli	HONNEBAGI	HONNEBAGI				wpp installed
163	TUMAKURU	Chiknayakanhalli	MUDDENAHALLI	M.H.KAVAL				wpp installed
164	TUMAKURU	Chiknayakanhalli	DUGADIHALLI	KAREHALLI				wpp installed
165	TUMAKURU	Chiknayakanhalli	MALLIGERE	KANKERE				wpp installed
166	TUMAKURU	Chiknayakanhalli	MALLIGERE	DAGGENAHALLI				wpp installed
167	TUMAKURU	Chiknayakanhalli	BARAGURU	YEREKATTE				wpp installed
168	TUMAKURU	Chiknayakanhalli	BARAGURU	RANGENAHALLI				wpp installed
169	TUMAKURU	Chiknayakanhalli	BARAGURU	OTIKER THIMMALAPURA				wpp installed
170	TUMAKURU	Chiknayakanhalli	BELAGUU	NIRUVAGALLU				wpp installed
171	TUMAKURU	Chiknayakanhalli	BELAGUU	TARIKATTE				wpp installed
172	TUMAKURU	Chiknayakanhalli	BELAGUU	BELAGUU				wpp installed
173	TUMAKURU	Chiknayakanhalli	RAMANAHALLI	AJJIGUDDE				wpp installed
174	TUMAKURU	Chiknayakanhalli	RAMANAHALLI	ASHRIMAL				wpp installed
175	TUMAKURU	Chiknayakanhalli	THIMMANAHALLI	THIMMANAHALLI				wpp installed
176	TUMAKURU	Chiknayakanhalli	BARAKANALU	SANGENAHALLI				wpp installed
177	TUMAKURU	Chiknayakanhalli	BARAKANALU	YAREHALLI				wpp installed

1197

178	TUMAKURU	Chiknayakanhalli	BARAKANALLI	SIDLEKATTE				wpp installed
179	TUMAKURU	Chiknayakanhalli	DODDARIDIRE	AVALAGERE				wpp installed
180	TUMAKURU	Chiknayakanhalli	DODDARIDIRE	KALLAHALLI				wpp installed
181	TUMAKURU	Chiknayakanhalli	DODDARIDIRE	KODIHALLI				wpp installed
182	TUMAKURU	Chiknayakanhalli	THIMMALAPURA	SEGGENAGI				wpp installed
183	TUMAKURU	Chiknayakanhalli	THIMMALAPURA	THIMMALAPURA				wpp installed
184	TUMAKURU	Chiknayakanhalli	CHOWLAKATTE	SARENAHALLI				wpp installed
185	TUMAKURU	Chiknayakanhalli	CHOWLAKATTE	HARENAHALLI				wpp installed
186	TUMAKURU	Chiknayakanhalli	CHOWLAKATTE	GOPALAPURA				wpp installed
187	TUMAKURU	Chiknayakanhalli	CHOWLAKATTE	LAKSHMIPURA				wpp installed
188	TUMAKURU	Chiknayakanhalli	CHOWLAKATTE	HONNASHETTIHALLI				wpp installed
189	TUMAKURU	Chiknayakanhalli	CHOWLAKATTE	LINGADAHALLI				wpp installed
190	TUMAKURU	Chiknayakanhalli	CHOWLAKATTE	SORALAMAVU				wpp installed
191	TUMAKURU	Chiknayakanhalli	CHOWLAKATTE	CHOWLAKATTE				wpp installed
192	TUMAKURU	Chiknayakanhalli	DODDAYANNAGERE	H.M.KAVAL				wpp installed
193	TUMAKURU	Chiknayakanhalli	DODDAYANNAGERE	KIDIKANAHALLI				wpp installed
194	TUMAKURU	Chiknayakanhalli	DODDAYANNAGERE	DODDAHULLENAHALLI				wpp installed
195	TUMAKURU	Chiknayakanhalli	DODDAYANNAGERE	NADUVANAHALLI				wpp installed
196	TUMAKURU	Chiknayakanhalli	DODDAYANNAGERE	CHIKKAYANNAGERE				wpp installed
197	TUMAKURU	Chiknayakanhalli	DODDAYANNAGERE	CHORAGONDANAHALLI				wpp installed
198	TUMAKURU	Chiknayakanhalli	DODDAYANNAGERE	DODDAYANNAGERE				wpp installed
199	TUMAKURU	Chiknayakanhalli	KORAGERE	SALAPURA				wpp installed
200	TUMAKURU	Chiknayakanhalli	KORAGERE	BARAGIHALLI				wpp installed
201	TUMAKURU	Chiknayakanhalli	KORAGERE	DINKANAHALLI				wpp installed
202	TUMAKURU	Chiknayakanhalli	KORAGERE	MOTIHALLI				wpp installed
203	TUMAKURU	Chiknayakanhalli	KORAGERE	BHATTARAHALLI				wpp installed
204	TUMAKURU	Chiknayakanhalli	YALANADU	TAMMADIHALLI				wpp installed
205	TUMAKURU	Chiknayakanhalli	KENKERE	GOWDAGERE				wpp installed
206	TUMAKURU	Chiknayakanhalli	KENKERE	KENKERE				wpp installed
207	TUMAKURU	Chiknayakanhalli	HOYSALAKATTE	NILENURU				wpp installed
208	TUMAKURU	Chiknayakanhalli	HOYSALAKATTE	HOYASALAKATTE				wpp installed
209	TUMAKURU	Chiknayakanhalli	DASUDI	DARBAGUNTE				wpp installed
210	TUMAKURU	Chiknayakanhalli	DASUDI	MARENADU				wpp installed
211	TUMAKURU	Chiknayakanhalli	DASUDI	DASUDI				wpp installed

I-336

Executive Engineer
R.W.S.& S Division,
TUMKUR.

Sl No	District Name	Taluka name	Gram Panchyata	Village Name	No. of source affected by Fluoride	No. of source affected by Arsenic	Scheme ID with Alternate source provided	
							MVS	WPP
1	Udupi	No Contamination Found						

Arsenic and Fluoride contamination details with measure's taken

Sl No	District Name	Taluka name	Gram Panchyata	Village Name	No. of source affected by Fluoride	No. of source affected by Arsenic	Scheme ID with Alternate source provided	
							MVS	WPP
1	Uttara Kannada	NIL						

EXECUTIVE ENGINEER
RURAL DRINKING WATER AND
SANITATION DIVISION
KARWAR (U.K.)

Arsenic and fluoride affected habitation NGT issue

Sl No	District Name	Taluka name	Gram Panchyata	Village Name	No. of source affected by Fluoride	No. of source affected by Arsenic	Scheme ID with Alternate source provided		
							MVS Scheme name	MVS Scheme ID	WPP
1	VIJAYANAGARA	KUDLIGI	CHIRATAGUNDU	CHIRTAGUNDU	1	0	-	-	RO Plant Located in village
2	VIJAYANAGARA	KUDLIGI	BELLAGATTA	BELLAGATTA	2	0	-	-	RO Plant Located in village
3	VIJAYANAGARA	KUDLIGI	BELLAGATTA	HULIKUNTE	1	0	-	-	RO Plant Located in village
4	VIJAYANAGARA	KUDLIGI	BELLAGATTA	VERALINGANAHALLI	1	0	-	-	RO Plant Located in village
5	VIJAYANAGARA	KUDLIGI	JUMBOBANAHALLI	LOKIKERI	1	0	-	-	RO Plant Located in village
6	VIJAYANAGARA	KUDLIGI	JUMBOBANAHALLI	JUMBOBANAHALLI	1	0	-	-	RO Plant Located in village
7	VIJAYANAGARA	KUDLIGI	JUMBOBANAHALLI	KUMATI	2	0	-	-	RO Plant Located in village
8	VIJAYANAGARA	KUDLIGI	CHOUDAPUR	AMALAPURA	1	0	-	-	RO Plant Located in village
9	VIJAYANAGARA	KUDLIGI	CHOUDAPUR	CHOUDAPUR	4	0	-	-	RO Plant Located in village
10	VIJAYANAGARA	KUDLIGI	KAKUPPI	SOOBAVVANAHALLI	1	0	-	-	RO Plant Located in village
11	VIJAYANAGARA	KUDLIGI	KAKUPPI	KAKKUPPI	2	0	-	-	RO Plant Located in village

1201

12	VIJAYANAGARA	KUDLIGI	HIREHEGDAL	HIREHEGDAL	1	0	-	-	RO Plant Located in village
13	VIJAYANAGARA	KUDLIGI	BADELADAKU	KUPPINAKERU	1	0	-	-	RO Plant Located in village
14	VIJAYANAGARA	KUDLIGI	BADELADAKU	BADELADKU	2	0	-	-	RO Plant Located in village
15	VIJAYANAGARA	KUDLIGI	BADELADAKU	NAGALAPURA	8	0	-	-	RO Plant Located in village
16	VIJAYANAGARA	KUDLIGI	SHIVAPURA	SHIVAPURA	2	0	-	-	RO Plant Located in village
17	VIJAYANAGARA	KUDLIGI	BANAVIKALLU	BANAVIKALLU	5	0	-	-	RO Plant Located in village
18	VIJAYANAGARA	KUDLIGI	BANAVIKALLU	M B IYYANAHALLI	5	0	-	-	RO Plant Located in village
19	VIJAYANAGARA	KUDLIGI	SULADAHALLI	SULADAHALLI	1	0	-	-	RO Plant Located in village
20	VIJAYANAGARA	KUDLIGI	HOSAHALLI	HOSAHALLI	1	0	-	-	RO Plant Located in village
21	VIJAYANAGARA	KUDLIGI	HIREKUMBALAGUNTE	BYLATUMBARAGUDDI	1	0	-	-	RO Plant Located in village
22	VIJAYANAGARA	KUDLIGI	HIREKUMBALAGUNTE	HULIKERE	1	0	-	-	RO Plant Located in village
23	VIJAYANAGARA	KUDLIGI	ALOORU	ALOORU	4	0	-	-	RO Plant Located in village
24	VIJAYANAGARA	KUDLIGI	ALOORU	KENCHAMALLANAHALLI	2	0	-	-	RO Plant Located in village
25	VIJAYANAGARA	KUDLIGI	PUJARAHALLI	KALLAHALLI	1	0	-	-	RO Plant Located in village

- 340 -

26	VIJAYANAGARA	KUDLIGI	PUJARAHALLI	THIPPEHALLI	1	0	-		RO Plant Located in village
27	VIJAYANAGARA	KUDLIGI	PUJARAHALLI	PUJARAHALLI	4	0	-	-	RO Plant Located in village
28	VIJAYANAGARA	KUDLIGI	HUDEM	HUDEM	3	0	-		RO Plant Located in village
29	VIJAYANAGARA	KUDLIGI	GUNDUMUNUGU	KADEKOLLA	3	0	-		RO Plant Located in village
30	VIJAYANAGARA	KUDLIGI	MAKANADAKU	MAKANADUGU	2	0	-	-	RO Plant Located in village
31	VIJAYANAGARA	KUDLIGI	GANDABOMMANAHALLI	EKKAGUNDI	2	0	-	-	RO Plant Located in village
32	VIJAYANAGARA	KUDLIGI	GANDABOMMANAHALLI	GANDABOMMANAHALLI	1	0	-		RO Plant Located in village
33	VIJAYANAGARA	KUDLIGI	HURALIHAL	HURALIHAL	4	0	-		RO Plant Located in village
34	VIJAYANAGARA	KUDLIGI	HURALIHAL	MINAKERI	1	0	-		RO Plant Located in village
35	VIJAYANAGARA	KUDLIGI	HIRMALI	HIRMALI	1	0	-		RO Plant Located in village
36	VIJAYANAGARA	KUDLIGI	RAMADURGA	RAMADURGA	2	0	-		RO Plant Located in village
37	VIJAYANAGARA	KUDLIGI	APPENHALLI	HALASAGARA	1	0	-		RO Plant Located in village
38	VIJAYANAGARA	KUDLIGI	APPENHALLI	APPENAHALLI	5	0			RO Plant Located in village
39	VIJAYANAGARA	KOTTURU	RAMPURA	KOMBHALLI	1	0			RO Plant Located in village

1202

1203

40	VIJAYANAGARA	KOTTURU	K AYYANAHALLI	K AYYANAHALLI	1	0	-	-	RO Plant Located in village
41	VIJAYANAGARA	KOTTURU	NAGARAKATTE	JOLADAKUDRIGI	1	0	-	-	RO Plant Located in village
42	VIJAYANAGARA	KOTTURU	KALAPURA	HIREVADDENAHALLI	1	0	-	-	RO Plant Located in village
43	VIJAYANAGARA	KOTTURU	IULAHALLI	IULAHALLI	1	0	-	-	RO Plant Located in village
44	VIJAYANAGARA	KOTTURU	UHNI	UHNI	2	0	-	-	RO Plant Located in village
45	VIJAYANAGARA	HOSPET	SEETHARAMA THANDA	SEETHARAM THANDA	1	0	PROVIDING BULK WATER SUPPLY TO SITARAMTHANDA AND OTHER 03 VILLAGES	8392350	RO Plant Located in village
46	VIJAYANAGARA	HOSPET	P.K.HALLI	P.K. HALLI	1	0	P K Halli Habitton in Hospet Taluk Ballari District through MVS to P K Halli and other 3 Villages in	8403411	RO Plant Located in village
47	VIJAYANAGARA	HAGARIBOMMANA HALLI	HAMPAPATNA	HAMPAPATNA	1	0	MVS scheme Uppanayakanahalli and other 21 villages in Hagaribommanahalli taluk in	8399595	RO Plant Located in village
48	VIJAYANAGARA	HAGARIBOMMANA HALLI	BASIGIDERI	HIRESOBATI	1	0	MVS scheme Sonna and Basarakodu other 49 villages in Hagaribommanahalli taluk in	6379329	RO Plant Located in village
49	VIJAYANAGARA	HAGARIBOMMANA HALLI	BASIGIDERI	BASIGIDERI	5	0	MVS scheme Sonna and Basarakodu other 49 villages in Hagaribommanahalli taluk in	6379329	RO Plant Located in village
50	VIJAYANAGARA	HAGARIBOMMANA HALLI	VALLABHAPURA	KUCHANABANDI	3	0	MVS scheme Hashamapura	8402576	RO Plant Located in village
51	VIJAYANAGARA	HAGARIBOMMANA HALLI	BANNIGOLA	BANNIGOLA	1	0	MVS scheme Sonna and Basarakodu other 49 villages in Hagaribommanahalli taluk in	6379329	RO Plant Located in village
52	VIJAYANAGARA	HAGARIBOMMANA HALLI	BANNIGOLA	BASARAKODU	1	0	MVS scheme Sonna and Basarakodu other 49 villages in Hagaribommanahalli taluk in	6379329	RO Plant Located in village
53	VIJAYANAGARA	HAGARIBOMMANA HALLI	BANNIGOLA	SIGENAHALLI	4	0	MVS scheme Sonna and Basarakodu other 49 villages in Hagaribommanahalli taluk in	6379329	RO Plant Located in village

-342-

102

54	VIJAYANAGARA	HAGARIBOMMANAHALLI	BACHIGUNDANAHALLI	ANKASAMUDRA	2	0	MVS scheme Uppanayakanahalli and other 21 villages in Hagaribommanahalli taluk in	8109556	RO Plant Located in village
55	VIJAYANAGARA	HAGARIBOMMANAHALLI	BACHIGUNDANAHALLI	BACHIGUNDANAHALLI	2	0	MVS scheme Uppanayakanahalli and other 21 villages in Hagaribommanahalli taluk in	6379329	RO Plant Located in village
56	VIJAYANAGARA	HAGARIBOMMANAHALLI	BACHIGUNDANAHALLI	ANANDADEVANAHALLI	1	0	MVS scheme Uppanayakanahalli and other 21 villages in Hagaribommanahalli taluk in	8309822	RO Plant Located in village
57	VIJAYANAGARA	HAGARIBOMMANAHALLI	MORABBIHAL	NARAYANADEVANAKERI	1	0	MVS scheme Uppanayakanahalli and other 21 villages in Hagaribommanahalli taluk in	6379329	RO Plant Located in village
58	VIJAYANAGARA	HAGARIBOMMANAHALLI	MORABBIHAL	MARABBIHAL	1	0	MVS scheme Uppanayakanahalli and other 21 villages in Hagaribommanahalli taluk in	6379329	RO Plant Located in village
59	VIJAYANAGARA	HAGARIBOMMANAHALLI	THAMBRALLI	THAMBRALLI	1	0	MVS scheme Sonna and Basarakodu other 49 villages in Hagaribommanahalli taluk in	6379329	RO Plant Located in village
60	VIJAYANAGARA	HAGARIBOMMANAHALLI	SONNA	SONNA	1	0	MVS scheme Sonna and Basarakodu other 49 villages in Hagaribommanahalli taluk in	6379329	RO Plant Located in village
61	VIJAYANAGARA	HAGARIBOMMANAHALLI	MURAGURI	MORAGURI	4	0	MVS scheme Sonna and Basarakodu other 49 villages in Hagaribommanahalli taluk in	6379329	RO Plant Located in village
62	VIJAYANAGARA	HAGARIBOMMANAHALLI	BANNIKALLU	BANNIKALLU	4	0	MVS scheme Sonna and Basarakodu other 49 villages in Hagaribommanahalli taluk in	6379329	RO Plant Located in village
63	VIJAYANAGARA	HAGARIBOMMANAHALLI	BANNIKALLU	HANUMAGONDANAHALLI	3	0	MVS scheme Sonna and Basarakodu other 49 villages in Hagaribommanahalli taluk in	6379329	RO Plant Located in village
64	VIJAYANAGARA	HAGARIBOMMANAHALLI	GADDIKERI	GADDIKERI	2	0	MVS scheme Sonna and Basarakodu other 49 villages in Hagaribommanahalli taluk in	6379329	RO Plant Located in village
65	VIJAYANAGARA	HAGARIBOMMANAHALLI	HAMPASAGAR	HAMPASAGAR	3	0	MVS scheme Sonna and Basarakodu other 49 villages in Hagaribommanahalli taluk in	6379329	RO Plant Located in village
66	VIJAYANAGARA	HAGARIBOMMANAHALLI	BENAKAL	BENAKAL	1	0	MVS scheme Dashanapura Hagaribommanahalli taluk in Ballari district	6423874	RO Plant Located in village
67	VIJAYANAGARA	HAGARIBOMMANAHALLI	MALVI	MALVI	1	0	MVS scheme Sonna and Basarakodu other 49 villages in Hagaribommanahalli taluk in	6379329	RO Plant Located in village

1205

68	VIJAYANAGARA	HAGARIBOMMANA HALLI	NELKUDERI-I	NELKUDERI	3	0	MVS scheme Sonna and Basavakodu other 49 villages in Hagaribommanahalli taluk se	8370329	RO Plant Located in village
69	VIJAYANAGARA	HARAPPANAHALLI	DUGGAVATHI	DUGGAVATHI	4	0	MVS scheme telgi	1782737	RO Plant Located in village
70	VIJAYANAGARA	HARAPPANAHALLI	TELIGI	TELIGI	3	0	MVS scheme telgi	1782737	RO Plant Located in village
71	VIJAYANAGARA	HARAPPANAHALLI	RAGIMANALAVADA	SIBBAGANAHALLI	1	0	MVS scheme telgi	8473668	RO Plant Located in village
72	VIJAYANAGARA	HARAPPANAHALLI	HOGARIKATTI	NARAYANAPURA	1	0	MVS scheme Harakunda	1782276	RO Plant Located in village
73	VIJAYANAGARA	HARAPPANAHALLI	ADAVIHALLI	ADAVIHALLI	1	0	MVS scheme chigateri nuchavvanahalli	8392274	RO Plant Located in village
74	VIJAYANAGARA	HARAPPANAHALLI	GUNDAGATTHI	KAMBHATRAHALLI	1	0	MVS scheme telgi	1782737	RO Plant Located in village

Executive Engineer
RDW&SD Division Hospet

104

-3494-

Sl No	District Name	Taluka name	Gram Panchyata	Village Name	No. of source affected by Fluoride	Scheme ID with Alternate source provided	
						MVS	WPP
1	VIJAYAPURA	Sindgi	YANKANCHI	YANKANCHI	Fluoride		7941839
2	VIJAYAPURA	Sindgi	YANKANCHI	KHAINUR	Fluoride		7622263
3	VIJAYAPURA	DEVARA HIPPARAGI	YALAGOD	WANDAL	Fluoride	1781337	4959445
4	VIJAYAPURA	DEVARA HIPPARAGI	YALAGOD	KADARAPUR	Fluoride	1781337	
5	VIJAYAPURA	Sindgi	SUNGATHAN	MURADI	Fluoride		4864084
6	VIJAYAPURA	DEVARA HIPPARAGI	MANNUR	MANNUR	Fluoride	1782066	
7	VIJAYAPURA	TALIKOTI	KALAKERI	KALAKERI	Fluoride		0007841982
8	VIJAYAPURA	TALIKOTI	KALAKERI	BINJALABHAVI	Fluoride	0006628764	
9	VIJAYAPURA	Sindgi	GUBBEWAD	BORAGI	Fluoride	4959569	
10	VIJAYAPURA	ALMELA	GUTTARAGI	BHANTANUR	Fluoride		6628998
11	VIJAYAPURA	TALIKOTI	BEKINAL	HALAGUNDAKANAL	Fluoride		7842000
12	VIJAYAPURA	ALMELA	BALAGANUR	SURAGIHALLI	Fluoride		7842000
13	VIJAYAPURA	ALMELA	BALAGANUR	BALAGANUR	Fluoride		6665950
14	VIJAYAPURA	TALIKOTI	ASKI	BANNIHATTI PT	Fluoride	3998273	
15	VIJAYAPURA	Muddebihal	YARAZERI	YARAZERI	Fluoride		7741039
16	VIJAYAPURA	Muddebihal	YARAZERI	MUDHUR	Fluoride		5543129
17	VIJAYAPURA	Muddebihal	YARAZERI	KANDAGANUR	Fluoride		7524039
18	VIJAYAPURA	NIDAGUNDI	YALAGUR	Y.BUDIHAL	Fluoride	8219654	
19	VIJAYAPURA	NIDAGUNDI	BALABATTI	WADAWADAGI	Fluoride		7522891
20	VIJAYAPURA	NIDAGUNDI	BALABATTI	MASUTI	Fluoride		7763642
21	VIJAYAPURA	TALIKOTI	TUMBAGI	TUMBAGI	Fluoride		7524035
22	VIJAYAPURA	TALIKOTI	TUMBAGI	HUVINAHALLI	Fluoride		7523807
23	VIJAYAPURA	TALIKOTI	TUMBAGI	HOSAHALLI	Fluoride		7763636
24	VIJAYAPURA	TALIKOTI	TUMBAGI	FATTEPUR	Fluoride		5556806
25	VIJAYAPURA	TALIKOTI	BOMMANAHALLI	BOMMANAHALLI	Fluoride		7763631
26	VIJAYAPURA	TALIKOTI	BOMMANAHALLI	BOLAWAD	Fluoride		7523994
27	VIJAYAPURA	Muddebihal	TANGADAGI	TANGADAGI	Fluoride		7741037
28	VIJAYAPURA	Muddebihal	BASRKOD	SIDDAPUR	Fluoride		7763628
29	VIJAYAPURA	Muddebihal	RUDAGI	GUNDAKARAJAGI	Fluoride		7763627
30	VIJAYAPURA	Muddebihal	RUDAGI	GUDADINNI	Fluoride		7523961
31	VIJAYAPURA	Muddebihal	RAKKASAGI	RAKKASAGI	Fluoride		7763618
32	VIJAYAPURA	Muddebihal	RAKKASAGI	KAPANUR	Fluoride		6927759
33	VIJAYAPURA	Muddebihal	RAKKASAGI	HUNAKUNTI	Fluoride		7763615
34	VIJAYAPURA	Muddebihal	RAKKASAGI	BANGARAGUND	Fluoride		7763612
35	VIJAYAPURA	Muddebihal	RAKKASAGI	BALADINNI	Fluoride	8240332	
36	VIJAYAPURA	Muddebihal	NAGABENAL	NAGABENAL	Fluoride		7741032
37	VIJAYAPURA	Muddebihal	NAGARABETTA	JAINAPUR	Fluoride		7523847
38	VIJAYAPURA	Muddebihal	NAGABENAL	ARESHANKAR	Fluoride		7524010
39	VIJAYAPURA	TALIKOTI	MUKIHAL	SHIVAPUR	Fluoride		7763600

41	VIJAYAPURA	TALIKOTI	MUKIHAL	KALLADEVANAHALLI	Fluoride		7523935
42	VIJAYAPURA	TALIKOTI	MUKIHAL	HARANAL	Fluoride		7763597
43	VIJAYAPURA	TALIKOTI	MUKIHAL	HADAGINAL	Fluoride	8241731	
44	VIJAYAPURA	TALIKOTI	MINAJAGI	MINIJAGI	Fluoride		7741027
45	VIJAYAPURA	TALIKOTI	BOMMANAHALLI	MASAKANAL	Fluoride		7523293
46	VIJAYAPURA	TALIKOTI	MINAJAGI	BALAGANUR	Fluoride		7763593
47	VIJAYAPURA	Muddebihal	MADIKESHWAR	TARANAL	Fluoride		7519365
48	VIJAYAPURA	Muddebihal	MADIKESHWAR	MADIKESHWAR	Fluoride		7756349
49	VIJAYAPURA	Muddebihal	MADIKESHWAR	GUDIHAL	Fluoride		7523953
50	VIJAYAPURA	Muddebihal	MADIKESHWAR	BALAWAT	Fluoride		7763588
51	VIJAYAPURA	Muddebihal	KUNTOJI	KUNTOJI	Fluoride	4959577	7763585
52	VIJAYAPURA	Muddebihal	KUNTOJI	JAKKERAL	Fluoride		7756351
53	VIJAYAPURA	Muddebihal	KUNTOJI	INACHAGAL	Fluoride	4959577	
54	VIJAYAPURA	Muddebihal	KUNTOJI	HOKRANI	Fluoride		7524114
55	VIJAYAPURA	Muddebihal	KUNTOJI	ABBIHAL	Fluoride		7756353
56	VIJAYAPURA	TALIKOTI	KONNUR	PADEKANUR	Fluoride		7524113
57	VIJAYAPURA	Muddebihal	KOLUR	NEBAGERI	Fluoride		7763571
58	VIJAYAPURA	Muddebihal	KOLUR	KOLUR	Fluoride		7741016
59	VIJAYAPURA	Muddebihal	KOLUR	GONAL SH	Fluoride	0008241598	5556883
60	VIJAYAPURA	Muddebihal	KOLUR	BANOSHI	Fluoride		7523814
61	VIJAYAPURA	TALIKOTI	KODAGANUR	KYATNAL	Fluoride		7523924
62	VIJAYAPURA	TALIKOTI	KODAGANUR	GADISOMANAL	Fluoride		0004804803
63	VIJAYAPURA	Muddebihal	KAVADIMATTI	SHIROL	Fluoride		7763556
64	VIJAYAPURA	Muddebihal	HIREMURALA	VANAKIHAL	Fluoride		7756352
65	VIJAYAPURA	Muddebihal	KAVADIMATTI	SARUR	Fluoride		7524102
66	VIJAYAPURA	Muddebihal	KAVADIMATTI	KAVADIMATTI	Fluoride		7522255
67	VIJAYAPURA	Muddebihal	KAVADIMATTI	JALAPUR	Fluoride		7523816
68	VIJAYAPURA	Muddebihal	HIREMURALA	GONAL SH	Fluoride		7524033
69	VIJAYAPURA	Muddebihal	KALAGI	KALAGI	Fluoride		7522254
70	VIJAYAPURA	Muddebihal	KALAGI	CHELAMI	Fluoride		7763554
71	VIJAYAPURA	Muddebihal	INGALAGERI	INGALAGERI	Fluoride		7763551
72	VIJAYAPURA	Muddebihal	INGALAGERI	GUDANAL	Fluoride		7763549
73	VIJAYAPURA	Muddebihal	HULLUR	JETTAGI	Fluoride		7524087
74	VIJAYAPURA	Muddebihal	HULLUR	HULLUR	Fluoride		7740989
75	VIJAYAPURA	Muddebihal	HIREMURALA	NERABENCHI	Fluoride		7740974
76	VIJAYAPURA	Muddebihal	NAGARABETTA	MAVINABHAVI	Fluoride		7523920
77	VIJAYAPURA	Muddebihal	HIREMURALA	JANGAMURAL	Fluoride		7740967
78	VIJAYAPURA	Muddebihal	HIREMURALA	HIREMURAL	Fluoride		7524033
79	VIJAYAPURA	Muddebihal	HIREMURALA	AREMURAL	Fluoride		7524013
80	VIJAYAPURA	Muddebihal	HIREMURALA	ARASANAL	Fluoride		7756341
81	VIJAYAPURA	Muddebihal	HADALAGERI	MUDNAL	Fluoride		7523286
82	VIJAYAPURA	Muddebihal	HADALAGERI	HADALAGERI	Fluoride		7763538
83	VIJAYAPURA	Muddebihal	HADALAGERI	GEDDALAMARI	Fluoride		7740956
84	VIJAYAPURA	Muddebihal	DHAVALAGI	HALLUR	Fluoride		7763536
85	VIJAYAPURA	Muddebihal	DHAVALAGI	CHONDI	Fluoride	0008219755	
86	VIJAYAPURA	Muddebihal	DHAVALAGI	AGASABAL	Fluoride		7756346
87	VIJAYAPURA	Muddebihal	BIJJUR	SULTANAPUR	Fluoride		7523279
88	VIJAYAPURA	Muddebihal	BIJJUR	LOTAGERI	Fluoride		7523297
89	VIJAYAPURA	Muddebihal	BIJJUR	KHANIKERI	Fluoride		7523309
90	VIJAYAPURA	Muddebihal	BIJJUR	GALAPUJI	Fluoride		7740934

92	VIJAYAPURA	Muddebihal	BIDARKUNDI	MADINAL	Fluoride		7522250
93	VIJAYAPURA	Muddebihal	BIDARKUNDI	GONAL	Fluoride		7740930
94	VIJAYAPURA	TALIKOTI	BANTANUR	SHELLAGI	Fluoride		7524072
95	VIJAYAPURA	TALIKOTI	BANTANUR	PEERAPUR	Fluoride		7524056
96	VIJAYAPURA	TALIKOTI	BANTANUR	GOTAKHANDAKI	Fluoride		7763531
97	VIJAYAPURA	TALIKOTI	BANTANUR	BHANTANUR	Fluoride		7763527
98	VIJAYAPURA	TALIKOTI	BAVOOR	VANAHALLI	Fluoride	0008219729	0008227875
99	VIJAYAPURA	TALIKOTI	BAVOOR	LINGADALLI	Fluoride		7524029
100	VIJAYAPURA	TALIKOTI	BAVOOR	KUCHABAL	Fluoride		7763534
101	VIJAYAPURA	TALIKOTI	BAVOOR	BVOOR	Fluoride		7763533
102	VIJAYAPURA	Muddebihal	BASRKOD	BASARAKOD	Fluoride		7756344
103	VIJAYAPURA	TALIKOTI	B.SALAWADAGI	MATAKADEVANA HALLI	Fluoride		5543024
104	VIJAYAPURA	TALIKOTI	B.SALAWADAGI	GUNDAKANAL	Fluoride		7763525
105	VIJAYAPURA	Muddebihal	ALUR	YARAGAL	Fluoride		7740918
106	VIJAYAPURA	Muddebihal	ALUR	MADARI	Fluoride		7740916
107	VIJAYAPURA	Muddebihal	ALUR	KESAPUR	Fluoride		7524047
108	VIJAYAPURA	Muddebihal	ALUR	GARASANGI	Fluoride		7523965
109	VIJAYAPURA	Muddebihal	ALUR	ALUR	Fluoride		7524045
110	VIJAYAPURA	Muddebihal	ADAVISOMANAL	KYATANADONI	Fluoride		7740913
111	VIJAYAPURA	Muddebihal	NAGARABETTA	KHILARIHATTI	Fluoride		7523308
112	VIJAYAPURA	Muddebihal	ADAVISOMANAL	DONKAMADU	Fluoride		7523809
113	VIJAYAPURA	Muddebihal	ADAVISOMANAL	CHAVANABHAVI	Fluoride		7763521
114	VIJAYAPURA	Muddebihal	ADAVISOMANAL	ADAVI SOMANAL	Fluoride		7522248
115	VIJAYAPURA	Muddebihal	ADAVISOMANAL	ADAVI HULAGABAL	Fluoride		7740910
116	VIJAYAPURA	Indi	TAMBA	WADE	Fluoride		1781098
117	VIJAYAPURA	Indi	PADANUR	PADANUR	Fluoride		7901778
118	VIJAYAPURA	CHADACHAN	JIGAJIVANI	KATRAL	Fluoride		7523664
119	VIJAYAPURA	CHADACHAN	INCHAGERI	KANAKANAL	Fluoride		7901888
120	VIJAYAPURA	Indi	HADALASANG	HADALASANG	Fluoride		7901732
121	VIJAYAPURA	Indi	BHATAGUNAKI	BUDIHAL	Fluoride	597725	
122	VIJAYAPURA	Indi	ANJUTAGI	ANJUTAGI	Fluoride	597725	7740948
123	VIJAYAPURA	Indi	INGALAGI	MAVINAHALLI	Fluoride	4959468	7740946
124	VIJAYAPURA	Vijayapur	TIDAGUNDI	BOMMANALLI	Fluoride		7831735
125	VIJAYAPURA	TIKOTA	TAKKALAKI	HUBANUR	Fluoride		7741313
126	VIJAYAPURA	TIKOTA	TAKKALAKI	TAKKALAKI	Fluoride		7741311
127	VIJAYAPURA	TIKOTA	SIDDAPUR K	SIDDAPUR K	Fluoride		7523912
128	VIJAYAPURA	Vijayapur	SHIVANAGI	SHIVANAGI	Fluoride		4803788
129	VIJAYAPURA	BABALESHWAR	SARAWAD	SARAWAD	Fluoride		4803852
130	VIJAYAPURA	Vijayapur	NAGATHAN	NAGATHAN	Fluoride	4959424	7763376
131	VIJAYAPURA	Vijayapur	NAGATHAN	HUNASHYAL	Fluoride	4959424	
132	VIJAYAPURA	Vijayapur	MADABHAVI	MADABHAVI	Fluoride		7901755
133	VIJAYAPURA	Vijayapur	MADABHAVI	KAVALAGI	Fluoride		7523785
134	VIJAYAPURA	Vijayapur	KANNUR	MADASANAL	Fluoride		0008251289
135	VIJAYAPURA	TIKOTA	KANAMADI	KANAMADI	Fluoride		7763353
136	VIJAYAPURA	Vijayapur	JAMBAGI	JAMBAGI (A)	Fluoride		8242012
137	VIJAYAPURA	TIKOTA	JALAGERI	JALAGERI	Fluoride		7741630
138	VIJAYAPURA	Vijayapur	KUMATAGI	KUMATAGI			

139	VIJAYAPURA	BABALESHWAR	HONAGANAHALLI	SAVANAHALLI	Fluoride		0005541385
140	VIJAYAPURA	BABALESHWAR	HONAGANAHALLI	HONAGANAHALLI	Fluoride		0005541376
141	VIJAYAPURA	Vijayapur	HITTINAHALLI	HITTINAHALLI	Fluoride		7524428
142	VIJAYAPURA	Vijayapur	HEGADIHAL	KATAKANALLI	Fluoride		7741294
143	VIJAYAPURA	Vijayapur	KUMATAGI	KAGGOD	Fluoride		7521293
144	VIJAYAPURA	Vijayapur	HADAGALI	HADAGALI	Fluoride		7763330
145	VIJAYAPURA	Vijayapur	GUNAKI	KANNAL	Fluoride	6637129	
146	VIJAYAPURA	Vijayapur	GUNAKI	GUNAKI	Fluoride	6637129	
147	VIJAYAPURA	TIKOTA	GHONASAGI	KALLAKAVATAGI	Fluoride		7523990
148	VIJAYAPURA	Vijayapur	ALIYABAD	DYABERI	Fluoride		7519769
149	VIJAYAPURA	Vijayapur	AINAPUR	BHURANPUR	Fluoride		0008225921
150	VIJAYAPURA	Vijayapur	AINAPUR	AINAPUR	Fluoride		7519533
151	VIJAYAPURA	Basavana Bagevadi	YARNAL	YARNAL	Fluoride	0008375599	0007902333 /0007859174
152	VIJAYAPURA	Basavana Bagevadi	YARNAL	NANDIHAL	Fluoride		0007658271
153	VIJAYAPURA	NIDAGUNDI	VANDAL	KIRASHYAL	Fluoride		7523971
154	VIJAYAPURA	NIDAGUNDI	VANDAL	GONAL	Fluoride		7763616
155	VIJAYAPURA	NIDAGUNDI	VANDAL	ABBIHAL	Fluoride		7763581
156	VIJAYAPURA	Basavana Bagevadi	UKKALI	UKKALI	Fluoride		7523969
157	VIJAYAPURA	KOLHAR	TELAGI	SULAKOD	Fluoride	7523960	
158	VIJAYAPURA	Basavana Bagevadi	INGALESHWAR	RABINAL	Fluoride		7763528
159	VIJAYAPURA	TALIKOTI	SASANUR	SOMANAL	Fluoride		7523988
160	VIJAYAPURA	TALIKOTI	SASANUR	SASANUR	Fluoride		7741234
161	VIJAYAPURA	TALIKOTI	SASANUR	CHABANUR	Fluoride		7515229
162	VIJAYAPURA	KOLHAR	RONIHAL	HALLADAGENNUR	Fluoride		7763613
163	VIJAYAPURA	KOLHAR	RONIHAL	GARASANGI BK	Fluoride		7523952
164	VIJAYAPURA	Basavana Bagevadi	NARASALAGI	NARASALAGI	Fluoride		7541131
165	VIJAYAPURA	Basavana Bagevadi	NARASALAGI	IVANAGI	Fluoride		7763602
166	VIJAYAPURA	Basavana Bagevadi	NARASALAGI	AMBALANUR	Fluoride		7523842
167	VIJAYAPURA	Basavana Bagevadi	MUTTAGI	TAKKALAKI	Fluoride		7523839
168	VIJAYAPURA	Basavana Bagevadi	MUTTAGI	MUTTAGI	Fluoride		7741461
169	VIJAYAPURA	KOLHAR	MULAWAD	MULAWAD	Fluoride		7741449
170	VIJAYAPURA	Basavana Bagevadi	MASABINAL	MASABINAL	Fluoride	4805272	
171	VIJAYAPURA	Basavana Bagevadi	MASABINAL	DEGINAL	Fluoride		7741225
172	VIJAYAPURA	Basavana Bagevadi	DONUR	BOMMANAHALLI	Fluoride	0008370121	
173	VIJAYAPURA	Basavana Bagevadi	MANNUR	MANNUR	Fluoride		7763594

175	VIJAYAPURA	NIDAGUNDI	ITAGI	RAJANAL	Fluoride		7523881
176	VIJAYAPURA	NIDAGUNDI	ITAGI	JEERALABHAVI	Fluoride		7523805
177	VIJAYAPURA	NIDAGUNDI	ITAGI	ITAGI	Fluoride		7523805
178	VIJAYAPURA	NIDAGUNDI	ITAGI	BIDNAL	Fluoride		7541124
179	VIJAYAPURA	NIDAGUNDI	ITAGI	ARESHANKAR	Fluoride	7523831	
180	VIJAYAPURA	Basavana Bagevadi	MANNUR	HANGARAGI	Fluoride		7519186
181	VIJAYAPURA	KOLHAR	HANAMAPUR	MATTIHAL	Fluoride		7763541
182	VIJAYAPURA	NIDAGUNDI	GOLASANGI	GOLASANGI	Fluoride		7741413
183	VIJAYAPURA	Basavana Bagevadi	DONUR	YAMBATNAL	Fluoride		5543083
184	VIJAYAPURA	Basavana Bagevadi	DONUR	NEGINAL	Fluoride		7901685
185	VIJAYAPURA	Basavana Bagevadi	DONUR	MULLAL	Fluoride	0008152227	
186	VIJAYAPURA	Basavana Bagevadi	DONUR	DONUR	Fluoride		4804636
187	VIJAYAPURA	NIDAGUNDI	GANI R C	MARADAGI	Fluoride	7523863	
188	VIJAYAPURA	NIDAGUNDI	GANI R C	MAJAREKOPPA	Fluoride	7523863	
189	VIJAYAPURA	Basavana Bagevadi	BYAKOD	SOLAWADAGI	Fluoride		7874264
190	VIJAYAPURA	Basavana Bagevadi	BYAKOD	JAYAWADAGI	Fluoride		7763545
191	VIJAYAPURA	Basavana Bagevadi	BYAKOD	BYAKOD	Fluoride		7523803
192	VIJAYAPURA	NIDAGUNDI	BIRALADINNI	UNNIBHAVI	Fluoride		7763541
193	VIJAYAPURA	NIDAGUNDI	BIRALADINNI	MUKARTIHAL	Fluoride		7763540
194	VIJAYAPURA	NIDAGUNDI	BIRALADINNI	BUDNI	Fluoride		7523856
195	VIJAYAPURA	KOLHAR	SIDDANATHA R C	SIDDANATH	Fluoride		7523790
196	VIJAYAPURA	NIDAGUNDI	BENALA R C	BENAL	Fluoride		7515205

Executive Engineer,
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VIJAYPUR

1211

110

Details of Arsenic affected sources & the remediation measures taken

District: YADGIR **Date: 25/06/2019**

S.No	Taluk	Gram Panchayath	Habitation Name	Arsenic concentration in mg/l	Arsenic contaminated source covered under MVS scheme(Specify scheme name)	Date of installation (DD/MM/YY)	working condition at present	Arsenic contaminated source covered under WPP(Yes/No)	Date of installation (DD/MM/YY)	working condition at present	If covered under WPP,what is the capacity in LPH	Supply of potable water/Capita	Reject management (yes/no)	Details of any other technologies being used
1	SHORAPUR	ALDAL	MANIKYAL	Arsenic(0.09 Mg/L)	Covered Under MVS Scheme	-	-	Yes	21/5/2014	No	1000	-	Yes	-
2	SHORAPUR	ALDAL	NAGIRAL	Arsenic(0.06 Mg/L)	Covered Under MVS Scheme	-	-	Yes	10/4/2014	No	2000	500	Yes	-
3	SHORAPUR	ARKERA(K)	ARKERA(K)	Arsenic(0.06 Mg/L)	Covered Under MVS Scheme	-	-	Yes	23/1/2014	Yes	4000	50	Yes	-
4	SHORAPUR	ARKERA(K)	BIJAPUR	Arsenic(0.07 Mg/L)	Covered Under MVS Scheme	-	-	Yes	23/1/2014	Yes	4000	50	Yes	-
5	SHORAPUR	KACHEKNOOR	K. TALIYALLI	Arsenic(0.09 Mg/L)	Covered Under MVS Scheme	-	-	Yes	25/6/2014	Yes	3000	50	Yes	-
6	SHORAPUR	KARADIGOL	KARADIGOL	Arsenic(0.07 Mg/L)	Covered Under MVS Scheme	-	-	Yes	13/6/2016	Yes	1000	70	Yes	-
7	SHORAPUR	KHANAPUR SH	HOSHIHAL (J)	Arsenic(0.08 Mg/L)	Covered Under MVS Scheme	-	-	Yes	11/6/2014	Yes	500	50	Yes	-
8	SHORAPUR	MALAGATTI	CHIGIHAL	Arsenic(0.07 Mg/L)	Covered Under MVS Scheme	-	-	Yes	6/12/2013	No	2000	-	Yes	-
9	SHORAPUR	MALAGATTI	GUDIHAL	Arsenic(0.08 Mg/L)	Covered Under MVS Scheme	-	-	Yes	3/12/2013	Yes	2000	70	Yes	-
10	SHORAPUR	MALAGATTI	HEGGANDIGERA	Arsenic(0.09 Mg/L)	Covered Under MVS Scheme	-	-	Yes	10/6/2014	Yes	2000	70	Yes	-
11	SHORAPUR	MALAGATTI	JAINAPUR	Arsenic(0.06 Mg/L)	Covered Under MVS Scheme	-	-	Yes	13/12/2013	Yes	1000	70	Yes	-
12	SHORAPUR	MALAGATTI	KIRDALLI TANDA	Arsenic(0.09 Mg/L)	Covered Under MVS Scheme	-	-	Yes	20/7/2014	Yes	1000	50	Yes	-
13	SHORAPUR	MALAGATTI	MEVEMAMATTI	Arsenic(0.08 Mg/L)	Covered Under MVS Scheme	-	-	Yes	16/6/2013	No	1000	-	Yes	-
14	SHORAPUR	MARWAL	MARWAL	Arsenic(0.07 Mg/L)	Covered Under R.O Plant	-	-	Yes	8/8/2014	Yes	2000	50	Yes	-
15	SHORAPUR	MUDNOOR(K)	RAMPUR	Arsenic(0.09 Mg/L)	Covered Under MVS Scheme	-	-	Yes	12/8/2014	Yes	1000	50	Yes	-
16	SHORAPUR	NAGANOOR	GOUDAGERA	Arsenic(0.07 Mg/L)	Covered Under MVS Scheme	-	-	Yes	3/4/2014	No	4000	-	Yes	-
17	SHORAPUR	PARSNALLI	KIRDALLI	Arsenic(0.08 Mg/L)	Covered Under MVS Scheme	-	-	Yes	13/9/2016	Yes	2000	50	Yes	-
18	SHORAPUR	PARSNALLI	PARSNALLI	Arsenic(0.07 Mg/L)	Covered Under MVS Scheme	-	-	Yes	24/8/2014	Yes	4000	70	Yes	-
19	SHORAPUR	PETHAMMAPUR	MANGALGERE	Arsenic(0.07 Mg/L)	Covered Under MVS Scheme	-	-	Yes	21/6/2014	No	2000	-	Yes	-
20	SHORAPUR	PETHAMMAPUR	RAL AMAPUR	Arsenic(0.07 Mg/L)	Covered Under MVS Scheme	-	-	Yes	20/5/2012	No	1000	-	Yes	-

Executive Engineer
Rural Drinking Water Supply & Sanitation
Division Yadgir

- 350 -

Details of Arsenic affected sources & the remediation measures taken

District: YADGIR **Date: 20.10.2019**

S.No	Taluk	Gram Panchayath	Habitation Name	Arsenic concentration in mg/l	Arsenic contaminated source covered under MVS scheme(Specify scheme name)	Date of installation (DD/MM/YY)	working condition at present	Arsenic contaminated source covered under WPP(Yes/No)	Date of installation (DD/MM/YY)	working condition at present	If covered under WPP,what is the capacity in LPH	Supply of potable water/Capita	Reject management (yes/no)	Details of any other technologies being used
1	SHORAPUR	ALDAL	MANGYAL	Arsenic[0.09 Mg/L]	Covered Under MVS Scheme	-	-	Yes	21/5/2014	No	1000	-	Yes	-
2	SHORAPUR	ALDAL	NAGRAL	Arsenic[0.06 Mg/L]	Covered Under MVS Scheme	-	-	Yes	10/4/2014	No	2000	500	Yes	-
3	SHORAPUR	ARKERA(K)	ARKERA(K)	Arsenic[0.06 Mg/L]	Covered Under MVS Scheme	-	-	Yes	23/3/2014	Yes	4000	50	Yes	-
4	SHORAPUR	ARKERA(K)	BIJASPUR	Arsenic[0.07 Mg/L]	Covered Under MVS Scheme	-	-	Yes	23/3/2014	Yes	4000	50	Yes	-
5	SHORAPUR	KACHEKNOOR	K. TALHALLI	Arsenic[0.09 Mg/L]	Covered Under MVS Scheme	-	-	Yes	15/6/2014	Yes	1000	50	Yes	-
6	SHORAPUR	KARADKOL	KARADKOL	Arsenic[0.07 Mg/L]	Covered Under MVS Scheme	-	-	Yes	13/4/2016	Yes	1000	70	Yes	-
7	SHORAPUR	KHANAPUR SH	GUDIHAL (J)	Arsenic[0.08 Mg/L]	Covered Under MVS Scheme	-	-	Yes	11/6/2014	Yes	500	50	Yes	-
8	SHORAPUR	MALAGATTI	CHIGIHAL	Arsenic[0.07 Mg/L]	Covered Under MVS Scheme	-	-	Yes	6/12/2013	No	2000	-	Yes	-
9	SHORAPUR	MALAGATTI	GODARIHAL	Arsenic[0.08 Mg/L]	Covered Under MVS Scheme	-	-	Yes	3/12/2013	Yes	2000	70	Yes	-
10	SHORAPUR	MALAGATTI	HOGIANDOOR	Arsenic[0.09 Mg/L]	Covered Under MVS Scheme	-	-	Yes	10/5/2014	Yes	2000	70	Yes	-
11	SHORAPUR	MALAGATTI	JADAPUR	Arsenic[0.06 Mg/L]	Covered Under MVS Scheme	-	-	Yes	13/12/2013	Yes	1000	70	Yes	-
12	SHORAPUR	MALAGATTI	KIRDALLI TANDA	Arsenic[0.09 Mg/L]	Covered Under MVS Scheme	-	-	Yes	20/7/2014	Yes	1000	50	Yes	-
13	SHORAPUR	MALAGATTI	MAVINAMATTI	Arsenic[0.08 Mg/L]	Covered Under MVS Scheme	-	-	Yes	16/6/2013	No	1000	-	Yes	-
14	SHORAPUR	MARNAL	MARNAL	Arsenic[0.07 Mg/L]	Covered Under R.O Plant	-	-	Yes	8/8/2014	Yes	2000	50	Yes	-
15	SHORAPUR	MUDNOOR(K)	RAMPUR	Arsenic[0.09 Mg/L]	Covered Under MVS Scheme	-	-	Yes	12/8/2014	Yes	1000	50	Yes	-
16	SHORAPUR	NAGANOOR	GOUDGERA	Arsenic[0.07 Mg/L]	Covered Under MVS Scheme	-	-	Yes	3/6/2014	No	4000	-	Yes	-
17	SHORAPUR	PARSNALLI	KIRDALLI	Arsenic[0.08 Mg/L]	Covered Under MVS Scheme	-	-	Yes	13/5/2016	Yes	2000	50	Yes	-
18	SHORAPUR	PARSNALLI	PARSNALLI	Arsenic[0.07 Mg/L]	Covered Under MVS Scheme	-	-	Yes	24/8/2014	Yes	4000	70	Yes	-
19	SHORAPUR	PETHAMMAPUR	MANGALORE	Arsenic[0.07 Mg/L]	Covered Under MVS Scheme	-	-	Yes	21/6/2014	No	2000	-	Yes	-
20	SHORAPUR	PETHAMMAPUR	HALAMAPUR	Arsenic[0.07 Mg/L]	Covered Under MVS Scheme	-	-	Yes	20/5/2012	No	1000	-	Yes	-

Executive Engineer
Rural Drinking Water Supply & Sanitation
Division Yadgir

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ಹದಿನೈದನೇ ವಿಧಾನ ಸಭೆಯ 2ನೇ ಅಧಿವೇಶನಕ್ಕೆ ಸಂಬಂಧಿಸಿದ ಭರವಸೆಗಳು:

ಗ್ರಾಮೀಣ ಕುಡಿಯುವ ನೀರು ಮತ್ತು ನೈರ್ಮಲ್ಯ ವಿಭಾಗ, ಯಾದಗಿರಿ

ಭರವಸೆ ಸಂಖ್ಯೆ	ಉಲ್ಲೇಖ ಮತ್ತು ದಿನಾಂಕ	ವಿಷಯ	ನೀಡಲಾದ ಭರವಸೆ	ಕೈಗೊಂಡ ಕ್ರಮದ ಬಗ್ಗೆ ಇಲಾಖೆಯ ಉತ್ತರ
	09/2018	ಸುರಪೂರ ತಾಲೂಕಿನ ಬಹಳಷ್ಟು ಗ್ರಾಮಗಳಲ್ಲಿನ ಶುದ್ಧ ನೀರಿನ ಘಟಕ ಮತ್ತು ಆರ್ಸೆನಿಕ್ ನೀರು ಹಾಗೂ ಫ್ಲೋರೈಡ್ ಯುಕ್ತ ನೀರನ್ನು ಶುದ್ಧೀಕರಿಸುವ ಬಗ್ಗೆ ಸರ್ಕಾರದ ಕ್ರಮ.	ಫ್ಲೋರೈಡ್ ಯುಕ್ತ ನೀರನ್ನು ಶುದ್ಧೀಕರಿಸಲು, ಶುದ್ಧ ಕುಡಿಯುವ ನೀರಿನ ಘಟಕಗಳನ್ನು ಆದ್ಯತೆ ಮೇರೆಗೆ ತೆಗೆದುಕೊಳ್ಳಲಾಗಿದೆಯೆಂದು ಮಾನ್ಯ ಗ್ರಾಮೀಣಾಭಿವೃದ್ಧಿ ಮತ್ತು ಪಂಚಾಯತ್ ರಾಜ್ ಹಾಗೂ ಕಾನೂನು, ನ್ಯಾಯ ಮತ್ತು ಮಾನವ ಹಕ್ಕುಗಳು ಹಾಗೂ ಸಂಸದೀಯ ವ್ಯವಹಾರಗಳ ಸಚಿವರು ಭರವಸೆ ನೀಡಿರುತ್ತಾರೆ.	ಆರ್ಸೆನಿಕ್ ಲವಣ ಅಂಶ ಇರುವ 7 ಗ್ರಾಮಗಳನ್ನು ಈಗಾಗಲೇ ಬಹುಗ್ರಾಮ ಯೋಜನೆಯಡಿಯಲ್ಲಿ ತೆಗೆದುಕೊಳ್ಳಲಾಗಿದ ಫ್ಲೋರೈಡ್ ಲವಣ ಅಂಶವಿರುವ 3 ಗ್ರಾಮಗಳಲ್ಲಿ ಈಗಾಗಲೇ 32 ಗ್ರಾಮಗಳಿ ಶುದ್ಧ ಕುಡಿಯುವ ನೀರಿನ ಘಟಕಗಳನ ಅಳವಡಿಸಲಾಗಿದೆ. ಇನ್ನು 4 ಗ್ರಾಮಗಳಿ ಅಳವಡಿಸಲು ಸರಕಾರಕ್ಕೆ ಪ್ರಸ್ತಾವ ಸಲ್ಲಿಸಲಾಗಿದೆ. ಲವಣ ಅಂಶವಿರುವ ಗ್ರಾಮಗಳ ವಿವರಗಳನ ಪ್ರತ್ಯೇಕವಾಗಿ ನಮೂನೆಯ ಲಗತ್ತಿಸಲಾಗಿದೆ.

ಕಾರ್ಯನಿರ್ವಾಹಕ ಅಧಿಯಂತರರು
ಗ್ರಾಮೀಣ ಕುಡಿಯುವ ನೀರು ಮತ್ತು ನೈರ್ಮಲ್ಯ
ವಿಭಾಗ, ಯಾದಗಿರಿ

Rural Drinking Water and Sanitation Division

Gadag Water Quality Testing Laboratory

Arsenic and Fluoride Affected Habitation

Sl No	District Name	Taluka name	Gram Panchyata	Village Name	No. of source affected by Fluoride	No. of source affected by Arsenic	Scheme ID with Alternate source provided	
							MVS	WPP
1	Gadag	Gadag	Huyelagola	Hirekoppa	1	0	8225483	Available
			Chikkahandigol	Dundur	2	0		Available
			Asundi	Malasamudra	3	0		Available
			Adavisomapur	Adavisomapur	1	0		Available
			Asundi	Asundi	2	0		Available
			Binkadakatti	Binkadakatti	2	0		Available
			Chikkahandigol	Chikkahandigol	1	0		Available
			Hombala	Hombala	1	0		Available
			Kadhadi	Kadhadi	7	0		Available
			Balaganur	Balaganur	3	0		Available
2		LAXMESHWAR	BATTUR	KUNDRALLI	1	0		Available
			ADARAKATTI	ADARAKATTI	2	0		Available
			BATTUR	BATTUR	1	0		Available
			FUTGAO BADNI	FUTGAO BADNI	1	0		Available
			GOJANUR	GOJANUR	1	0		Available
3		Mundaragi	Korlahalli	Maktumpur	1	0		Available
			Harogeri	Kelur	1	0		Available
			Hirewaddatti	Hirewaddatti	2	0		Available
			Doni	Doni	1	0	8166476	Available
4		Naragund	Konnur	Konnur	2	0		Available
			Shirol	Shirol	3	0		Available
5		Ron	Hosalli	Hosalli	1	0		Available
			Savadi	Honnapur	2	0		Available
6		Shirahatti	Magadi	Parasapur	1	0	8225483	Available
			Konchigerei	Bijjur	2	0		Available
			Bannikoppa	Sugnalli	1	0		Available
			Bannikoppa	Bannikoppa	2	0		Available

Executive Engineer
Rural Drinking Water & Sanitation Division
GADAG

ARSENIC & FLUORIDE AFFECTED DETAILS 2023-24 CHITRADURGA

Sl No	District Name	Taluka name	Gram Panchyata	Village Name	No. of source affected by Fluoride	No. of source affected by Arsenic	Scheme ID with Alternate source provided		Remarks
							MVS	WPP	
1	Chitradurga	Challakere	Abbenahalli	Guntakolammanahalli	1	0	-	Present	
2	Chitradurga	Challakere	Abbenahalli	Tirekolamma nahalli	1	0	-	Present	
3	Chitradurga	Challakere	Bedareddyhalli	Banjigere	1	0	-	Present	
4	Chitradurga	Challakere	Belagere	HULIKUNTE	1	0	-	Present	
5	Chitradurga	Challakere	Belagere	Kalamanahalli	2	0	-	Present	
6	Chitradurga	Challakere	Belagere	Kathenahalli	1	0	-	Present	
7	Chitradurga	Challakere	Budnahatti	Budnahatti	1	0	-	Present	
8	Chitradurga	Challakere	Budnahatti	Duggavara	4	0	-	Present	
9	Chitradurga	Challakere	Budnahatti	Veerabhimanahally Pujarihatty	1	0	-	Present	
10	Chitradurga	Challakere	Channammanagatthihalli	Channammanagatthihalli	5	0	-	Present	
11	Chitradurga	Challakere	Channammanagatthihalli	Dyavaranahalli	1	0	-	Present	
12	Chitradurga	Challakere	Channammanagatthihalli	Puriahalli	4	0	-	Present	
13	Chitradurga	Challakere	CHOWLUR	Chowluru 1	6	0	-	Present	
14	Chitradurga	Challakere	CHOWLUR	Chowluru 2	1	0	-	Present	
15	Chitradurga	Challakere	CHOWLUR	Suranahalli	3	0	-	Present	
16	Chitradurga	Challakere	Devara Marikunte	Devara Marikunte	6	0	-	Present	
17	Chitradurga	Challakere	Devara Marikunte	Nellurahalli	1	0	-	Present	
18	Chitradurga	Challakere	Devara Marikunte	Vaderahalli	2	0	-	Present	
19	Chitradurga	Challakere	Devara Marikunte	Yelagatta	2	0	-	Present	
20	Chitradurga	Challakere	Devareddy halli	Bukkambudi	5	0	-	Present	
21	Chitradurga	Challakere	Devareddy Halli	Devarehalli	2	0	-	Present	
22	Chitradurga	Challakere	Devareddy Halli	Devareddyhalli	1	0	-	Present	
23	Chitradurga	Challakere	Devareddy Halli	Gouresamudra Kavalu	1	0	-	Present	
24	Chitradurga	Challakere	Devareddy Halli	Mallesamudra	1	0	-	Present	
25	Chitradurga	Challakere	Dodda Challur	Chikka Challur	6	2	-	Present	
26	Chitradurga	Challakere	Dodda Challur	Dodda Beersnahalli	6	2	-	Present	
27	Chitradurga	Challakere	Dodda Challur	Dodda Challur	5	0	-	Present	
28	Chitradurga	Challakere	DODDAULLARTHI	Chikkaullarathi	4	0	-	Present	
29	Chitradurga	Challakere	DODDAULLARTHI	Doddaullarthi	6	2	-	Present	
30	Chitradurga	Challakere	Dodderi	Bhanemasagara	6	2	-	Present	
31	Chitradurga	Challakere	Dodderi	Rammasamudra	1	0	-	Present	
32	Chitradurga	Challakere	Dodderi	Dodderi	2	0	-	Present	
33	Chitradurga	Challakere	Ghattaganthy	Channagahalli	1	0	-	Present	
34	Chitradurga	Challakere	Ghattaganthy	Ghattaganthi	3	2	-	Present	
35	Chitradurga	Challakere	Ghattaganthy	Valaur	1	2	-	Present	
36	Chitradurga	Challakere	Gowdgere	Bheemagondanahalli	1	0	-	Present	
37	Chitradurga	Challakere	Gowdgere	Bviranayakanahatti	1	0	-	Present	
38	Chitradurga	Challakere	Gowdgere	Gowdgere	2	0	-	Present	
39	Chitradurga	Challakere	Gowdgere	Jogihatti	6	0	-	Present	
40	Chitradurga	Challakere	Gowdgere	Kavalanahalli	1	0	-	Present	
41	Chitradurga	Challakere	Gowsamudra	Bande Thimlapura	1	0	-	Present	
42	Chitradurga	Challakere	Gowsamudra	GOWRASAMUDRA	8	0	-	Present	
43	Chitradurga	Challakere	Gowsamudra	Hanumanthanahalli	1	0	-	Present	
44	Chitradurga	Challakere	Hirehalli	Bukkorahalli	1	0	-	Present	
45	Chitradurga	Challakere	Hirehalli	Hirehalli	3	0	-	Present	
46	Chitradurga	Challakere	Jajur	Jajur	4	0	-	Present	
47	Chitradurga	Challakere	Jajur	Modur	1	0	-	Present	
48	Chitradurga	Challakere	Malluruhalli	Dasaramuthenahalli	1	0	-	Present	
49	Chitradurga	Challakere	Malluruhalli	Kamplasagara (b)	1	0	-	Present	
50	Chitradurga	Challakere	Malluruhalli	Malluruhalli	3	0	-	Present	
51	Chitradurga	Challakere	Malluruhalli	REKHAJAGERE	2	0	-	Present	
52	Chitradurga	Challakere	Mannekote	Mannekote	2	0	-	Present	
53	Chitradurga	Challakere	Meerasabihalli	Vidyaranakunte	1	0	-	Present	
54	Chitradurga	Challakere	Meerasabihalli	Vidyaraveerapura	1	0	-	Present	
55	Chitradurga	Challakere	N.MAHDEVAPURA	Khudagura	1	0	-	Present	
56	Chitradurga	Challakere	N.MAHDEVAPURA	Mahadevapura	1	0	-	Present	
57	Chitradurga	Challakere	Nagarangere	Lakshmipura	1	0	-	Present	
58	Chitradurga	Challakere	Nannivala	Gorlabatte	4	0	-	Present	
59	Chitradurga	Challakere	Nalagethanagatti	Gollahalli	1	0	-	Present	
60	Chitradurga	Challakere	Nalagethanagatti	Hirekerekavai	1	0	-	Present	
61	Chitradurga	Challakere	Nalagethanagatti	Nalagethanahatti	1	0	-	Present	
62	Chitradurga	Challakere	Nalagethanagatti	Ramdurga	1	0	-	Present	

63	Chitradurga	Challakere	Nerlagunte	Nerlagunte	1	0	-	Present	
64	Chitradurga	Challakere	OBLAPURA	Chikkabeldhalli	1	0	-	Present	
65	Chitradurga	Challakere	OBLAPURA	Doddabeldhalli	1	0	-	Present	
66	Chitradurga	Challakere	OBLAPURA	Doniahalli	1	0	-	Present	
67	Chitradurga	Challakere	OBLAPURA	OBLAPURA	1	0	-	Present	
68	Chitradurga	Challakere	OBLAPURA	Thippareddihalli	1	0	-	Present	
69	Chitradurga	Challakere	P.mahadevapura	P.mahadevapura	1	0	-	Present	
70	Chitradurga	Challakere	Pagadala Bande	Bommanahunte	1	0	-	Present	
71	Chitradurga	Challakere	Pagadala Bande	Haravigondanahalli	1	0	-	Present	
72	Chitradurga	Challakere	Pagadala Bande	Korla Kunte	1	0	-	Present	
73	Chitradurga	Challakere	Pagadala Bande	Pagadalabande	1	0	-	Present	
74	Chitradurga	Challakere	PARUSHURAMAPU RA	Parasuramapura 1	1	0	-	Present	
75	Chitradurga	Challakere	Ramajoghalli	JANIVEHALLY	1	0	-	Present	
76	Chitradurga	Challakere	Ramajoghalli	KURUDIHALLY	1	0	-	Present	
77	Chitradurga	Challakere	Renukapura	Kasavi Gollarahalli	1	0	-	Present	
78	Chitradurga	Challakere	Renukapura	Kattamdevarakote	1	0	-	Present	
79	Chitradurga	Challakere	Renukapura	Renukapura	3	0	-	Present	
80	Chitradurga	Challakere	Sankere	hottajana Kapile	1	0	-	Present	
81	Chitradurga	Challakere	Sankere	Jadekunte	1	0	-	Present	
82	Chitradurga	Challakere	Sankere	Kammathmarikunte	1	0	-	Present	
83	Chitradurga	Challakere	Sankere	Sankere	1	0	-	Present	
84	Chitradurga	Challakere	Siddeshwara Durga	Siddapura	1	0	-	Present	
85	Chitradurga	Challakere	Somguddu	Chikkamadure	5	0	-	Present	
86	Chitradurga	Challakere	Somguddu	Ganjigunte	4	0	-	Present	
87	Chitradurga	Challakere	Somguddu	Hiremadure	5	0	-	Present	
88	Chitradurga	Challakere	Somguddu	Somguddu	4	0	-	Present	
89	Chitradurga	Challakere	T.N Kote	GOSIKERE	3	0	-	Present	
90	Chitradurga	Challakere	T.N Kote	Thimmannanayakanako te	1	0	-	Present	
91	Chitradurga	Challakere	Talak	Talak	1	0	-	Present	
92	Chitradurga	Challakere	Thimmappalahalli	Gajaganahalli	1	0	-	Present	
93	Chitradurga	Challakere	Thimmappanahalli	Giddapura	1	0	-	Present	
94	Chitradurga	Challakere	Thimmappanahalli	Jambalahnahalli	1	0	-	Present	
95	Chitradurga	Challakere	Thimmappanahalli	Thimmappanahalli	3	0	-	Present	
96	Chitradurga	Chitradurga	ALAGATTA	Bommavvanagatihalli	1	0	-	Present	
97	Chitradurga	Chitradurga	ALAGATTA	Chikkalaghatte	2	0	-	Present	
98	Chitradurga	Chitradurga	ALAGATTA	V.K. Halli	1	0	-	Present	
99	Chitradurga	Chitradurga	Alagawadi	Obalapura	3	0	-	Present	
100	Chitradurga	Chitradurga	Belagatta	Belagatta	2	0	-	Present	
101	Chitradurga	Chitradurga	Belagatta	PELARAHATTI	4	0	-	Present	
102	Chitradurga	Chitradurga	Bharamasagara	Bevinahalli	5	0	-	Present	
103	Chitradurga	Chitradurga	BHEEMASAMUDRA	Bheemasamudra	1	0	-	Present	
104	Chitradurga	Chitradurga	BHEEMASAMUDRA	TUREBAILU	1	0	-	Present	
105	Chitradurga	Chitradurga	BYALAHAL	Basavanathkanakere	3	0	-	Present	
106	Chitradurga	Chitradurga	Chikkabennur	Chikkabennur	4	0	-	Present	
107	Chitradurga	Chitradurga	Chikkabennur	Kalluhte	1	0	-	Present	
108	Chitradurga	Chitradurga	Chikkagondanahalli	Chikkagondanahalli	4	0	-	Present	
109	Chitradurga	Chitradurga	Chikkagondanahalli	Chippenakere	2	0	-	Present	
110	Chitradurga	Chitradurga	Cholagatta	Bchalanagenahalli	1	0	-	Present	
111	Chitradurga	Chitradurga	Cholagatta	Gorehatti	1	0	-	Present	
112	Chitradurga	Chitradurga	D.S.HALLI	D.S.HALLI	6	0	-	Present	
113	Chitradurga	Chitradurga	Godabanahal	Godabanahal	1	0	-	Present	
114	Chitradurga	Chitradurga	Godabanahal	Pandarahalli	1	0	-	Present	
115	Chitradurga	Chitradurga	Gowur	Mallapura	4	0	-	Present	
116	Chitradurga	Chitradurga	Gowur	Muttalahnahatti	6	0	-	Present	
117	Chitradurga	Chitradurga	Haledyamavvanaha li	Haledyamavvanahalli	5	0	-	Present	
118	Chitradurga	Chitradurga	Haledyamavvanaha li	TOPURAMALIGE	4	0	-	Present	
119	Chitradurga	Chitradurga	Hireguntanur	Hosahalli	4	0	-	Present	
120	Chitradurga	Chitradurga	Hireguntanur	Hunsekatte	1	0	-	Present	
121	Chitradurga	Chitradurga	Hireguntanur	Kodagavalli	1	0	-	Present	
122	Chitradurga	Chitradurga	HULLUR	Hullur	2	0	-	Present	
123	Chitradurga	Chitradurga	HULLUR	Singapura	1	0	-	Present	
124	Chitradurga	Chitradurga	Ingaladal	Ingaladalu	5	0	-	Present	
125	Chitradurga	Chitradurga	Isamudra	Hatalakatte	1	0	-	Present	

126	Chitradurga	Chitradurga	Issarmudra	Issamudra	1	0	-	Present	
127	Chitradurga	Chitradurga	Issarmudra	Pathrahalli	2	0	-	Present	
128	Chitradurga	Chitradurga	(YANAHALLI	Beeravara	1	0	-	Present	
129	Chitradurga	Chitradurga	(YANAHALLI	(yenahalli Kurubarahatti	1	0	-	Present	
130	Chitradurga	Chitradurga	(YANAHALLI	K. Balekatte	1	0	-	Present	
131	Chitradurga	Chitradurga	(YANAHALLI	Malenahalli	1	0	-	-	
132	Chitradurga	Chitradurga	(YANAHALLI	Maraghatta	1	0	-	Present	
133	Chitradurga	Chitradurga	(YANAHALLI	Vaddanahalli	1	0	-	Present	
134	Chitradurga	Chitradurga	J.N.KOTE	Jampannanakunahalle	2	0	-	Present	
135	Chitradurga	Chitradurga	J.N.KOTE	Pallavegere	1	0	-	Present	
136	Chitradurga	Chitradurga	J.N.KOTE	Sajjanakere	2	0	-	Present	
137	Chitradurga	Chitradurga	Jenukonda	Jenukonda	1	0	-	Present	
138	Chitradurga	Chitradurga	Kalgere	Chowlihalli	1	0	-	Present	
139	Chitradurga	Chitradurga	Kalgere	Kalgere	1	0	-	Present	
140	Chitradurga	Chitradurga	Kalgere	Nallikatte	1	0	-	Present	
141	Chitradurga	Chitradurga	Kogunde	Bahadurghatta	1	0	-	Present	
142	Chitradurga	Chitradurga	Kogunde	Kogunde	1	0	-	Present	
143	Chitradurga	Chitradurga	Kolahal	Kasavanahalli	1	0	-	-	KO water used, WRP available nearest village
144	Chitradurga	Chitradurga	Kolahal	Kolahal	2	0	-	Present	
145	Chitradurga	Chitradurga	M.K.hatti	Matadakunubarahatti (CT)	5	0	-	Present	
146	Chitradurga	Chitradurga	Madakaripura	MADAKARIPURA	1	0	-	Present	
147	Chitradurga	Chitradurga	Madakaripura	Pillekerenahalli	3	0	-	Present	
148	Chitradurga	Chitradurga	MADANAYAKANAH ALLI	MADANAYAKANAHALLI	2	0	-	Present	
149	Chitradurga	Chitradurga	MADANAYAKANAH ALLI	RUMMAGATTA	2	0	-	Present	
150	Chitradurga	Chitradurga	MEDEHALLI	MEDEHALLI	5	0	-	Present	
151	Chitradurga	Chitradurga	MEDEHALLI	MEGALAHALLI	1	0	-	Present	
152	Chitradurga	Chitradurga	Muddapura	Muddapura	4	0	-	Present	
153	Chitradurga	Chitradurga	Siligere	Siddapura	1	0	-	Present	
154	Chitradurga	Chitradurga	Siligere	Siligere	1	0	-	Present	
155	Chitradurga	Chitradurga	Sondekola	Sondekola	2	0	-	Present	
156	Chitradurga	Chitradurga	Turuvanur	Avalenahalli	1	0	-	Present	
157	Chitradurga	Chitradurga	Turuvanur	Bangarakkanahalli	1	0	-	Present	
158	Chitradurga	Chitradurga	Turuvanur	Bogalerahatti	1	0	-	Present	
159	Chitradurga	Chitradurga	Turuvanur	Doddaganta	1	0	-	Present	
160	Chitradurga	Chitradurga	Turuvanur	Turuvanur	1	0	-	Present	
161	Chitradurga	Chitradurga	Yelagodu	Yelagodu	1	0	-	Present	
162	Chitradurga	Hiriyur	Adivala	Nandihalli	1	0	-	Present	
163	Chitradurga	Hiriyur	Babbur	Babbur	5	0	-	Present	
164	Chitradurga	Hiriyur	Babbur	Chinnakhnahatti	1	0	-	Present	
165	Chitradurga	Hiriyur	Babbur	Mykalurahalli	1	0	-	Present	
166	Chitradurga	Hiriyur	Burujanarappa	Burujanarappa	5	0	-	Present	
167	Chitradurga	Hiriyur	Burujanarappa	Palavvanahalli	4	0	-	Present	
168	Chitradurga	Hiriyur	Gannakanahally	Balenahalli	6	0	-	Present	
169	Chitradurga	Hiriyur	Gannakanahally	Gannavakanahalli	1	0	-	Present	
170	Chitradurga	Hiriyur	Gannakanahally	hemadala	1	0	-	Present	
171	Chitradurga	Hiriyur	Gannakanahally	Kariobenahalli	2	0	-	Present	
172	Chitradurga	Hiriyur	Harthikote	Golagondanahalli	2	0	-	Present	
173	Chitradurga	Hiriyur	Harthikote	Harthikote	1	0	-	Present	
174	Chitradurga	Hiriyur	Imangla	Andikatte	1	0	-	Present	
175	Chitradurga	Hiriyur	Imangla	Imangla	6	0	-	Present	
176	Chitradurga	Hiriyur	Khandenahalli	Benkikatapanahatti	1	0	5013521 BW	-	
177	Chitradurga	Hiriyur	Khandenahalli	Hosakere	1	0	-	Present	
178	Chitradurga	Hiriyur	Kunikere	A.v. Kottige	1	0	-	Present	
179	Chitradurga	Hiriyur	M.d.kote	Basapana Melige	5	0	-	Present	
180	Chitradurga	Hiriyur	M.d.kote	Jodipura	2	0	-	Present	
181	Chitradurga	Hiriyur	M.d.kote	Sondekere	4	0	-	Present	
182	Chitradurga	Hiriyur	M.d.kote	Vaddikere	3	0	-	Present	
183	Chitradurga	Hiriyur	Maradihally	Maradihalli	4	0	-	Present	
184	Chitradurga	Hiriyur	Matadihally	Talavatti	3	0	-	Present	
185	Chitradurga	Hiriyur	Mavkal	Mavkal	4	0	-	Present	
186	Chitradurga	Hiriyur	Metikurke	Giddadabenahalli	3	0	-	Present	
187	Chitradurga	Hiriyur	Metikurke	Gullalu	2	0	-	Present	
188	Chitradurga	Hiriyur	Metikurke	Metikurke	5	0	-	Present	
189	Chitradurga	Hiriyur	Metikurke	Thadapinachinnamma hanahalli	1	0	-	Present	
190	Chitradurga	Hiriyur	RANGANATHAPURA	Ranganathapura	1	0	-	Present	
191	Chitradurga	Hiriyur	Suragondanahally	Adiveru	1	0	-	Present	
192	Chitradurga	Hiriyur	Suragondanahally	Alamaradahatti	2	0	-	Present	
193	Chitradurga	Hiriyur	Suragondanahally	Gowdahalli	1	0	-	Present	

17

194	Chitradurga	Hiriyur	Suragondanahally	Sooragondanahalli	1	0	-	Present	
195	Chitradurga	Hiriyur	Suragondanahally	Tavarekr	1	0	-	Present	
196	Chitradurga	Hiriyur	Udavalli	Indiranagar	1	0	-	Present	
197	Chitradurga	Hiriyur	Udavalli	Somenahalli	1	0	-	Present	
198	Chitradurga	Hiriyur	V.V. Pura	Vanivilaspura	1	0	-	Present	
199	Chitradurga	Hiriyur	Yallodakere	Shivalalagere	1	0	-	Present	
200	Chitradurga	Hiriyur	Yallodakere	Handiganalli	1	0	-	Present	
201	Chitradurga	Hiriyur	Yarabahally	Kalavibagi	1	0	-	Present	
202	Chitradurga	Holalkere	Adanur	Adanur	0	0	-	Present	
203	Chitradurga	Holalkere	Adanur	Appasamahally	1	0	-	Present	
204	Chitradurga	Holalkere	Adanur	Harenahalli	1	0	-	Present	
205	Chitradurga	Holalkere	Bidarekere	Bidarekere	1	0	-	Present	
206	Chitradurga	Holalkere	Bidarekere	Channasamudra	4	0	-	Present	
207	Chitradurga	Holalkere	Bidarekere	Gundasamudra	1	0	-	Present	
208	Chitradurga	Holalkere	Bidarekere	Jakkanahalli	1	0	-	-	RO water used, WPP available nearest village
209	Chitradurga	Holalkere	Bidarekere	Mullera Halli	1	0	-	-	RO water used, WPP available nearest village
210	Chitradurga	Holalkere	Chikkayemiganur	Iyyanahalli	1	0	-	Present	
211	Chitradurga	Holalkere	Chikkayemiganur	Kottaganalu	1	0	-	Present	
212	Chitradurga	Holalkere	Chikkayemiganur	Kottehal	4	0	-	Present	
213	Chitradurga	Holalkere	Chithrahalli	Chithrahalli	1	0	-	Present	
214	Chitradurga	Holalkere	Chithrahalli	Echaghatta	1	0	-	Present	
215	Chitradurga	Holalkere	Gangasamudra	Arabegatta	1	0	-	Present	
216	Chitradurga	Holalkere	Gangasamudra	Talagatta	1	0	-	Present	
217	Chitradurga	Holalkere	Gunderi	Edehalli	3	0	-	Present	
218	Chitradurga	Holalkere	Gunderi	Gunderi	1	0	-	Present	
219	Chitradurga	Holalkere	Gunderi	Gunderi Kaval	1	0	-	Present	
220	Chitradurga	Holalkere	Gunderi	Maleerahalli Kaval	1	0	-	-	RO water used, WPP available nearest village
221	Chitradurga	Holalkere	Hire Kemmegenur	Dasarahalli	1	0	-	-	RO water used, WPP available nearest village
222	Chitradurga	Holalkere	Madderu	Halehalli	1	0	-	-	RO water used, WPP available nearest village
223	Chitradurga	Holalkere	Madderu	Huliarapanche	1	0	-	-	RO water used, WPP available nearest village
224	Chitradurga	Holalkere	Madderu	Seeneerakatte	3	0	-	-	RO water used, WPP available nearest village
225	Chitradurga	Holalkere	Malladihalli	Kenguntе	1	0	-	Present	
226	Chitradurga	Holalkere	Malladihalli	Malladihalli	2	0	-	Present	
227	Chitradurga	Holalkere	Muthugadur	Kalagatta	1	0	-	Present	
228	Chitradurga	Holalkere	Muthugadur	Muthugadur	1	0	-	Present	
229	Chitradurga	Holalkere	N.g.halli	Gowdihalli	1	0	-	Present	
230	Chitradurga	Holalkere	N.g.halli	Narayanagondanahalli	1	0	-	Present	
231	Chitradurga	Holalkere	N.g.halli	Sannalahnahalli	5	0	-	Present	
232	Chitradurga	Holalkere	R.nulenur	Basapura	1	0	-	Present	
233	Chitradurga	Holalkere	R.nulenur	Rangapura	4	0	-	Present	
234	Chitradurga	Holalkere	Shivaganga	Gataga	6	0	-	Present	
235	Chitradurga	Holalkere	Shivaganga	Kudineerakatti	2	0	-	Present	
236	Chitradurga	Holalkere	Shivapura	Maruthi Nagara	1	0	-	Present	
237	Chitradurga	Holalkere	T.nulenur	Banajogondanahalli	1	0	-	Present	
238	Chitradurga	Holalkere	T.nulenur	T. Nulenur	4	0	-	Present	
239	Chitradurga	Holalkere	Talya	Hullkere	1	0	-	Present	
240	Chitradurga	Holalkere	Talya	Kummaragatta	3	0	-	Present	
241	Chitradurga	Holalkere	Talya	Papenahalli	1	0	-	-	RO water used, WPP available nearest village
242	Chitradurga	Holalkere	Talya	venkateshapura	6	0	-	Present	
243	Chitradurga	Holalkere	Tekalavatti	Kumaranahalli	1	0	-	Present	
244	Chitradurga	Holalkere	Tuppadahalli	Kenchapura	1	0	-	Present	
245	Chitradurga	Holalkere	Tuppadahalli	Rangavinadurga Kaval	1	0	-	Present	
246	Chitradurga	Holalkere	Tuppadahalli	Singenahalli	2	0	-	Present	
247	Chitradurga	Holalkere	Uppangenahalli	Gulihosahalli	1	0	-	Present	
248	Chitradurga	Holalkere	Uppangenahalli	Mogalekatte	3	0	-	Present	
249	Chitradurga	Holalkere	Uppangenahalli	Uppangenahalli	2	0	-	Present	

250	Chitradurga	Holalkere	Viswanathanahalli	Ayirahatti	1	0	-	Present	
251	Chitradurga	Holalkere	Viswanathanahalli	Santhenahalli	1	0	-	Present	
252	Chitradurga	Holalkere	Viswanathanahalli	Viswanathanahalli	1	0	-	Present	
253	Chitradurga	Hosadurga	Attimagge	Attimagge	1	0	-	Present	
254	Chitradurga	Hosadurga	Attimagge	Hulikatti	4	0	-	-	RO water used, WPP available nearest village
255	Chitradurga	Hosadurga	Attimagge	Masanihalli	6	0	-	-	RO water used, WPP available nearest village
256	Chitradurga	Hosadurga	Attimagge	Ramajanahalli	3	0	-	Present	
257	Chitradurga	Hosadurga	Bagur	Bagur	1	0	-	Present	
258	Chitradurga	Hosadurga	Bagur	Ivilapura	2	0	-	Present	
259	Chitradurga	Hosadurga	Bagur	Srirangapura	3	0	-	Present	
260	Chitradurga	Hosadurga	Ballalasamudra	Ballalasamudra	5	0	-	Present	
261	Chitradurga	Hosadurga	Ballalasamudra	Handanakere	2	0	-	Present	
262	Chitradurga	Hosadurga	Ballalasamudra	Kalkere	2	0	-	Present	
263	Chitradurga	Hosadurga	Ballalasamudra	Ulavinagondi	1	0	-	-	RO water used, WPP available nearest village
264	Chitradurga	Hosadurga	Belagur	Belagur	1	0	-	Present	
265	Chitradurga	Hosadurga	Bokkere	M G Dibba	1	0	-	Present	
266	Chitradurga	Hosadurga	Devapura	Akkithimmayanahatti	5	0	-	Present	
267	Chitradurga	Hosadurga	Devapura	Devapura	6	0	-	Present	
268	Chitradurga	Hosadurga	Devapura	Devapura Colony	5	0	-	Present	
269	Chitradurga	Hosadurga	Devapura	Galabenahalli	4	0	-	-	RO water used, WPP available nearest village
270	Chitradurga	Hosadurga	Devapura	Honnenahalli	5	0	-	Present	
271	Chitradurga	Hosadurga	Devapura	Kodihalli	1	0	-	Present	
272	Chitradurga	Hosadurga	Devapura	Narasipura	4	0	-	Present	
273	Chitradurga	Hosadurga	Devigere	Beesanahalli	3	0	-	Present	
274	Chitradurga	Hosadurga	Devigere	Gallirangasnahatti	5	0	-	Present	
275	Chitradurga	Hosadurga	Devigere	Kumbarakatte	3	0	-	-	RO water used, WPP available nearest village
276	Chitradurga	Hosadurga	Devigere	Mavinakatte	1	0	-	Present	
277	Chitradurga	Hosadurga	Devigere	N.g.halli Kabbala	1	0	-	Present	
278	Chitradurga	Hosadurga	Doddatheksalavatti	Doddatheksalavatti	2	0	-	Present	
279	Chitradurga	Hosadurga	Doddghatta	Banashalli	1	0	-	Present	
280	Chitradurga	Hosadurga	Doddghatta	D. Mallapura	3	0	-	Present	
281	Chitradurga	Hosadurga	Doddghatta	Goolihatti	5	0	-	Present	
282	Chitradurga	Hosadurga	G.n kere	Agasanahalli	1	0	-	-	RO water used, WPP available nearest village
283	Chitradurga	Hosadurga	Heggere	Heggere	5	0	-	Present	
284	Chitradurga	Hosadurga	Heggere	Vengalapura	1	0	-	Present	
285	Chitradurga	Hosadurga	Hunavinadu	Gonavinakai	1	0	-	Present	
286	Chitradurga	Hosadurga	Hunavinadu	Hunavinadu	4	0	-	Present	
287	Chitradurga	Hosadurga	Hunavinadu	Kappagere	4	0	-	Present	
288	Chitradurga	Hosadurga	Hunavinadu	Sodaranal	4	0	-	-	RO water used, WPP available nearest village
289	Chitradurga	Hosadurga	Hunavinadu	Srirangapura (pol)	4	0	-	Present	
290	Chitradurga	Hosadurga	Jankal	Benakanahalli	5	0	-	Present	
291	Chitradurga	Hosadurga	Jankal	Jankal	6	0	-	Present	
292	Chitradurga	Hosadurga	Kabbla	Kabbala	2	0	-	Present	
293	Chitradurga	Hosadurga	Kabbla	Thonechenahalli	1	0	-	Present	
294	Chitradurga	Hosadurga	Kabbla	Tumbinakere	1	0	-	Present	
295	Chitradurga	Hosadurga	Kainadu	Arsikalli	6	0	-	Present	
296	Chitradurga	Hosadurga	Kainadu	Bachavara	3	0	-	Present	
297	Chitradurga	Hosadurga	Kainadu	Malapanahalli	4	0	-	Present	
298	Chitradurga	Hosadurga	Kainadu	Mengasandra	2	0	-	Present	
299	Chitradurga	Hosadurga	Kainadu	Somasandra	3	0	-	Present	
300	Chitradurga	Hosadurga	Kanchipura	Kanchipura	3	0	-	Present	
301	Chitradurga	Hosadurga	Kanchipura	Kanubenahalli	2	0	-	Present	
302	Chitradurga	Hosadurga	Karehalli	Hagalakere	1	0	-	Present	
303	Chitradurga	Hosadurga	Karehalli	Hottugondanahalli	1	0	-	Present	
304	Chitradurga	Hosadurga	Karehalli	Thippenahalli	1	0	-	Present	
305	Chitradurga	Hosadurga	Kellodu	Attigatta	3	0	-	Present	

326	Chitradurga	Hosadurga	Kelhodu	Bhadravanahalli	1	0	-	-	RO water used, WPP available nearest village
327	Chitradurga	Hosadurga	Kelhodu	Boravigondanahalli	4	0	-	Present	
328	Chitradurga	Hosadurga	Kelhodu	Kanagundhi	1	0	-	-	RO water used, WPP available nearest village
329	Chitradurga	Hosadurga	Kelhodu	Kanagundhihalli	4	0	-	-	RO water used, WPP available nearest village
330	Chitradurga	Hosadurga	Kelliodu	Kelhodi	4	0	-	Present	
331	Chitradurga	Hosadurga	Kelliodu	Kurubarahalli	5	0	-	Present	
332	Chitradurga	Hosadurga	Kelliodu	Kyadigere	4	0	-	Present	
333	Chitradurga	Hosadurga	Kelliodu	Lingothahalli	6	0	-	-	RO water used, WPP available nearest village
334	Chitradurga	Hosadurga	Kelliodu	Mettirahole	5	0	-	-	RO water used, WPP available nearest village
335	Chitradurga	Hosadurga	Kelliodu	Muttagundi	3	0	-	-	RO water used, WPP available nearest village
336	Chitradurga	Hosadurga	Kongavally	Kadadanakere	1	0	-	Present	
337	Chitradurga	Hosadurga	Kurubarahalli	Gavirangapura	4	0	-	Present	
338	Chitradurga	Hosadurga	Kurubarahalli	Mallihalli	1	0	-	Present	
339	Chitradurga	Hosadurga	Kurubarahalli	Mylarapura	5	0	-	Present	
340	Chitradurga	Hosadurga	Kurubarahalli	Somenahalli	1	0	-	Present	
341	Chitradurga	Hosadurga	Kurubarahalli	Sujihal	4	0	-	Present	
342	Chitradurga	Hosadurga	Lakki Halli	Lakki Halli	1	0	-	Present	
343	Chitradurga	Hosadurga	Lakki Halli	Seeranakatte	4	0	-	Present	
324	Chitradurga	Hosadurga	Madadakere	Rangavvanahalli	3	0	-	-	RO water used, WPP available nearest village
325	Chitradurga	Hosadurga	Madhure	B.v.nagara	5	0	-	Present	
326	Chitradurga	Hosadurga	Madhure	Chinnapura	6	0	-	Present	
327	Chitradurga	Hosadurga	Madhure	Madhure	1	0	-	Present	
328	Chitradurga	Hosadurga	Madhure	Nagenahalli	1	0	-	Present	
329	Chitradurga	Hosadurga	Mallapanahalli	Chikkammanahalli	3	0	-	-	RO water used, WPP available nearest village
330	Chitradurga	Hosadurga	Mallapanahalli	Chikkavagati	1	0	-	Present	
331	Chitradurga	Hosadurga	Mallapanahalli	Jammapura	1	0	-	Present	
332	Chitradurga	Hosadurga	Mallapanahalli	Mallapanahalli	4	0	-	Present	
333	Chitradurga	Hosadurga	Mathodu	Arerahalli	4	0	-	Present	
334	Chitradurga	Hosadurga	Mathodu	Kappanaikanahalli	1	0	-	Present	
335	Chitradurga	Hosadurga	Mathodu	Mathodu	1	0	-	Present	
336	Chitradurga	Hosadurga	S NERLAKERE	Chikkahullenahalli	2	0	-	Present	
337	Chitradurga	Hosadurga	S NERLAKERE	Garimbilu	4	0	-	Present	
338	Chitradurga	Hosadurga	S NERLAKERE	H S PALYA	3	0	-	Present	
339	Chitradurga	Hosadurga	S NERLAKERE	Haragondanahalli	4	0	-	Present	
340	Chitradurga	Hosadurga	S NERLAKERE	Nagaregere	4	0	-	Present	
341	Chitradurga	Hosadurga	S NERLAKERE	Naigere	5	0	-	Present	
342	Chitradurga	Hosadurga	S NERLAKERE	Neralakere	1	0	-	Present	
343	Chitradurga	Hosadurga	S NERLAKERE	Sadarahalli	3	0	-	Present	
344	Chitradurga	Hosadurga	Sanihalli	Adribatte	1	0	-	Present	
345	Chitradurga	Hosadurga	Sanihalli	murthalli	1	0	-	-	RO water used, WPP available nearest village
346	Chitradurga	Hosadurga	Sanihalli	Sanehalli	5	0	-	Present	
347	Chitradurga	Hosadurga	Sanihalli	SHETTIHALLI	1	0	-	Present	
348	Chitradurga	Hosadurga	Srirampura	Gulhalli	3	0	-	Present	
349	Chitradurga	Hosadurga	Srirampura	Kachapura	1	0	-	Present	
350	Chitradurga	Hosadurga	Srirampura	Srirampura	1	0	-	Present	
351	Chitradurga	Hosadurga	Thandga	Kerehosahalli	1	0	-	Present	
352	Chitradurga	Hosadurga	Thandga	Krishnapura	2	0	-	Present	
353	Chitradurga	Hosadurga	Thandga	Tandaga	1	0	-	Present	
354	Chitradurga	Hosadurga	Thandga	Yadagatta	2	0	-	Present	
355	Chitradurga	Molakalmuru	Ashoka Siddapura	Ashokasiddapura	4	0		Present	
356	Chitradurga	Molakalmuru	Ashoka Siddapura	Chikkanahalli	4	0	75231363 BW	-	
357	Chitradurga	Molakalmuru	Ashoka Siddapura	Hanumapura S	8	0		Present	
358	Chitradurga	Molakalmuru	Ashoka Siddapura	Heruru	3	0	-	-	RO water used, WPP available nearest village
359	Chitradurga	Molakalmuru	Ashoka Siddapura	Hosuru	6	0	-	-	RO water used, WPP available nearest village
360	Chitradurga	Molakalmuru	Ashoka Siddapura	Machenahalli	4	0		Present	

Details of Fluoride affected sources & the remediation measures taken

District: YADGIR

S.No	Taluk	Gram Panchayath	Habitation Name	Village	Fluoride concentration in mg/l	BIS Permissible Limit	Fluoride contaminated source covered under MVS scheme(Specify scheme name)	working condition at present	Fluoride contaminated source covered under WPP(Yes/No)	Any Remarks
1	SHORAPUR	ALDAL	ALDAL	BANDERADODDI	Fluoride[1.62 Mg/L]	1.5	R.O.Plant	Not Working	Yes	
2	SHORAPUR	BASCHIHAL	KANHALLI	KANHALLI	Fluoride[2.35 Mg/L]	1.5	-			
3	SHORAPUR	BAILKUNTI	BAILKUNTI	BAILKUNTI	Fluoride[2.25 Mg/L]	1.5	R.O.Plant	Not working	Yes	
4	SHORAPUR	BAILKUNTI	HANAMSAGAR	HANAMSAGAR	Fluoride[1.70 Mg/L]	1.5	R.O.Plant	Not working	Yes	
5	SHORAPUR	DEVARGONAL	BARIMADDI	BARIMADDI	Fluoride[2.20 Mg/L]	1.5	R.O.Plant	Working	Yes	
6	SHORAPUR	DEVARGONAL	DEVARGONAL	DEVARGONAL	Fluoride[2.25 Mg/L]	1.5	R.O.Plant	Not working	Yes	
7	SHORAPUR	DEVIKERA	DEVIKERA	DEVIKERA	Fluoride[2.20 Mg/L]	1.5	R.O.Plant	Working	Yes	
8	SHORAPUR	DEVIKERA	RATHAL	RATHAL	Fluoride[2.25 Mg/L]	1.5	R.O.Plant	Working	Yes	
9	SHORAPUR	GEDDALMARI	GEDDALMARI	GEDDALMARI	Fluoride[1.70 Mg/L]	1.5	R.O.Plant	Not working	Yes	
10	SHORAPUR	GEDDALMARI	YADALBHAVI	YADALBHAVI	Fluoride[1.64 Mg/L]	1.5	R.O.Plant	Working	Yes	
11	SHORAPUR	HEBBAL(B)	HEBBAL(B)	HEBBAL(B)	Fluoride[2.55 Mg/L]	1.5	R.O.Plant	Working	Yes	
12	SHORAPUR	HEMNOOR	LINGDHALLI SH	LINGDHALLI SH	Fluoride[2.25 Mg/L]	1.5	R.O.Plant	Not working	Yes	
13	SHORAPUR	HUNASAGI	HUNASAGI	HUNASAGI	Fluoride[2.35 Mg/L]	1.5	R.O.Plant	Working	Yes	
14	SHORAPUR	KACHEKNOOR	CHICKNALLI	CHICKNALLI	Fluoride[2.20 Mg/L]	1.5	R.O.Plant	Working	Yes	
15	SHORAPUR	KACHEKNOOR	KACHEKNOOR	KACHEKNOOR	Fluoride[2.54 Mg/L]	1.5	R.O.Plant	Not working	Yes	
16	SHORAPUR	KAMNATGI	HOMBALKAL	HOMBALKAL	Fluoride[1.65 Mg/L]	1.5	R.O.Plant	Not working	Yes	
17	SHORAPUR	KAMNATGI	KANAGANDANHALLI	KANAGANDANHALLI	Fluoride[2.25 Mg/L]	1.5	R.O.Plant	Not working	Yes	
18	SHORAPUR	KARADIGI	KARADIGI	KARADIGAL CAMP	Fluoride[2.30 Mg/L]	1.5	R.O.Plant	Working	Yes	
19	SHORAPUR	KEMBHAVI	KEMBHAVI	KEMBHAVI	Fluoride[2.20 Mg/L]	1.5	R.O.Plant	Working	Yes	
20	SHORAPUR	KEMBHAVI	KEMBHAVI	SAI CAMP	Fluoride[1.62 Mg/L]	1.5	R.O.Plant	Working	Yes	
21	SHORAPUR	KHANAPUR SH	KHANAPUR SH	KHANAPUR SH	Fluoride[2.30 Mg/L]	1.5	R.O.Plant	Working	Yes	
22	SHORAPUR	MALLA(B)	HADANUR	HADANUR (SC COLONY)	Fluoride[1.62 Mg/L]	1.5	R.O.Plant	Working	Yes	
23	SHORAPUR	MALLA(B)	MALLA(K)	MALLA(K)	Fluoride[1.65 Mg/L]	1.5	R.O.Plant	Working	Yes	
24	SHORAPUR	MALNOOR	GULBAL	GULBAL	Fluoride[1.62 Mg/L]	1.5	R.O.Plant	Working	Yes	
25	SHORAPUR	MARDAL	YENNI WADAGERA	YENNI WADAGERA	Fluoride[2.45 Mg/L]	1.5	R.O.Plant	Not working	Yes	
26	SHORAPUR	MUDNOOR(K)	MUDNOOR(K)	MUDNOOR(K)	Fluoride[1.58 Mg/L]	1.5	-			

S.No	Taluk	Gram Panchayath	Habitation Name	Village	Fluoride concentration in mg/l	BIS Permissible Limit	Fluoride contaminated source covered under MVS scheme(Specify scheme name)	working condition at present	Fluoride contaminated source covered under WPP(Yes/No)	Any Remarks
27	SHORAPUR	MUDNOOR(K)	MUDNOOR(K)	MUDNOOR(K) TANDA	Fluoride(1.60 Mg/L)	1.5	-		-	
28	SHORAPUR	NARAYANPUR	JANGINAGADDI	JANGINAGADDI	Fluoride(1.65 Mg/L)	1.5	-		-	
29	SHORAPUR	NARAYANPUR	NARAYANPUR	NARAYANPUR	Fluoride(1.60 Mg/L)	1.5	R.O.Plant	Working	Yes	
30	SHORAPUR	PARSNALLI	MALALLI	MALALLI	Fluoride(1.99 Mg/L)	1.5	R.O.Plant	Working	Yes	
31	SHORAPUR	RAJANKOLLUR	RAJANKOLLUR	RAJANKOLLUR	Fluoride(2.50 Mg/L)	1.5	R.O.Plant	Not working	Yes	
32	SHORAPUR	VAKYAPUR	ADNAPUR	ADNAPUR	Fluoride(1.71 Mg/L)	1.5	R.O.Plant	Working	Yes	
33	SHORAPUR	YALAGI	YALAGI	YALAGI	Fluoride(2.03 Mg/L)	1.5	R.O.Plant	Working	Yes	
34	SHORAPUR	YEVOOR	DANDASOLAPUR	DANDASOLAPUR	Fluoride(1.55 Mg/L)	1.5	R.O.Plant	Not working	Yes	
35	SHORAPUR	YEVOOR	YEVOOR	MADDI TANDA	Fluoride(2.15 Mg/L)	1.5	R.O.Plant	Working	Yes	
36	SHORAPUR	YEVOOR	YEVOOR	YEVOOR	Fluoride(2.50 Mg/L)	1.5	R.O.Plant	Working	Yes	

Executive Engineer
Rural Drinking Water Supply & Sanitation
Division Yadgir

362	Chitradurga	Molakalmuru	Ashoka Siddapura	Ramsagara	3	0		Present	
363	Chitradurga	Molakalmuru	Ashoka Siddapura	Poppa	4	0		Present	
364	Chitradurga	Molakalmuru	Ashoka Siddapura	Veerapura	2	0	-	-	RO water used, WPP available nearest village
365	Chitradurga	Molakalmuru	B.g.kere	B.g.kere	6	0		Present	
366	Chitradurga	Molakalmuru	B.g.kere	Mathigarahalli	2	0		Present	
367	Chitradurga	Molakalmuru	B.g.kere	Mogalahalli	1	0		Present	
368	Chitradurga	Molakalmuru	B.g.kere	Suramanahalli	5	0		Present	
369	Chitradurga	Molakalmuru	Chikkerahally	Amarapli	1	0		Present	
370	Chitradurga	Molakalmuru	Chikkerahally	Bhairahalli	1	0		Present	
371	Chitradurga	Molakalmuru	Chikkerahally	Byrapura	1	0		Present	
372	Chitradurga	Molakalmuru	Chikkerahally	Chikkerahalli	2	0		Present	
373	Chitradurga	Molakalmuru	Devasamudra	Devasamudra	5	0		Present	
374	Chitradurga	Molakalmuru	Devasamudra	Ponnammanahalli	4	0		Present	
375	Chitradurga	Molakalmuru	Devasamudra	Thimmalapura	2	0		Present	
376	Chitradurga	Molakalmuru	Devasamudra	Uthal	4	0		Present	
377	Chitradurga	Molakalmuru	Devasamudra	Venkatapura	5	0		Present	
378	Chitradurga	Molakalmuru	Devasamudra	Vittalapura	5	0		Present	
379	Chitradurga	Molakalmuru	Hanagal	Bommalinganahalli	1	0		Present	
380	Chitradurga	Molakalmuru	Hanagal	Hanagal	2	0		Present	
381	Chitradurga	Molakalmuru	Hanagal	Kelagalahatti	1	0	7782913 BW	-	
382	Chitradurga	Molakalmuru	Hanagal	Megalahatti	1	0	7787715 BW	-	
383	Chitradurga	Molakalmuru	Harapanahally	Guddadahalli	2	0	7782889 BW	-	
384	Chitradurga	Molakalmuru	Hirekerehally	Hiresiremahalli	1	0		Present	
385	Chitradurga	Molakalmuru	Hirekerehally	Talavarahalli	3	0		Present	
386	Chitradurga	Molakalmuru	Jahagir Buddanahally	Jahagirbuddenahalli	1	0		Present	
387	Chitradurga	Molakalmuru	Jahagir Buddanahally	Jambalamaki	1	0		Present	
388	Chitradurga	Molakalmuru	Jahagir Buddanahally	Mallenarayu	2	0	7873419 BW	-	
389	Chitradurga	Molakalmuru	Jahagir Buddanahally	Nallareddikoodapura	1	0		Present	
390	Chitradurga	Molakalmuru	Jahagir Buddanahally	Pakkurthi	2	0		Present	
391	Chitradurga	Molakalmuru	Konasagara	Konsagara	4	0		Present	
392	Chitradurga	Molakalmuru	Konasagara	Nesrenahalli	3	0	7523131 BW	-	
393	Chitradurga	Molakalmuru	Kondlahally	Kondlahalli	4	0		Present	
394	Chitradurga	Molakalmuru	Nagasamudra	Nagasamudra	4	0		Present	
395	Chitradurga	Molakalmuru	Nerpahalli	Gundluru	4	0		Present	
396	Chitradurga	Molakalmuru	Neralahalli	Marlahalli	2	0		Present	
397	Chitradurga	Molakalmuru	Neralahalli	Nerlahalli	3	0	7782899 BW	-	
398	Chitradurga	Molakalmuru	Rampura	Kerekondapura	1	0		Present	
399	Chitradurga	Molakalmuru	Rampura	Rampura	4	0		Present	
400	Chitradurga	Molakalmuru	Rayapura	Ijenahalli	1	0	7819644 BW	-	
401	Chitradurga	Molakalmuru	Rayapura	MATADHAJOGIHALLI	1	0	5013885 BW	-	
402	Chitradurga	Molakalmuru	Rayapura	Rayapura	4	0		Present	
403	Chitradurga	Molakalmuru	Rayapura	Siddalahrikote	4	0		Present	
404	Chitradurga	Molakalmuru	Rayapura	Yerajinnenahalli	1	0	-	-	RO water used, WPP available nearest village
405	Chitradurga	Molakalmuru	Santhegudda	Yerrenahalli	5	0		Present	
406	Chitradurga	Molakalmuru	Santhegudda	B.Hanumapura	1	0		Present	
407	Chitradurga	Molakalmuru	Santhegudda	B.hanumanagudda	1	0		Present	
408	Chitradurga	Molakalmuru	Santhegudda	Bandravi	1	0		Present	
409	Chitradurga	Molakalmuru	Santhegudda	Kelaginakanive	2	0		Present	
410	Chitradurga	Molakalmuru	Santhegudda	Melinakanive	1	0		Present	
411	Chitradurga	Molakalmuru	Santhegudda	Santhegudda	1	0		Present	
412	Chitradurga	Molakalmuru	Thammenahally	Bommadevarahalli	4	0		Present	
[illegible]	[illegible]	[illegible]	[illegible]	Bommakkanahalli	1	0		Present	
[illegible]	[illegible]	[illegible]	[illegible]	Kanakuppe	1	0		Present	
[illegible]	[illegible]	[illegible]	[illegible]	Kavalihalli	1	0		Present	
[illegible]	[illegible]	[illegible]	[illegible]	Konapura	1	0	7575081 BW	-	
[illegible]	[illegible]	[illegible]	[illegible]	Muradi	1	0		Present	
[illegible]	[illegible]	[illegible]	[illegible]	Rampura	4	0		Present	
[illegible]	[illegible]	[illegible]	[illegible]	Siriyala	1	0		Present	
[illegible]	[illegible]	[illegible]	[illegible]	Thammenahalli	2	0		Present	
[illegible]	[illegible]	[illegible]	[illegible]	Chikkumbi	1	0		Present	
[illegible]	[illegible]	[illegible]	[illegible]	Dore Thammenahally	2	0	-	-	
[illegible]	[illegible]	[illegible]	[illegible]	Tumkuntahalli	2	0		Present	

Executive Engineer
R.D.W.S.& S.Dn,
Chitradurga.

Annexure – VII

Office of the Engineer In Chief
Public Health Engineering Department
Jal Bhawan, Banganga Square , Bhopal (M.P)

No. 5552 /EinC/JJM/PHED/2024 Bhopal, Dt. 12/6/2024

To,

Dr.S.K.Ambast
Chairman,
Central Ground Water Authority
Govt. of India
New Delhi- 110011

Sub:- **News item appearing in Hindustan dated 30-11-2023 titled " Arsenic found in groundwater in 25 States, Fluoride in 27 States –reg.**

Ref:- **(1) Your letter No CGWA-22/3/2024/CGWA/ dated 30-05-2024**
(2) This office letter No. 1263 /Dt. 08.02.2024

Sir,

(1) On the subject cited above, it is to submit that a detailed reply was submitted in which various remedial actions taken earlier are mentioned. It is also mentioned in the report that no excessive Fluoride found during 2023-24 . It was duly acknowledged in H'ble NGT order Dt. 15-02-2024 that report has been received from Madhya Pradesh. Arsenic has also not been found in the State. A copy of the reply submitted before H'ble National Green Tribunal, Principal Bench ,New Delhi is enclosed herewith for ready reference. Therefore, no action is pending from this State.

(2) It is to further submit that, as per H'ble NGT order dated 26.04.2024, 15 samples where occurrence of fluoride found above permissible limit "sampling carried out by the regional offices of CGWB". It is also not clear whether these are drinking water sources or not. No details of these 15 samples shared with this department. Hence ATR on this may please be sought from CGWB.

(3) The information about number of health cases reported due to consumption of groundwater having excessive fluoride has been sought from State Public Health & Family Welfare Department, but it is still awaited.

Submitted for further needful please.

Encl: As above

11.6.2024
(K.K.Songaria)
Engineer In Chief

Endt.No. 5552 /EinC/JJM/PHED/2024 Bhopal, Dt. 12/6/2024

Copy forwarded to :

1. Personal Assistant to the Secretary, Govt. of M.P, PHED, Mantralaya, Vallabh Bhawan Bhopal for favour of information, please.

11.6.2024
Engineer In Chief

BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL
PRINCIPAL BENCH, NEW DELHI

ORIGINAL APPLICATION NO. 728 OF 2023 (PB)

IN THE MATTER OF :

"IN RE: News item appearing in Hindustan dated 30.11.2023 titled "Arsenic found in groundwater in 25 States, fluoride in 27 States: Govt."

INDEX

S. No.	Particulars	Annexure	Page No.
1.	Reply on behalf of Respondent No. 13, State of Madhya Pradesh		02-05
2.	Affidavit		06
3.	List of districts is attached enumerating the habitations affected with excessive Fluoride content	R13/1	07
4.	Copy of J.J.M Portal of Ministry of Jal Shakti, Government of India	R13/2	08-09
5.	Copy of CGWB Report	R13/3	10-11
6.	Vakalatnama		12

Date: 12.02.2024
Place: Bhopal

R Bokde

COUNSEL FOR
STATE OF MADHYA PRADESH

BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL PRINCIPAL BENCH, NEW DELHI

ORIGINAL APPLICATION NO. 728 OF 2023 (PB)

IN THE MATTER OF :

"IN RE: News item appearing in Hindustan dated 30.11.2023 titled "Arsenic found in groundwater in 25 States, fluoride in 27 States: Govt."

REPLY ON BEHALF OF RESPONDENT NO. 13, STATE OF MADHYA PRADESH THROUGH CHIEF SECRETARY

IT IS MOST RESPECFULLY SUBMITTED HEREINUNDER :

1. That the present original application under Section 14 and 15 of National Green Tribunal Act, 2010 (hereinafter referred to as "NGT Act, 2010") has been registered by exercising suo moto jurisdiction based on the newspaper report published in Business Standard under the heading "Arsenic found in groundwater in 25 States, fluoride in 27 States: Govt.". The report alleges that Arsenic has been detected in ground water in parts of 230 Districts and 25 States and fluoride in 469 Districts and 27 States and statement to this effect was made by Union Minister of State for Jal Shakti and Rajya Sabha. It is also stated that ground water contamination reported by Central Ground Water Board (hereinafter referred to as „CGWB") is mostly geogenic in nature and does not show significant change over the years. The newspaper item states that studies indicate occurrence of arsenic and fluoride in ground water beyond permissible limits set by the Bureau of Indian

Standards for human consumption in isolated pockets of various States and Union Territories.

2. That the primary prerogative of the Public Health Engineering Department, Government of Madhya Pradesh is to ensure the supply of clean drinking water in the rural areas within the state. That the maximum permissible limit of fluoride in drinking water is 1.5 mg per litre and consumption of water with fluoride levels exceeding the said limit can be harmful to health. It is pertinent to note here that based on tests conducted in previous years, excessive fluoride was observed in the groundwater of 6746 hand pumps in the 27 districts of the state and that alternative arrangements for drinking water have already been made. The list of districts is attached enumerating the habitations affected with excessive Fluoride content is marked and annexed herewith as **Annexure R13/1**.

3. It is pertinent to note here that, post identifying the Fluoride affected water sources, the State Administration immediately sealed / capped the affected water sources and thereafter the residents of the area have been advised to obtain drinking water from other safe sources. That to ensure the availability of safe and clean drinking water.

4. It is further pertinent to note here that that State Administration taking cognizance of the issue of Fluoride in ground water, has sealed the aforementioned affected contaminated sources, and therefore as of 2023-2024

there are no active fluoride affected groundwater sources within the State of Madhya Pradesh. That a copy of J.J.M Portal of Ministry of Jal Shakti, Government of India is marked and annexed herewith as **Annexure R13/2**.

5. It is stated that in the year 2010, as per the survey conducted by the Central Ground Water Board (hereinafter referred as "**CGWB**"), wherein the Arsenic content was observed within the maximum permissible limit for 48 groundwater sources of 8 districts in the state namely; Betul, Burhanpur, Chhindwara, Dhar, Khandwa, Mandsaur, Neemuch, and Umaria. It is further pertinent to note here that in the year 2019-2020, another inspection / survey was undertaken by CGWB wherein it was further observed that the Arsenic content of the aforementioned Districts is within the permissible limit. A copy of CGWB Report is marked and annexed herewith as **Annexure R13/3.**

6. It is stated that at present there is neither excessive Fluoride nor excessive Arsenic has been observed in groundwater levels within the State of Madhya Pradesh.

7. It is submitted that the Government of Madhya Pradesh is conducting regular spot inspections on random groundwater sources within the State of Madhya Pradesh to ensure that the quality of groundwater is within the permissible limit and the same is not hazardous to the residents of Madhya Pradesh.

8. Hon'ble Tribunal may kindly be pleased to take the aforesaid reply on record. An Affidavit in support is filed herewith.

Date: 12.02.2024
Place: Bhopal

R Bobde

COUNSEL FOR
STATE OF MADHYA PRADESH

BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL
PRINCIPAL BENCH, NEW DELHI

ORIGINAL APPLICATION NO. 728 OF 2023 (PB)

IN THE MATTER OF :

"IN RE: News Item appearing in Hindustan dated 30.11.2023 titled "Arsenic found in groundwater in 25 States, fluoride in 27 States: Govt."

AFFIDAVIT

I, Sunil Kumar Chaturvedi, S/o Shri M.L. Chaturvedi, Aged about 53 years, presently working as Executive Engineer, Capital Project Division – 2, Public Health Engineering Department Bhopal, Madhya Pradesh, do hereby Solemnly affirm and state as under:

1. That I am Officer in Charge for State of Madhya Pradesh in the present matter, and am fully conversant with the facts of the case and hence competent to swear on this affidavit.
2. That I am filing the Reply in the aforementioned matter before the Hon'ble Tribunal the contents of which are true and correct and no material fact is concealed or suppressed.
3. That the contents of the Reply are true and correct and no material fact is concealed or suppressed.

Sunil Kumar Chaturvedi
S/o M.L. Chaturvedi
EE Capital Project Division II
Bhopal M.P.
12/2/24

DEPONENT

VERIFICATION

I, the above-named deponent do hereby verify that the contents of the affidavit above are true and correct.

Signed and verified on this 12th Day of February, 2024 at Bhopal (MP)

IDENTIFY BY ME

DEPONENT

Annexure R13/1

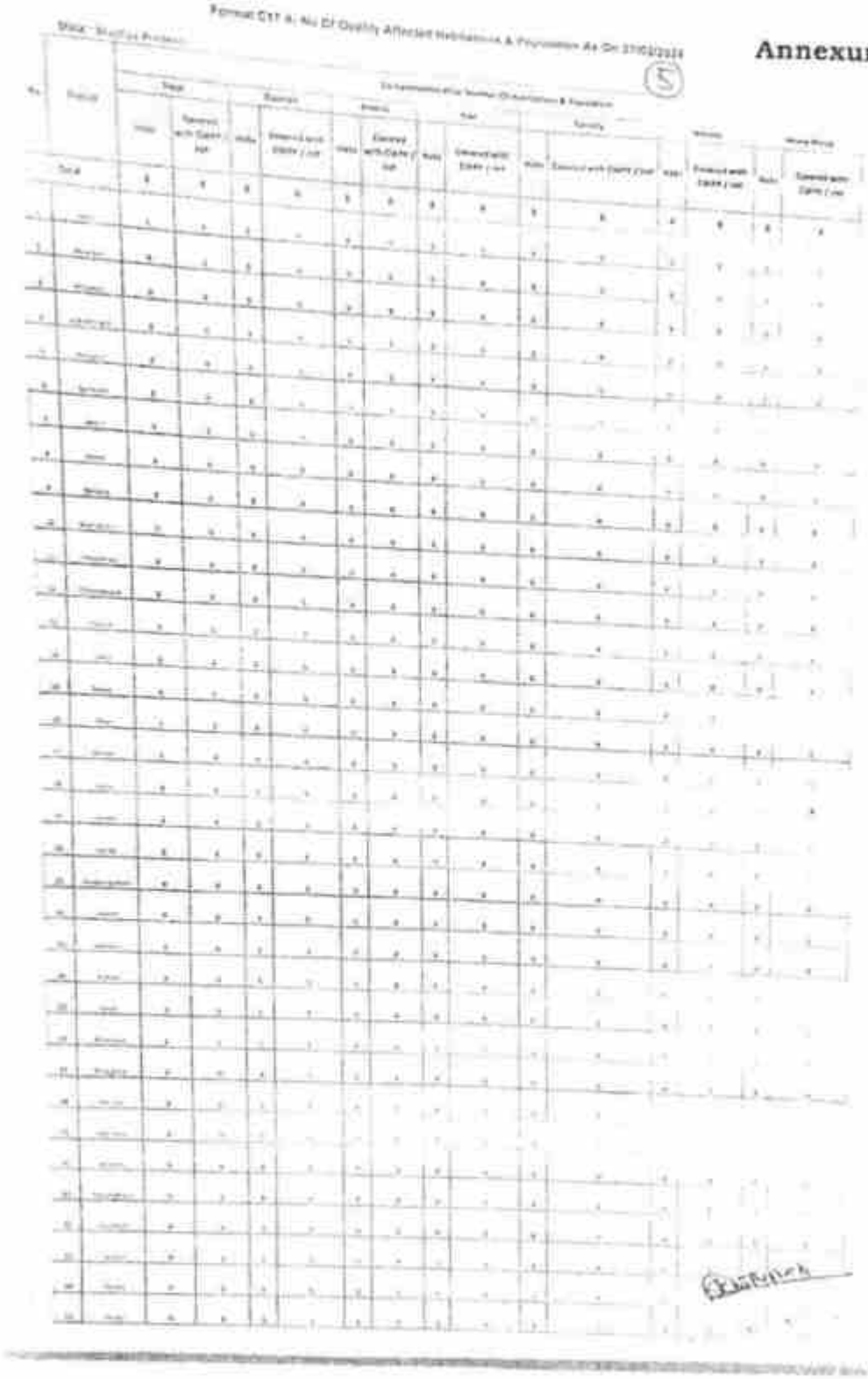
List of Fluoride affected habitations in Madhya Pradesh

S.No.	District	No. of affected habitations
1	2	3
1	Raisen	142
2	Sehore	176
3	Rajgarh	488
4	Vidisha	335
5	Betul	84
6	Indore	9
7	Dhar	1002
8	Jhabua	590
9	Alirajpur	554
10	Khargone	55
11	Ujjain	29
12	Ratlam	263
13	Neemuch	5
14	Dewas	8
15	Shajapur	122
16	Morena	6
17	Shivpuri	89
18	Datia	21
19	Guna	126
20	Sheopur	5
21	Sagar	74
22	Jabalpur	7
23	Balaghat	131
24	Mandla	645
25	Dindori	508
26	Seoni	809
27	Chhindwara	663
		6746
		27 Distt.

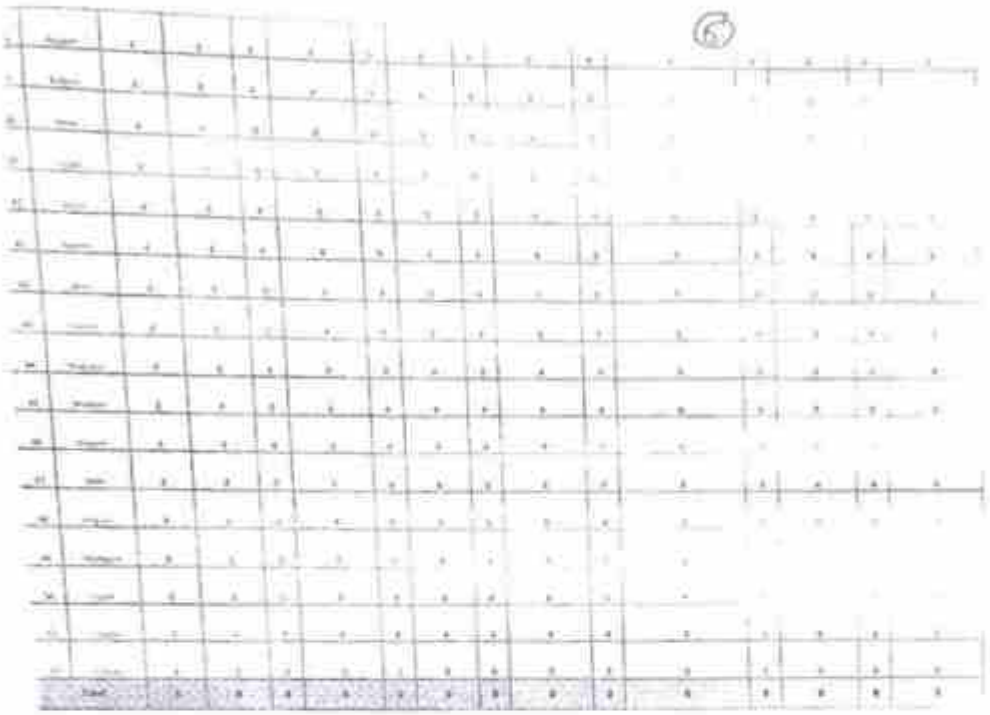
Superintending Engineer
Circle Rajgarh & Div. No.2
Rajgarh (Distt.- Rajgarh)

8

Annexure R13/2



9



Executive Engineer
Irrigation Project Div. No.-I
P.H.E. Deptt. BHOPAL

Annexure R13/3

Arsenic Concentration in NHS 2019-20					
S.No	District	Block	Location	Arsenic (ppb) BIS Limit (10 ppb)	Arsenic (ppm) BIS Limit (0.01 ppm)
1	Betul	Betul	Betul	0.326	0.00032607
2	Betul	Multhai	Bhoori	0.093	0.00009329
3	Betul	Chicholi	Chhapraha	0.240	0.00024566
4	Betul	Multhai	Ghatpipaliya	0.082	0.00008191
5	Betul	Chicholi	Kherachhapa	0.071	0.00007053
6	Betul	Shahpur	Kodaiyakot	0.095	0.00009476
7	Betul	Bhainsdehi	Kodia	0.036	0.00003638
8	Betul	Multai	Kumbhari	0.089	0.00008852
9	Betul	Chicholi	Kherkhedakala	0.079	0.00007861
10	Betul	Bhainsdehi	Kotal Kalan	0.119	0.00011826
11	Betul	Prabhat Patan	Mandi Nala	0.167	0.00016672
12	Betul	Multai	Multaipar	0.805	0.00080487
13	Betul	Chicholi	Nangpur	0.035	0.00003455
14	Betul	Prabhat Patan	Pathai	0.323	0.00032313
15	Betul	Bhainsdehi	Sarwal Middle	0.165	0.00016452
16	Betul	Chandagarh	Sarni	0.017	0.00001693
17	Betul	Shahpur	Shahpur	0.041	0.00004079
18	Buchanpur	Buchanpur	Vachaspatinagar	0.809	0.00080811
19	Burhanpur	Khaknar	Naya Nagar	0.911	0.00091097
20	Burhanpur	Burhanpur	Rahatkhapri	0.331	0.00033124
21	Burhanpur	Khaknar	Kathiwada	0.295	0.00029516
22	Burhanpur	Khaknar	Khaknar	0.216	0.00021645
23	Burhanpur	Khaknar	Ordala	0.100	0.00010035
24	Chhatarpur	Bijawar	Ajaigarh	0.001	0.00000050
25	Chhatarpur	Chandla	Bangawan	0.106	0.00010601
26	Chhatarpur	Bijawar	Bijawar	0.110	0.00010981
27	Chhatarpur	Chandla	Chandla	0.350	0.00035012
28	Chhatarpur	Laundi	Chhatri	0.041	0.00004199
29	Chhatarpur	Nowgaon	Chhatrkhola	0.210	0.00021014
30	Chhatarpur	Rajnagar	Dhanaula	0.054	0.00005410
31	Chhatarpur	Chhatarpur	Gaurihar Rd	0.104	0.00010291
32	Chhatarpur	Harpalpur	Kachhar	0.033	0.00003326
33	Chhatarpur	Rajnagar	Kalyanpur	0.002	0.00000188
34	Chhatarpur	Bijawar	Khajuraho Rd	0.162	0.00016187
35	Chhatarpur	Laundi	Kuchalia	0.007	0.00000705
36	Chhatarpur	Nowgaon	Nowgaon	0.166	0.00016566
37	Chhatarpur	Rajnagar	Pali	0.109	0.00010893
38	Chhatarpur	Rajnagar	Rajnagar	0.250	0.00025019
39	Chhatarpur	Rajnagar	Rajnagar Rural	0.456	0.00045648
40	Chhatarpur	Rajnagar	Rora	0.407	0.00040787
41	Chhatarpur	Laundi	Sarai	0.150	0.00015040
42	Chhatarpur	Nowgaon	Sarai	0.191	0.00019121
43	Chhatarpur	Rajnagar	Sarai	0.326	0.00032593
44	Chhatarpur	Rajnagar	Sarai	0.113	0.00011323
45	Chhatarpur	Rajnagar	Sarai	0.166	0.00016684
46	Chhatarpur	Rajnagar	Sarai	0.127	0.00012784

Ques Report

12

BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL

PRINCIPAL BENCH, NEW DELHI

ORIGINAL APPLICATION NO. 728 OF 2023 (PB)

IN THE MATTER OF :

"IN RE: News item appearing in Hindustan dated 30.11.2023 titled "Arsenic found in groundwater in 25 States, fluoride in 27 States: Govt."

I/ We/ Appellant/ Claimant/ Petitioner or Defendant/ Respondent/ non-applicant named below do hereby appoint, engage and authorize advocate(s) named below to appear, act and plead in aforesaid case / proceedings, which shall include applications for restoration, setting aside of ex-parte orders, corrections, modifications, review and recall of orders passed in these proceedings, in this Court or in any other Court in which the same may be tried / heard / proceeded with and also in the appellate, revisional or executing Court in respect of proceedings arising from this case / proceedings as per agreed terms and conditions and authorize him / them to sign and file pleadings, appeals, cross objections, petitions, applications, affidavits or other documents as may be deemed necessary or proper for the prosecution / defence of the said case in all its stage and also agree to ratify and confirm acts done by him / them as if done by me / us.

In witness whereof I / we do hereunto set my / our hand to these presents, the contents of which have been **duly** understood by me / us, this.

Particulars (in block letters) of each party executing Vakalatnama

Name & Father's / Husband's Name	Registered Address	E-mail Address (if any)	Telephone Number (if any)	Status in the Case	Full Signature / Thumb Impression
(1)	(2)	(3)	(4)	(5)	(6)
Sunil Kumar Chaturvedi, S/o Shri M.L. Chaturvedi, Aged about 53 years, presently working as Executive Engineer, Capital Project Division – 2, Public Health Engineering Department Bhopal, Madhya Pradesh			98262 - 14495	Respondent No. 13	

Particulars (in block letters) of each advocate Accepting Vakalatnama

S.N.	Names	Address for service & Email Add. (if any)	Telephone No. (if any)	Full Sign.
1	Rukmani Bobde	D-366, Ground Floor, Defence Colony, Block D, New Delhi 110024		

*Insert text whichever is not applicable

Annexure - VIII

BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL, NEW DELHI

Original Application no. 728 of 2023

In re: News Item appearing in Hindustan dated 30.11.2023 titled "Arsenic found in groundwater in 25 states, fluoride in 27 states: Government.

Reply of Additional Secretary to Government of Punjab, Department of Science, Technology and Environment on behalf of respondent no.16 i.e. State of Punjab through Chief Secretary.

Respectfully showeth

1. That briefly submitted, the above-mentioned Original Application no.728 of 2023 has been registered by the Hon'ble National Green Tribunal exercising suo moto jurisdiction based on the newspaper report published in Business Standard under the heading "Arsenic found in groundwater in 25 States, fluoride in 27 States: Government". The report says that Arsenic has been detected in ground water in parts of 230 Districts and 25 States and fluoride in 469 Districts and 27 States and statement to this effect was made by Union Minister of State for Jal Shakti and Rajya Sabha. It is also stated that ground water contamination reported by Central Ground Water Board (hereinafter referred to as „CGWB") is mostly geogenic in nature and does not show significant change over the years. The newspaper item states that studies indicate occurrence of arsenic and fluoride in ground water beyond permissible limits set by the Bureau of Indian Standards for human consumption in isolated pockets of various States and Union Territories.

2. That after consideration of the matter, the Hon'ble Tribunal vide order dated 20.12.2023 was pleased to implead all the States including the State of Punjab as respondents in the case. The State

of Punjab has been impleaded as respondent no.16 in the case through Chief Secretary, Punjab. The Hon'ble Tribunal was further pleased to issue notice to all the States including the State of Punjab vide the said order dated 20.12.2023 requiring them to file response.

3. That the undersigned is working as Additional Secretary to Government of Punjab, Department of Science, Technology and Environment and as such is conversant with the facts of the case and is authorized and competent to file the present reply on behalf of the State of Punjab i.e. respondent no.16.

4. That in compliance to order dated 20.12.2023 of the Hon'ble National Green Tribunal, it is submitted that the Punjab Pollution Control Board (PPCB) has been carrying out monitoring at 43 groundwater locations under the National Water Monitoring Programme (NWMP) of the Central Pollution Control Board across the State of Punjab covering the districts of Patiala, Jalandhar, Ludhiana, Amritsar, Hoshiarpur, Fatehgarh Sahib, Faridkot, Bathinda, Batala (Gurdaspur), SAS Nagar. These locations are subject to biannual monitoring, specifically in April and October.

5. That as per the report submitted by the Central Ground Water Authority before the Hon'ble Tribunal in advance notice, arsenic has been shown to be recorded in 17 districts of the State of Punjab namely Mansa, Amritsar, Bhatinda, Fazilka, Ferozpur, Gurdaspur, Hoshiarpur, Kapurthala, Ropar, Faridkot, Nawashahar, Sangrur, TaranTaran, SAS Nagar, Pathankot, Patiala, Chandigarh.

The ground water monitoring carried out by the Punjab Pollution Control Board across 07 districts of the State of Punjab has not revealed the presence of arsenic. Scrutiny of the data confirms that none of the samples from the 07 districts of Patiala, Hoshiarpur, Ropar, Amritsar, Bathinda, Batala (Gurdaspur), SAS Nagar

breached the permissible limits set by the Bureau of Indian standards (BIS) for arsenic. The monitoring in the remaining 10 districts of Mansa, Fazilka, Ferozepur, Kapurthala, Faridkot, Nawanshahar, Sangrur, Tarn Taran and Pathankot will be carried out as per the frequency of National Water Monitoring Programme (NWMP). It is relevant to mention here that Chandigarh is falling in the area of Union Territory of Chandigarh.

6. That the report of the Central Ground Water Authority further disclosed the occurrence of fluoride in ground water in 19 districts of the State of Punjab namely Amritsar, Barnala, Bhatinda, Fazilka, Faridkot, Fatehgarh Sahib, Firozpur, Gurdaspur, Jalandhar, Ludhiana, Mansa, Moga, Muktsar, Pathankot, Patiala, Ropar, Sangrur, SAS Nagar (Mohali), Tarn-Taran.

The ground water monitoring carried out by the Punjab Pollution Control Board across 10 districts of the State of Punjab has revealed the presence of fluoride in Districts of Bathinda and Muktsar Sahib beyond the permissible limits 1.5mg/l (absence of alternate source drinking water) and the same is due to geogenic reasons. The monitoring in remaining 09 districts of Tarn Taran, Barnala, Fazilka, Faridkot, Ferozepur, Mansa, Moga, Pathankot, Sangrur will be carried out as per the frequency of National Water Monitoring Programme (NWMP).

7. That it is pertinent to mention here that primarily the Central Ground Water Authority (CGWA) constituted by the Central Government in exercise of the powers conferred under the Environment (Protection) Act, 1986 is the statutory authority responsible for the regulation, control, management and development of ground water in the country and to issue necessary regulatory directions for the purpose. It is relevant to mention here that the drinking water supply arrangements in the State of Punjab are being regulated and monitored by the Department of Punjab Water Supply and Sanitation Board (PWSSB).

8. That the reply in compliance to order dated 20.12.2023 is submitted on behalf of the State of Punjab for kind perusal and consideration of the Hon'ble National Green Tribunal.

Date: 12.2.24

Place: Chandigarh.

Additional Secretary to Government of Punjab
Department of Science, Technology and Environment

on behalf of respondent no.16
i.e. State of Punjab through Chief Secretary

Annexure - IX

By Speed Post/
E-mail

Municipal Administration and
Water Supply (WS.1) Department,
Secretariat, Chennai – 600 009.

Letter No.756/WS.1/2024-3, dated: 06.04.2024

From
Dr. D. Karthikeyan, I.A.S.,
Principal Secretary to Government.

To
The Chairman,
Central Ground Water Authority,
Ministry of Jal Shakti,
Department of Water Resources, RD & GR,
Government of India,
New Delhi – 110 001. (W.e)

Sir,

Sub: National Green Tribunal – Original Application No.728/2023 – News Item titled "Arsenic found in groundwater in 25 states, fluoride in 27 states" published in Hindustan, dated 30.11.2023 – Regarding.

Ref:
1. From the Consultant (Judicial) National Green Tribunal, Notice in Original Application No.728/2023. Dated 30.12.2023.
2. Order of National Green Tribunal (PB) in O.A.No.728/2023, dated 15.02.2024.
3. This Government letter No.756/WS1/2024-2, Municipal Administration and Water Supply Department, dated 17.02.2024.
4. Your letter No.CGWA-22/3/2024-CGWA-94, dated 08.03.2024.

I am to refer your letter fourth cited and to inform that with reference to the direction of National Green Tribunal (PB) in O.A.No.728/2023 second cited, this State filed a Status Report before the National Green Tribunal (PB) vide the reference third cited.

2. A copy of the Status Report filed by this State is enclosed for reference.

Yours faithfully,

08.4.24

for Principal Secretary to Government

8/4/2024

-381

BEFORE THE NATIONAL GREEN TRIBUNAL
PRINCIPAL BENCH, AT NEW DELHI
ORIGINAL APPLICATION No.728 OF 2023

IN THE MATTER OF:
In re: News item appearing in Hindustan dated.30.11.2023 titled "Arsenic found in groundwater in 25 States, fluoride in 27 States".

STATUS REPORT FILED ON BEHALF OF THE 18th RESPONDENT CHIEF SECRETARY TO GOVERNMENT, GOVERNMENT OF TAMIL NADU

I, D. Karthikeyan, S/o. Thiru. S. Doss aged about 56 years, presently working as Principal Secretary to Government, Municipal Administration and Water Supply Department, Government of Tamil Nadu, do hereby solemnly affirm and sincerely state as follows:-

I submit that I have been working as Principal Secretary to Government, Municipal Administration and Water Supply Department, Government of Tamil Nadu since July 2023 and in my official capacity and as verifiable from official records maintained in Municipal Administration and Water Supply Department, I hereby file the status report before the Hon'ble National Green Tribunal (Principal Bench), New Delhi, on behalf of the Chief Secretary to Government, Government of Tamil Nadu.

2. I respectfully submit that while hearing the O.A No.728/ 2023 on 20.12.2023, the Hon'ble National Green Tribunal, New Delhi has directed as follows:-

"8. Let Notices be issued to all the above respondents. Response may be filed by above respondents within one month

after receipt of notice, by e-mail at judicial-ngt@gov.in preferably in the form of searchable PDF/OCR Support PDF and not inform of image PDF.

9. List this matter **on 15.02.2024**".

3. I respectfully submit that pursuant to the above directions of this Hon'ble Tribunal, I submit the status report on the issue of "Arsenic found in ground water in 25 States, fluoride in 27 States" relating to the State of Tamil Nadu as detailed below:-

In Tamil Nadu as per the Central Ground Water Board Water Quality map and reports, there is no arsenic present in the Ground water.

Further in the National Rural Drinking Water Programme/ Jal Jeenvan Mission Programme, the water quality samples were tested in the district water testing laboratories, Tamil Nadu Water and Drainage Board from the year 2012 to 2024. From the results of water samples, it is confirmed that **there is no arsenic presence in all the tested Water samples.**

Moreover, there are 5 blocks in Dharmapuri and 8 blocks in Krishnagiri district affected by fluoride contamination in the Ground water.

Details of Fluoride affected habitations:

A. Dharmapuri

Dharmapuri Block	- 1 Panchayat	(1 habitation)
Harur Block	- 6 Panchayats	(6 habitations)
Morappur Block	- 1 Panchayat	(1 habitation)
Palacode Block	- 1 Panchayat	(1 habitation)
Pappireddipatty Block	- 1 Panchayat	(1 habitation)
Total (5 Block)	**- 10 Panchayat**	**(10 habitation)**

B. Krishnagiri District

Bargur Block	-	12 Panchayats (12 habitations)
Hosur Block	-	1 Panchayas (1 habitation)
Kaveripattinam Block	-	19 Panchayats (19 habitations)
Kelamangalam Block	-	6 Panchayats (6 habitations)
Krishnagiri Block	-	21 Panchayats (21 habitations)
Shoolagiri Block	-	19 Panchayats (19 habitations)
Uthangarai Block	-	1 Panchayat (1 habitation)
Veppanapalli	-	20 Panchayats (20 habitations)
Total (8 Block)	-	**99 Panchayats (99 habitations)**

The above fluoride affected habitations are being supplemented by Hogenakkal water supply and Fluorosis mitigation project with river Cauvery as source, where supply of treated potable water to the tune of 30 lpcd in rural areas and 50 lpcd in urban areas, is ensured since 2013.

4. In the above circumstances, it is prayed that the Hon'ble Tribunal may be pleased to take the status report on record.

3/3

PRINCIPAL SECRETARY TO GOVERNMENT,
MUNICIPAL ADMINISTRATION AND WATER
SUPPLY DEPARTMENT,
GOVERNMENT OF TAMIL NADU.

Annexure - X

कार्यालय – 2678078
– 2672404
फैक्स : 0135–2672337
ईमेल : upsvnn@gmail.com

उत्तराखण्ड पेयजल संसाधन विकास एंव निर्माण निगम

प्रधान कार्यालय 11–मोहिनी रोड, देहरादून

पत्रांक. 203 /जल जीवन मिशन–अनु0जेजेएम0सामान्य/ 96 दिनांक. 22/03/2024

ई–मेल द्वारा

27 MAR 2024

Letter Receive No. 6752

सेवा में,

मुख्य अभियन्ता,
राज्य जल एवं स्वच्छता मिशन,
75/38–इन्दर रोड, देहरादून (उत्तराखण्ड)।

विषय :केन्द्रीय भू–जल बोर्ड के अनुसार उत्तराखण्ड राज्य के भू–जल में आर्सेनिक/एवं फ्लोराइड की मात्रा भारतीय मानक ब्यूरो द्वारा निर्धारित अनुमेय सीमा के अधिक होने विषयक।

महोदय,

उपरोक्त विषयक प्रधान कार्यालय के पत्रांक–91/जे.जे.एम. अनु0–जेजेएम सामान्य/38, दिनांक 09.02.2024 के संदर्भ में अवगत कराना है, कि केन्द्रीय भू–जल बोर्ड द्वारा दी गयी सूची के अनुसार भू–जल में आर्सेनिक एवं फ्लोराइड की मात्रा की जांच हेतु पेयजल निगम के क्षेत्रान्तर्गत जनपद हरिद्वार, ऊधमसिंह नगर एवं देहरादून के कुल 29 स्थलों/ग्रामों के जल नमूनों की परीक्षण रिपोर्ट का विवरण निम्नानुसार प्रेषित है :–

क्र0	जनपद	पत्रांक	ग्राम/स्थल की संख्या	जल परीक्षण रिपोर्ट की संख्या
1	हरिद्वार	171/जल जीवन मिशन अनु0–जेजेएम सामान्य /70, दिनांक 15.03.2024	11	22
2	ऊधमसिंह नगर	188/जल जीवन मिशन अनु0–जेजेएम सामान्य /82, दिनांक 19.03.2024	11	21
3.	देहरादून	–	7	7
		कुल योग	29	50

उल्लेखनीय है, जनपद ऊधमसिंह नगर के अन्तर्गत चिन्हित 11 स्थलों/ग्रामों के सापेक्ष कार्यालय अधिशासी अभियन्ता, नि0शा0, खटीमा ने अपने पत्रांक–495/जल परीक्षण/29, दिनांक 22.03.2024 द्वारा अवगत कराया है, कि क्रमशः खटीमा व सितारगंज स्थल हेतु उपलब्ध कराये कॉर्डिनेट के अनुरूप वर्तमान में स्थलीय सर्वेक्षण में कोई भी हैण्ड पम्प नहीं पाया गया है। अतः शेष जनपद देहरादून के 7 स्थलों/ग्रामों के जल परीक्षण रिपोर्ट मा0 राष्ट्रीय हरित प्राधिकरण, भारत सरकार, नई दिल्ली में योजित मूल आवदेन संख्या–728/2023 के अनुपालन हेतु आपको आवश्यक कार्यवाही हेतु संलग्न कर प्रेषित की जा रही है। सुलभ संदर्भ हेतु स्थलवार विवरण संलग्न है।

संलग्नक–उपरोक्तानुसार

भवदीय,

(संजय सिंह)
मुख्य अभियन्ता (मु0)

पृ0सं0 एवं दिनांक तदैव :–

1. प्रतिलिपि मुख्य वैयक्तिक अधिकारी, प्रबन्ध निदेशक, प्रधान कार्यालय, उत्तराखण्ड पेयजल निगम, देहरादून को प्रबन्ध निदेशक महोदय के संज्ञानार्थ।
2. प्रतिलिपि निम्नलिखित को सूचनार्थ एवं आवश्यक कार्यवाही हेतु प्रेषित :–
   (i) मुख्य अभियन्ता (गढवाल/कुमाऊँ), उत्तराखण्ड पेयजल निगम, पौडी/हल्द्वानी।
   (ii) महाप्रबन्धक (अप्रै0/नियो0), प्रधान कार्यालय, उत्तराखण्ड पेयजल निगम, देहरादून।
   (iii) अधीक्षण अभियन्ता, निर्माण मण्डल, उत्तराखण्ड पेयजल निगम, हरिद्वार/ऊधमसिंह नगर/देहरादून।
   (iv) अधिशासी अभियन्ता, निर्माण शाखा, उत्तराखण्ड पेयजल निगम, हरिद्वार/खटीमा/काशीपुर/ऊधमसिंह नगर।
   (v) अधिशासी अभियन्ता, यांत्रिक शाखा, उत्तराखण्ड पेयजल निगम, देहरादून।

PMT-2

मुख्य अभियन्ता (मु0)

Status of testing report of Arsenic/ Fluoride for complaince of Hon'ble NGT order No. 728/2023

S. No	District	Name of Division	Block	Location	Types of Structure	Nos of Testing Report	Testing report sent by letter no
1	Dehradun	Mech. Div. Dehradun	Sahaspur	Redapur	HP	1	
2	Dehradun	Mech. Div. Dehradun	Sahaspur	Nanda Ki Chowki	HP	1	
3	Dehradun	Mech. Div. Dehradun	Doiwala	Duggiawala	HP	1	
4	Dehradun	Mech. Div. Dehradun	Doiwala	Lal Tappar	HP	1	
5	Dehradun	Mech. Div. Dehradun	Raipur	Maldeota	HP	1	
6	Dehradun	Mech. Div. Dehradun	Vikas Nagar	Judli	HP	1	
7	Dehradun	Mech. Div. Dehradun	Vikas Nagar	Vikas Nagar	HP	1	
8	Haridwar	CD Haridwar	Bhagwanpur	Chudiala	HP	2	171/जेजेएम अनु0–जेजेएम सामान्य/70, दिनांक 15.03.2024
9	Haridwar	CD Haridwar	Bhagwanpur	Bahabalpur	HP	2	
10	Haridwar	CD Haridwar	Bahadrabad	Bandarjud	HP	2	
11	Haridwar	CD Haridwar	Bahadrabad	Bahadrabad	HP	2	
12	Haridwar	CD Haridwar	Bahadrabad	Bhogpur	HP	2	
13	Haridwar	CD Haridwar	Khanpur	Goverdhanpur	HP	2	
14	Haridwar	CD Haridwar	Khanpur	Dallawala	HP	2	
15	Haridwar	CD Haridwar	Khanpur	Khanpur	HP	2	
16	Haridwar	CD Haridwar	Laksar	Laksar	HP	2	
17	Haridwar	CD Haridwar	Laksar	Bhikainpur	HP	2	
18	Haridwar	CD Haridwar	Roorkee	Mohammadpur	HP	2	
19	USNagar	PIU Kashipur	Kashipur	Dhanauri Patti	HP	3	188/जेजेएम–सामान्य/82, दिनांक 19.03.2024
20	USNagar	PIU Kashipur	Kashipur	Durgapur	HP	2	
21	USNagar	PIU Kashipur	Kashipur	Shand Khera	HP	3	
22	USNagar	PIU Kashipur	Jaspur	Jaspur	HP	2	
23	USNagar	PIU Kashipur	Jaspur	Bichai	HP	1	
24	USNagar	CD Khatima	Sitarganj	Bidora	HP	1	
25	USNagar	CD Khatima	Sitarganj	Sitarganj	HP	According to coordinates hand pump does not exist.	
26	USNagar	CD Khatima	Khatima	Kanchanpuri (Majhola)	HP	1	
27	USNagar	CD Khatima	Khatima	Khatima	HP	According to coordinates hand pump does not exist	
28	USNagar	CD Khatima	Khatima	Barianjariya	HP	2	
29	USNagar	CD U S Nagar	Rudrapur	Kichha	HP	6	
				TOTAL		50	

ECON LABORATORY & CONSULTANCY

(ISO: 9001, 14001& 45001 Certified & MOEF & CC Recognized Laboratory)

Vill.: Khabarwala, P.O.: Jaintanwala, Near Garhi Cantt., Dehradun, Uttarakhand - 248003

TEST REPORT

Name & Address of Client:		ULR No:	TC550724000001502F
OFFICE OF EXECUTIVE ENGINEER MECHANICAL DIVISION Uttrakhand Peyjal Nigam Dehradun.		Reporting Date:	16/03/2024
		Date of Sampling:	12/03/2024
		Receipt Date:	12/03/2024
		Period of Testing:	13/03/2024 -16 /03/2024
		Sample Collected By:	Lab Representative
		Sampling Type:	Grab
Sample Description:	Drinking Water	Preservation :	Refrigerated
		Format No:	7.8-F-01
Sampling Protocol:	ECON/STP/WATER	Party Reference No:	469/221/04 Dated:29.02.2024
Sample Quantity:	1 Ltr.	Parameter Required:	As Per Work Order

TEST RESULTS

S. No.	Parameter	Sampling Location	Block	Latitude	Longitude	Result	Limit as per IS:10500:2012		Test Method
							Acceptable	Permissible	
1.	Fluoride,mg/l	Redapur	Sahaspur	30.40583	77.86333	BDL(DL: 0.2)	1.0	1.5	APHA 23rd Ed.2017, 4500 F
2.	Fluoride,mg/l	Duggiawala	Doiwala	30.17222	78.23361	BDL(DL: 0.2)	1.0	1.5	APHA 23rd Ed.2017, 4500 F
3.	Fluoride,mg/l	Maldeota	Raipur	30.34389	78.12028	BDL(DL: 0.2)	1.0	1.5	APHA 23rd Ed.2017, 4500 F
4.	Fluoride,mg/l	Vikasnagar	Vikasnagar	30.47778	77.78833	BDL(DL: 0.2)	1.0	1.5	APHA 23rd Ed.2017, 4500 F
5.	Fluoride,mg/l	Lal Tappar	Doiwala	30.11972	78.17389	BDL(DL: 0.2)	1.0	1.5	APHA 23rd Ed.2017, 4500 F
6.	Fluoride,mg/l	Nanda Ki Chowki	Sahaspur	30.34667	77.94667	BDL(DL: 0.2)	1.0	1.5	APHA 23rd Ed.2017, 4500 F
7.	Fluoride,mg/l	Judli	Vikasnagar	30.42389	77.69556	BDL(DL: 0.2)	1.0	1.5	APHA 23rd Ed.2017, 4500 F

BDL: Below Detection Limit, DL: Detection Limit

End of Report

CHECKED BY :

AUTHORISED SIGNATORY :

NOTE : 1. The results listed only to the tested sample & applicable parameters.
2. Total liabilities of our lab will be restricted to the invoice amount only.
3. The sample will be destroyed after retention time unless otherwise specified.
4. This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law without prior permission

Scanned with CamScanner

ECON LABORATORY & CONSULTANCY

(ISO: 9001, 14001 & 45001 Certified & MOEF & CC Recognized Laboratory)

Vill.: Khabarwala, P.O.: Jaintanwala, Near Garhi Cantt., Dehradun, Uttarakhand - 248003

TEST REPORT

Name & Address of Client:		ULR No:	TC550724000001503F
OFFICE OF EXECUTIVE ENGINEER MECHANICAL DIVISION Uttrakhand Peyjal Nigam Dehradun.		Reporting Date:	16/03/2024
		Date of Sampling:	12/03/2024
		Receipt Date:	12/03/2024
		Period of Testing:	13/03/2024 -16 /03/2024
		Sample Collected By:	Lab Representative
		Sampling Type:	Grab
Sample Description:	Drinking Water	Preservation :	Refrigerated
		Format No:	7.8-F-01
Sampling Protocol:	ECON/STP/WATER	Party Reference No:	469/221/04 Dated:29.02.2024
Sample Quantity:	1 Ltr.	Parameter Required:	As Per Work Order

TEST RESULTS

S. No.	Parameter	Sampling Location	Block	Latitude	Longitude	Result	Limit as per IS:10500:2012		Test Method
							Acceptable	Permissible	
1.	Arsenic,mg/l	Redapur	Sahaspur	30.40583	77.86333	BDL(DL:0.001)	0.01	No Relaxation	IS 3025 (Part-37) 1988, RA2019
2.	Arsenic,mg/l	Duggiawala	Doiwala	30.17222	78.23361	BDL(DL:0.001)	0.01	No Relaxation	IS 3025 (Part-37) 1988, RA2019
3.	Arsenic,mg/l	Maldeota	Raipur	30.34389	78.12028	BDL(DL:0.001)	0.01	No Relaxation	IS 3025 (Part-37) 1988, RA2019
4.	Arsenic,mg/l	Vikasnagar	Vikasnagar	30.47778	77.78833	BDL(DL:0.001)	0.01	No Relaxation	IS 3025 (Part-37) 1988, RA2019
5.	Arsenic,mg/l	Lal Tappar	Doiwala	30.11972	78.17389	BDL(DL:0.001)	0.01	No Relaxation	IS 3025 (Part-37) 1988, RA2019
6.	Arsenic,mg/l	Nanda Ki Chowki	Sahaspur	30.34667	77.94667	BDL(DL:0.001)	0.01	No Relaxation	IS 3025 (Part-37) 1988, RA2019
7.	Arsenic,mg/l	Judli	Vikasnagar	30.42389	77.69556	BDL(DL:0.001)	0.01	No Relaxation	IS 3025 (Part-37) 1988, RA2019

End of Report

सहोदय कृपया उपरोक्त नमूनों (Arsenic Test results)
सहोदय के अवलोकनार्थ | आवश्यक प्रयोजनार्थ
सादर प्रेषित है

CHECKED BY :

AUTHORISED SIGNATORY :

NOTE : 1. The results listed only to the tested sample & applicable parameters.
2. Total liabilities of our lab will be restricted to the invoice amount only.
3. The sample will be destroyed after retention time unless otherwise specified.
4. This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law without prior permission

Scanned with CamScanner

दूरभाष- कार्यालय 05943-253646
E-Mail ID- eecdkhatima@gmail.com

कार्यालय अधिशासी अभियन्ता, निर्माण शाखा

उत्तराखण्ड पेयजल संसाधन विकास एवं निर्माण निगम, खटीमा
पीलीभीत रोड, निकट इलाहाबाद बैंक, खटीमा (ऊधमसिंह नगर)।

पत्रांक 195 / Gen परीक्षण / 23 दिनांक- 22/3/2024

सेवा में,

मुख्य अभियन्ता (मु0),
प्रधान कार्यालय,
उत्तराखण्ड पेयजल निगम,
देहरादून।

प्रेषण का माध्यम	
ई-मेल द्वारा	✓
डाक द्वारा	

विषयः- केन्द्रीय भू-जल बोर्ड के अनुसार उत्तराखण्ड राज्य के भू-जल में आर्सेनिक/एवं फ्लोराइड की मात्रा भारतीय मानक ब्यूरो द्वारा निर्धारित अनुमेय सीमा के अधिक होने विषयक।

महोदय,

उपरोक्त विषयक अवगत कराना है कि केन्द्रीय भू-जल बोर्ड के अनुसार उत्तराखण्ड राज्य के भू-जल में आर्सेनिक/एवं फ्लोराइड की मात्रा भारतीय मानक ब्यूरो द्वारा निर्धारित अनुमेय सीमा के अधिक होने के कारण इस कार्यालय के कार्य क्षेत्रान्तर्गत विकासखण्ड खटीमा एवं सितारगंज के आवंटित राजस्व ग्रामों में विकासखण्ड खटीमा के 04 अधिष्ठापित हैण्डपम्पों हेतु अवगत कराया गया है, जिसमे 03 हैण्डपम्पों (1) **बरी अंजनिया** Location (Latitude-28.87139, Longitude-79.92250, Type of Structure-HP, Nos 02), (2) **कंचनपुरी (मझोला)** Location (Latitude-28.83111, Longitude-79.89750, Type of Structure-HP, Nos 01) एवं खटीमा क्षेत्र में Location (Latitude-28.991917, Longitude-79.96611, Type of Structure-HP, Nos 01) पर कोई हैण्डपम्प अधिष्ठापित नही पाया गया है। विकासखण्ड सितारगंज में 02 हैण्डपम्पों हेतु अवगत कराया गया है, जिसमें से 01 हैण्डपम्प (1) **बिडौरा** Location (Latitude-28.93649, Longitude-79.76667, Type of Structure-HP, Nos 01) एवं सितारगंज क्षेत्र में Location (Latitude-28.992222, Longitude-79.70417, Type of Structure-HP, Nos 01) पर कोई अधिष्ठापित हैण्डपम्प नहीं पाया गया है। उक्त लोकेशनों के कार्यस्थल पर पाये गये हैण्डपम्पों के जल नमूने एकत्र कर इस कार्यालय के पत्रांक 242/जल परीक्षण/10 दिनांक 09.02.2024 द्वारा Devansh Testing And Research Lab. Pvt Ltd., 94, Shiv Ganga Industrial Estate, Lakasheri, Bhagwanpur, Roorkee, Uttarakhand को प्रेषित किये गये थे, जल परीक्षण पेयजल हेतु भारतीय मानक ब्यूरो मानकों के अनुसार (आर्सेनिक एवं फ्लोराइड की मात्रा सहित) कराकर टेस्ट रिपोर्ट इस कार्यालय को डाक के माध्यम से दिनांक 21.02.2024 को उपलब्ध करायी गयी है, जिसको निम्नानुसार आपको संलग्न कर आवश्यक कार्यवाही हेतु प्रेषित की जा रही है। सभी सैम्पल में आर्सेनिक एवं फ्लोराइड की Obtained Value, Standard Acceptable limit से कम प्राप्त हुई है।

क्र0सं0	जनपद का नाम	विकासखण्ड का नाम	कार्यस्थल का नाम	हैण्डपम्प का विवरण	टिप्पणी
01	ऊधमसिंह नगर	खटीमा	बरी अंजनिया	02	टेस्ट रिपोर्ट संलग्न।
02		खटीमा	कंचनपुरी (मझोला)	01	टेस्ट रिपोर्ट संलग्न।
03		खटीमा	खटीमा	01	हैण्डपम्प लोकेशन पर नही पाया गया है।
04		सितारगंज	बिडौरा	01	टेस्ट रिपोर्ट संलग्न।
05		सितारगंज	सितारगंज	01	हैण्डपम्प लोकेशन पर नही पाया गया है।

संलग्नक-उपरोक्तानुसार।

भवदीय

(पी0एन0 चौधरी)
अधिशासी अभियन्ता

पत्रांक एवं दिनांक उपरोक्तानुसार।

प्रतिलिपि निम्नलिखित को सूचनार्थ एवं आवश्यक कार्यवाही हेतु प्रेषित।

1. मुख्य अभियन्ता (मु0), उत्तराखण्ड पेयजल निगम, हल्द्वानी।
2. अधीक्षण अभियन्ता, निर्माण मण्डल, उत्तराखण्ड पेयजल निगम, ऊधमसिंह नगर।
3. एस0डब्लू0एस0एम0, देहरादून।

GM(A/P)

अधिशासी अभियन्ता

दूरभाष (0135) 2670260
E-mail: jjmuja@gmail.com
cgmuja@gmail.com

उत्तराखण्ड जल संस्थान
'जलभवन' बी–ब्लॉक, नेहरू कालोनी, देहरादून ।

पत्रांक– 19 /JJM- State Laboratory / 2023-24 दिनांक 01/04/2024

सेवा में,

अपर परियोजना निदेशक
(अनु0 एवं मू0),
राज्य जल एवं स्वच्छता मिशन,
75/38, इंदर रोड़,
देहरादून।

विषय– **News item appearing in Hindustan dated 30-11-2023 titled "Arsenic found in groundwater in 25 states, Fluoride in 27 states. Govt"-reg.**

महोदय,

उपरोक्त विषयक कृपया आपके कार्यालय पत्रांक– 2208/JJM-32/2023-24 दिनांक 20.03.2024 जो कि क्षेत्रीय निदेशक, केन्द्रीय भूमि जल बोर्ड को प्रेषित एवं प्रतिलिपि अन्य के साथ इस कार्यालय को पृष्ठांकित है, का संदर्भ ग्रहण करने का कष्ट करेंगे। पत्र के माध्यम से मा0 राष्ट्रीय हरित प्राधिकरण में मूल आवेदन संख्या– 728/2023 In re: News item Appearing in Hindustan dated 30-11-2023 titled "Arsenic found in groundwater in 25 State, Flouride in 27 State: Govt", के अनुपालन में दिनांक 14-02-2024 को सचिव पेयजल के माध्यम से दाखिल जवाब *प्रतिउत्तर के Annexure R-6 के अनुसार 34 स्थानों के सापेक्ष 8 स्थानों की जल परीक्षण रिपोर्ट जल संस्थान द्वारा दिया जाना उल्लिखित है, के सापेक्ष 4 स्थानों के परीक्षण रिपोर्ट में Arsenic नही पाये जाने का उल्लेख है तथा 4 स्थानों की Report Awaited दर्शित है।*

उपरोक्त परिपेक्ष्य में 3 स्थानों क्रमशः Duggiawala (Block Doiwala), Judli (Block Vikasnagar) & Lal Tappar (Block Doiwala) में स्थित हैण्डपम्प में किये गये जल नमूनों की परीक्षण रिपोर्ट संलग्न कर प्रेषित की जा रही है तथा Charothi (Block Bhatwari) में स्थित हैण्डपम्पो में आर्सेनिक पाये जाने के कारण सम्बन्धित हैण्डपम्प का उपयोग बन्द किया जा चुका है।

PM (T)

कृपया सूचनार्थ प्रेषित।

भवदीय

संलग्न– उक्तानुसार।

2/4.

(मनीष सेमवाल)
सचिव अप्रैजल

प्रतिलिपि एवं दिनांक तदैव:–

Mr. Ankit
Assistt
PM(T)
2/4/24

1. मुख्य महाप्रबन्धक महोदया, उत्तराखण्ड जल संस्थान, देहरादून को सादर सूचनार्थ प्रेषित।
2. महाप्रबन्धक (मु0), उत्तराखण्ड जल संस्थान, देहरादून।
3. वरिष्ठ लेखाधिकारी, उत्तराखण्ड जल संस्थान, देहरादून।
4. सहायक लेखाधिकारी, उत्तराखण्ड जल संस्थान, देहरादून।

सचिव अप्रैजल

02 APR 2024

37

- O60 - e-2 (JJM letter 2020-21)

दूरभाष (कार्या) 01352671628
ई-मेल jjmujs@gmail.com
cgmujs@gmail.com

उत्तराखण्ड जल संस्थान
'जलभवन' बी–ब्लॉक, नेहरू कालोनी, देहरादून ।

पत्रांक– 19 /JJM- State Laboratory / 2023-24 दिनांक 01/04/2024

सेवा में,

अपर परियोजना निदेशक
(अनु0 एवं मू0),
राज्य जल एवं स्वच्छता मिशन,
75/38, इंदर रोड,
देहरादून।

विषय– **News item appearing in Hindustan dated 30-11-2023 titled "Arsenic found in groundwater in 25 states, Fluoride in 27 states. Govt"-reg.**

महोदय,

उपरोक्त विषयक कृपया आपके कार्यालय पत्रांक– 2208/JJM-32/2023-24 दिनांक 20.03.2024 जो कि क्षेत्रीय निदेशक, केन्द्रीय भूमि जल बोर्ड को प्रेषित एवं प्रतिलिपि अन्य के साथ इस कार्यालय को पृष्ठांकित है, का संदर्भ ग्रहण करने का कष्ट करेंगे। पत्र के माध्यम से मा0 राष्ट्रीय हरित प्राधिकरण में मूल आवेदन संख्या– 728/2023 In re: News item Appearing in Hindustan dated 30-11-2023 titled "Arsenic found in groundwater in 25 State, Flouride in 27 State: Govt", के अनुपालन में दिनांक 14-02-2024 को सचिव पेयजल के माध्यम से दाखिल जवाब *प्रतिउत्तर के Annexure R-6 के अनुसार 34 स्थानों के सापेक्ष 8 स्थानों की जल परीक्षण रिपोर्ट जल संस्थान द्वारा दिया जाना उल्लिखित है, के सापेक्ष 4 स्थानों के परीक्षण रिपोर्ट में Arsenic नहीं पाये जाने का उल्लेख है तथा 4 स्थानों की Report Awaited दर्शित है।*

उपरोक्त परिपेक्ष्य में 3 स्थानों क्रमशः Duggiawala (Block Doiwala), Judli (Block Vikasnagar) & Lal Tappar (Block Doiwala) में स्थित हैण्डपम्प में किये गये जल नमूनों की परीक्षण रिपोर्ट संलग्न कर प्रेषित की जा रही है तथा Charethi (Block Bhatwari) में स्थित हैण्डपम्पों में आर्सेनिक पाये जाने के कारण सम्बन्धित हैण्डपम्प का उपयोग बन्द किया जा चुका है।

कृपया सूचनार्थ प्रेषित।

भवदीय

संलग्न– उक्तानुसार।

(मनीष सेमवाल)
सचिव अप्रैजल

प्रतिलिपि एवं दिनांक तदैव–

1. मुख्य महाप्रबन्धक महोदया, उत्तराखण्ड जल संस्थान, देहरादून को सादर सूचनार्थ प्रेषित।
2. महाप्रबन्धक (मु0), उत्तराखण्ड जल संस्थान, देहरादून।
3. वरिष्ठ लेखाधिकारी, उत्तराखण्ड जल संस्थान, देहरादून।
4. सहायक लेखाधिकारी, उत्तराखण्ड जल संस्थान, देहरादून।

सचिव अप्रैजल

District Level Water Quality Testing and Monitoring Laboratory
Uttarakhand Jal Sansthan, 32, Rajpur Road, Dehradun
Ph (O): 0135-2746137, E-mail: gwwtlab-ujs-uttarakhand.in

Dated: 28/03/2024

TEST REPORT

Name and Address of Organization/ Customer	Assistant Engineer, Uttarakhand Jal Sansthan, Rishikesh		
Product Description	Drinking Water	Sample Description	One Water Sample collected from Doiwala (Duggalawala) Handpump
Reference Sample Identification:	DLWQTML/UJS/AE-01		Date of Start of Analysis: 27/03/2024
			Date of End of Analysis: 28/03/2024
Date and Time of Sample Received: 27/03/24 & 11:30 AM		Sample Collected by:	Customer

SN	Water Quality Parameters Under Chemical Scope	Results	Acceptable Limit As per IS 10500:2012	Permissible Limit (BIS) in the Absence of alternative source	Std. Test Method
1	Arsenic, mg/L,	Not detected	0.01	No Relaxation	APHA 3500-As B

1. The results listed refer only to tested sample and applicable parameters.
2. This certificate is not be reproduced wholly or in parts promotional publicity or legal purpose without permission of authority of testing laboratory.
3. The samples will be destroyed after Seven days from the date of issue of test certificate, unless otherwise agreed with customer.
4. The results apply to the sample as received
5. The Laboratory is responsible for all the information provided in the report, except when information is provided by the customer

**** End of Report ****

28/03/24

(Dr. Vikash Kandari)
Technical Manager, Lab

Technical Manager
DLWQTML
Uttarakhand Jal Sansthan
Dehradun

-End of Report-

District Level Water Quality Testing and Monitoring Laboratory
Uttarakhand Jal Sansthan, 32, Rajpur Road, Dehradun
Ph (O): 0135-2746137, E-mail: ezonlab-ujs-uk@nic.in

Dated: 28/03/2024

TEST REPORT

Name and Address of Organization/ Customer	Assistant Engineer, Uttarakhand Jal Sansthan, Rishikesh		
Product Description	Drinking Water	Sample Description	One Water Sample collected from Dalwala (Lal Tappar) Handpump
Reference Sample Identification:	DLWQTML/UJS/AE-02		Date of Start of Analysis: 27/03/2024
			Date of End of Analysis: 28/03/2024
Date and Time of Sample Received: 27/03/24 & 11:30 AM		Sample Collected by:	Customer

SN	Water Quality Parameters Under Chemical Scope	Results	Acceptable Limit As per IS 10500:2012	Permissible Limit (BIS) in the Absence of alternative source	Std. Test Method
1	Arsenic, mg/L,	Not detected	0.01	No Relaxation	APHA 3500-As B

1. The results listed refer only to tested sample and applicable parameters.
2. This certificate is not be reproduced wholly or in parts promotional publicity or legal purpose without permission of authority of testing laboratory.
3. The samples will be destroyed after Seven days from the date of issue of test certificate, unless otherwise agreed with customer.
4. The results apply to the sample as received
5. The Laboratory is responsible for all the information provided in the report, except when information is provided by the customer

**** End of Report ****

28/03/24

(Dr. Vikash Kandari)
Technical Manager, Lab

Technical Manager
DLWQTML
Uttrakhand Jal Sansthan
Dehradun

-End of Report-

District Level Water Quality Testing and Monitoring Laboratory
Uttarakhand Jal Sansthan, 32, Rajpur Road, Dehradun
Ph (O): 0135-2746137, E-mail: [illegible]

Dated: 28/03/2024

TEST REPORT

Name and Address of Organization/ Customer	Assistant Engineer, Uttarakhand Jal Sansthan, Vikasnagar.		
Product Description	Drinking Water	Sample Description	One Water Sample collected from Vikasnagar (Judh), Handpump
Reference Sample Identification:	DLWQTML/UJS/AEV-01		Date of Start of Analysis: 27/03/2024
			Date of End of Analysis: 28/03/2024
Date and Time of Sample Received: 27/03/24 & 12:30 PM		Sample Collected by:	Customer

SN	Water Quality Parameters Under Chemical Scope	Results	Acceptable Limit As per IS 10500:2012	Permissible Limit (BIS) in the Absence of alternative source	Std. Test Method
1	Arsenic, mg/L,	Not detected	0.01	No Relaxation	APHA 3500-As B

1. The results listed refer only to tested sample and applicable parameters.
2. This certificate is not be reproduced wholly or in parts promotional publicity or legal purpose without permission of authority of testing laboratory.
3. The samples will be destroyed after Seven days from the date of issue of test certificate, unless otherwise agreed with customer.
4. The results apply to the sample as received
5. The Laboratory is responsible for all the information provided in the report, except when information is provided by the customer

**** End of Report****

28/03/24

(Dr. Vikash Kandari)
Technical Manager, Lab
Technical Manager
DLWQTML
Uttarakhand Jal Sansthan
Dehradun

-End of Report-

राज्य जल एवं स्वच्छता मिशन
जल जीवन मिशन,
(पेयजल एवं स्वच्छता विभाग, उत्तराखण्ड)
75/38, इन्दर रोड़, डालनवाला,
देहरादून–उत्तराखण्ड

ई.मेल : ceswsm2020@gmail.com
फोन नं0: 0135-2974256

पत्रांकः 74 /JJM- 332/2024-25 दिनांकः 15 अप्रैल, 2024

सेवा में,

क्षेत्रीय निदेशक,
केंद्रीय भूगि जल बोर्ड
419-A, कांवली रोड बल्लीवाला,
निकट ऊर्जा भवन देहरादून उत्तराखण्ड।

विषयः– **News item appearing in Hindustan dated 30.11.2023 titled "Arsenic found in groundwater in 25 States, Fluoride in 27 States. Govt". -reg.**

महोदय,

कृपया इस कार्यालय के पत्रांक 2208/JJM-332/2023–24, दिनांक 20 मार्च 2024 का संदर्भ ग्रहण करने का कष्ट करें, जिसके माध्यम से माननीय राष्ट्रीय हरित अधिकरण -NGT के वाद संख्या 728/2023 के अनुपालन में दाखिल प्रतिउत्तर के Annexure R-6 से सम्बन्धित सूचना प्रेषित की गयी थी, जिसमें 34 स्थानों में से 13 स्थानों की जल परीक्षण की रिपोर्ट अवशेष थी।

उपरोक्त के क्रम में उत्तराखण्ड पेयजल संसाधन विकास एवं निर्माण निगम के पत्रांक 20.3/जल जीवन मिशन–अनु0जे0जे0एम0 सामान्य/90, दिनांक 22.03.2024 एवं उत्तराखण्ड जल संस्थान, देहरादून के पत्रांक –19/JJM-State Laboratory/2023–24, दिनांक 01.04.2024 (**प्रति संलग्न**) द्वारा शेष 12 स्थानों की सूचना इस कार्यालय को उपलब्ध करायी गयी है, जिसको Update करते हुए सूची तैयार की गयी है (**प्रति संलग्न**)। वाद संख्या 728/2023 की दिनांक 26 अप्रैल 2024 को अगली प्रस्तावित सुनवाई के क्रम में सूचना आपको अग्रेतर कार्यवाही हेतु प्रेषित की जा रही है।

संलग्नकः– उपरोक्तानुसार।

भवदीय,

(नितिन सिंह भदौरिया)
मिशन निदेशक

प्रतिलिपिः– निम्नलिखित को सूचनार्थ एवं आवश्यक कार्यवाही हेतु प्रेषितः–

1. निजी सचिव, सचिव पेयजल एवं स्वच्छता, उत्तराखण्ड शासन के संज्ञानार्थ।
2. अपर परियोजना निदेशक, (तकनीकी/अनु0 एवं मू0), जल जीवन मिशन उत्तराखण्ड, देहरादून ।
3. मुख्य महाप्रबन्धक, उत्तराखण्ड जल संस्थान, देहरादून को इस आशय से कि उत्तरकाशी जनपद के भटवाडी ब्लॉक की चरैथी ग्राम के हैण्ड पम्प की जल परीक्षण की रिपोर्ट अद्यतन अप्राप्त है। कृपया शीघ्र भिजवाने का कष्ट करें।
4. मुख्य अभियन्ता (मुख्यालय), उत्तराखण्ड पेयजल निगम, देहरादून।

मिशन निदेशक

Status of identified locations having Arsenic contamination as reported by CGWB

S. No	District	Block	Location	Latitude	Longitude	Types of Structure	Concentration of Arsenic (ppb)	Implementing agency	Test conducted for samples from Hand pumps/Spring			PWS facility provided		Remarks
									Source of sampling	Report Status	Date of report	Yes/No	Report Status	
1	Dehradun	Sahaspur	Rodapur	30.40583	77.86333	HP	11.5	UJN	Hand pump	Not Detected	16-03-2024	Yes	ok	1. PWS source has been tested and there is no arsenic contamination. 2. Water quality monitoring is being conducted through Labs, Field testing Kits (FTKs) & Pollution control board.
2	Dehradun	Doiwala	Dugguwala	30.17222	78.23361	HP	11.45	UJS	Hand pump	Not Detected	16-03-2024	Yes	ok	
3	Dehradun	Rajpur	Maldevta	30.34389	78.12028	HP	22.86	UJN	Hand pump	Not Detected	19-01-2024	Yes	ok	
4	Dehradun	Raipur	Soda Saroli	30.27667	78.13944	Spring	28.54	UJN	Spring	Not Detected	08-02-2024	Yes	ok	
5	Dehradun	Vikas Nagar	Judli	30.42389	77.69556	HP	71.28	UJS	Hand pump	Not Detected	16-03-2024	Yes	ok	
6	Dehradun	Vikasnagar	Vikas Nagar	30.47778	77.78833	HP	22.84	UJN	Hand pump	Not Detected	16-03-2024	Yes	ok	
7	Dehradun	Doiwala	Lal Tappar	30.11972	78.17389	HP	36.5	UJS	Hand pump	Not Detected	16-03-2024	Yes	ok	
8	Dehradun	Sahaspur	Nandal Ki Chowki	30.34667	77.94667	HP	56.4	UJN	Hand pump	Not Detected	16-03-2024	Yes	ok	
9	Almora	Hawalbagh	Dhara Naula	29.57083	79.67639	Spring	56.64	UJN	Spring	Not Detected	08-01-2024	Yes	ok	
10	Haridwar	Bhagwanpur	Chadiala	29.91000	77.76778	HP	11.43	UJN	Hand pump	Not Detected	28-02-2024	Yes	ok	
11	Haridwar	Bahadrabad	Bandarjud	30.05306	77.93861	HP	23.20	UJN	Hand pump	Not Detected	28-02-2024	Yes	ok	
12	Haridwar	Khanpur	Govardhanpur	29.70972	77.96389	HP	13.05	UJS	Hand pump	Not Detected	28-02-2024	Yes	ok	
13	Haridwar	Laksar	Laksar	29.75861	78.03667	HP	13.08	UJN	Hand pump	Not Detected	28-02-2024	Yes	ok	
14	Haridwar	Bhagwanpur	Bahabalpur	29.98722	77.81028	HP	25.43	UJN	Hand pump	Not Detected	19-01-2024	Yes	ok	
15	Haridwar	Khanpur	Dalliwala	29.56667	78.02300	HP	53.60	UJN	Hand pump	Not Detected	28-02-2024	Yes	ok	
16	Haridwar	Bahad rabad	Bahadrabad	29.91750	78.04389	HP	20.28	UJN	Hand pump	Not Detected	28-02-2024	Yes	ok	
17	Haridwar	Laksar	Bhikampur	29.75000	78.14167	HP	13.89	UJN	Hand pump	Not Detected	28-02-2024	Yes	ok	
18	Haridwar	Roorkee	Mohammadpur	29.71583	77.96139	HP	14.96	UJS	Hand pump	Not Detected	19-01-2024	Yes	ok	
19	Haridwar	Khanpur	Khanpur	29.59667	78.00972	HP	15.10	UJN	Hand pump	Not Detected	19-01-2024	Yes	ok	
20	Haridwar	Bahadrabad	Bhogpur	29.77750	78.16889	HP	12.74	UJN	Hand pump	Not Detected	28-02-2024	Yes	ok	
21	U S Nagar	Kashipur	Dhanauri Patti	29.27083	7901583	HP	13.13	UJS	Hand pump	Not Detected	28-02-2024	Yes	ok	
22	U S Nagar	Sitarganj	Bideen	28.93694	79.76667	HP	21.05	UJN	Hand pump	Not Detected	14-02-2024	Yes	ok	
23	U S Nagar	Jaspur	Jaspur	29.27861	78.83417	HP	22.77	UJN	Hand pump	Not Detected	28-02-2024	Yes	ok	
24	U S Nagar	Kashipur	Durgapur	29.29750	78.95667	HP	45.30	UJS	Hand pump	Not Detected	28-02-2024	Yes	ok	
25	U S Nagar	Jaspur	Bichai	80.094 17	29.04083	HP	62.54	UJN	Hand pump	Not Detected	28-02-2024	Yes	ok	
26	U S Nagar	Kashipur	Sland Khera	79.0 1 361	29.17556	HP	69.79	UJN	Hand pump	Not Detected	28-02-2024	Yes	ok	
27	U S Nagar	Khatima	Kancharipuri (Mal hola)	28.83 111	79.89750	HP	16.48	UJN	Hand pump	Not Detected	14-02-2024	Yes	ok	
28	U S Nagar	Khatima	Khatima	28.91 917	79 .9661 1	HP	16.90	UJN	Hand pump	The Implementing agency informed that the hand pump dose not exist at identified location/coordinates.		Yes	ok	
29	U S Nagar	Khatima	Barianjariya	28.871 39	79.92250	HP	17.93	UJN	Hand pump	Not Detected	14-02-2024	Yes	ok	
30	U S Nagar	Rudrapur	Kichha	28.90944	79.52222	HP	16.33	UJN	Hand pump	Not Detected	14-02-2024	Yes	ok	
31	U S Nagar	Sitarganj	Sitarganj	28.92222	79.7041 7	HP	18.64	UJN	Hand pump	The Implementing agency informed that the hand pump dose not exist at identified location/coordinates.		Yes	ok	
32	Uttarkashi	Bhatwari	Maneri	30.73972	78.52472	HP	12.35	UJN	Hand pump	Not Detected	27-01-2024	Yes	ok	
33	Uttarkashi	Bhatwari	Chaurbi	30.82 111	78.62639	HP	12.60	UJS	Hand pump	Detected	As per IA, Arsenic is detected at this location & the HP is permanently closed for usage.	Yes	ok	
34	Uttarkashi	Bhatwari	Gangnani	30.90306	78.68000	Spring	19.27	UJN	Spring	Not Detected	01-02-2024	Yes	ok	

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-396- (1,2,3,5,6,7,8)

ECON LABORATORY & CONSULTANCY

(ISO: 9001, 14001& 45001 Certified & MOEF & CC Recognized Laboratory)
Vill.: Khaharwala, P.O.: Jaintanwala, Near Garhi Cantt., Dehradun, Uttarakhand - 248003

TEST REPORT

Name & Address of Client:		ULR No:	TC550724000001503F
OFFICE OF EXECUTIVE ENGINEER MECHANICAL DIVISION Uttrakhand Peyjal Nigam Dehradun.		Reporting Date:	16/03/2024
		Date of Sampling:	12/03/2024
		Receipt Date:	12/03/2024
		Period of Testing:	13/03/2024 -16/03/2024
		Sample Collected By:	Lab Representative
		Sampling Type:	Grab
Sample Description:	Drinking Water	Preservation :	Refrigerated
		Format No:	7.8-F-01
Sampling Protocol:	ECON/STP/WATER	Party Reference No:	469/221/04 Dated:29.02.2024
Sample Quantity:	1 Ltr.	Parameter Required:	As Per Work Order

TEST RESULTS

S. No.	Parameter	Sampling Location	Block	Latitude	Longitude	Result	Limit as per IS:10500:2012		Test Method
							Acceptable	Permissible	
1.	Arsenic,mg/l	Redapur	Sahaspur	30.40583	77.86333	BDL(DL:0.001)	0.01	No Relaxation	IS 3025 (Part-37) 1988, RA2019
2.	Arsenic,mg/l	Duggiawala	Doiwala	30.17222	78.23361	BDL(DL:0.001)	0.01	No Relaxation	IS 3025 (Part-37) 1988, RA2019
3.	Arsenic,mg/l	Maldeota	Raipur	30.34389	78.12028	BDL(DL:0.001)	0.01	No Relaxation	IS 3025 (Part-37) 1988, RA2019
4.	Arsenic,mg/l	Vikasnagar	Vikasnagar	30.47778	77.78833	BDL(DL:0.001)	0.01	No Relaxation	IS 3025 (Part-37) 1988, RA2019
5.	Arsenic,mg/l	Lal Tappar	Doiwala	30.11972	78.17389	BDL(DL:0.001)	0.01	No Relaxation	IS 3025 (Part-37) 1988, RA2019
6.	Arsenic,mg/l	Nanda Ki Chowki	Sahaspur	30.34667	77.94667	BDL(DL:0.001)	0.01	No Relaxation	IS 3025 (Part-37) 1988, RA2019
7.	Arsenic,mg/l	Jodli	Vikasnagar	30.42389	77.69556	BDL(DL:0.001)	0.01	No Relaxation	IS 3025 (Part-37) 1988, RA2019

End of Report

सहोदय इसलिए (जल परीक्षण) (Arsenic Test results)
सहोदय के अवलोकार्थ सम्मिलित प्रस्तावित
सादर प्रस्तुत है

CHECKED BY :

AUTHORISED SIGNATORY :

NOTE : 1. The results listed only to the tested sample & applicable parameters.
2. Total liabilities of our lab will be restricted to the invoice amount only.
3. The sample will be destroyed after retention time unless otherwise specified.
4. This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law without prior permission

www.econlaboratory.com, ukjs econlaboratory.com, econlab.consultancy@yahoo.in
CONTACT NO.: +91-8534957815 8126534344

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District Level Water Quality Testing and Monitoring Laboratory
Uttarakhand Jal Sansthan, 32, Rajpur Road, Dehradun
Ph (O): 0135-2746137, E-mail: eenorth-ujs-uk@nic.in

(4)

Dated: 08/02/2024

TEST REPORT

Name and Address of Organization/ Customer	Executive Engineer, Uttarakhand Pay Jal Nigam, Dehradun		
Product Description	Drinking Water	Sample Description	One Water Sample collected from Sauda Saroli, Spring
Reference Sample Identification:	DLWQTML/UJS/01		Date of Start of Analysis: 08/02/2024
			Date of End of Analysis: 08/02/2024
Date and Time of Sample Received: 08/02/24 & 4:10 PM		Sample Collected by:	Customer

SN	Water Quality Parameters Under Chemical Scope	Results	Acceptable Limit As per IS 10500:2012	Permissible Limit (BIS) in the Absence of alternative source	Std. Test Method
1	Arsenic as (As), ppb	Not detected	10	No Relaxation	APHA 3500-As B

1. The results listed refer only to tested sample and applicable parameters.
2. This certificate is not be reproduced wholly or in parts promotional publicity or legal purpose without permission of authority of testing laboratory.
3. The samples will be destroyed after Seven days from the date of issue of test certificate, unless otherwise agreed with customer.
4. The results apply to the sample as received
5. The Laboratory is responsible for all the information provided in the report, except when information is provided by the customer

**** End of Report****

(Dr. Vikash Kandari)
Technical Manager, Lab

-End of Report

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District Level Water Quality Testing and Monitoring Laboratory
Uttarakhand Jal Sansthan, 32, Rajpur Road, Dehradun
Ph (O): 0135-2746137, E-mail: eenorth-ujs-uk@nic.in

Dated: 19/01/2024

TEST REPORT

Name and Address of Organization/ Customer	Executive Engineer, Uttarakhand Jal Sansthan, Dehradun.		
Product Description	Drinking Water	Sample Description	One Water Sample collected from Maldevta (Hand Pump)
Reference Sample Identification:	DLWQTML/UJS/04		Date of Start of Analysis: 18/01/2024
			Date of End of Analysis: 19/01/2024
Date and Time of Sample Received: 18/01/24 & 11:45 AM		Sample Collected by:	Customer

SN	Water Quality Parameters Under Chemical Scope	Results	Acceptable Limit As per IS 10500:2012	Permissible Limit(BIS) in the Absence of alternative source	Std. Test Method
1	Arsenic, mg/L,	Not detected	0.01	No Relaxation	APHA 3500-As B

1. The results listed refer only to tested sample and applicable parameters.
2. This certificate is not be reproduced wholly or in parts promotional publicity or legal purpose without permission of authority of testing laboratory.
3. The samples will be destroyed after Seven days from the date of issue of test certificate, unless otherwise agreed with customer.
4. The results apply to the sample as received
5. The Laboratory is responsible for all the information provided in the report, except when information is provided by the customer

**** End of Report****

(Dr. Vikash Kandari)
Technical Manager, Lab
Authorized Signatory
DLWQTML
Uttrakhand Jal Sansthan

District Level Water Quality Testing and Monitoring Laboratory
Uttarakhand Jal Sansthan, Almora
Phone No.: 05962-2234049, E-mail: eealm.ujs.uk@gmail.com

Test Report ID: 695 /UJS/DLWQTML/2023-24 Dated:08/01/2024

WATER QUALITY TEST REPORT

Name and Address of Organization/ Customer	Executive Engineer, Uttarakhand Jal Sansthan, Almora		
Type of Source (Surface Water/ Ground Water/ Sub-Surface Water)	DRINKING WATER	SAMPLE DESCRIPTION	ONE WATER SAMPLE COLLECTED FROM DHARANAULA NAULA ,IST, BLOCK-HAWALBAGH , ALMORA.
Reference Sample Identification:	DLWQTML/UJS/ALM/EE-08		DATE OF START OF ANALYSIS 08/01/2024
			DATE OF END OF ANALYSIS 08/01/2024
Date and Time of Sample Received: 07/01/2024 06:00PM		Sample Collected by:	Mr. Mohan Giri (Sampling Assistant)

SN	Water Quality Parameters Under Chemical Scope	Results	Acceptable Limit As Per IS 10500:2012 (BIS)	Permissible Limit (BIS) in the Absence of alternative source	Std. Test Method
1.	Arsenic, mg/l,	Not Detected	0.01	No Relaxation	APHA 3500-As B

(Lab Chemist)
Chemist
Lab U. J. S., Almora

Authorized Signatory
(Assistant Engineer)
Authorised Signatory
District Water Quality Testing
Monitoring Laboratory
Uttarakhand Jal Sansthan, Almora

-End of Report-

1. The results listed refer only to tested sample and applicable parameters.
2. This certificate is not be reproduced wholly or in parts promotional publicity or legal purpose without permission of authority of testing laboratory.
3. The samples will be destroyed after fifteen days from the date of issue of test certificate, unless otherwise agreed with customer.
4. Result apply to the sample as received.
5. The Laboratory is responsible for all the information provided in the report, except when information is provided by the customer.

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(11) (a)

PCRI/851

प्रदूषण नियंत्रण अनुसंधान संस्थान

भारत हेवी इलेक्ट्रिकल्स लिमिटेड, रानीपुर, हरिद्वार (उत्तराखंड)

POLLUTION CONTROL RESEARCH INSTITUTE

(A Govt. of India – UNDP / UNIDO Project)
BHARAT HEAVY ELECTRICALS LIMITED
RANIPUR, HARIDWAR (U.K.) - 249 403
(Approved Lab under Environment (Protection) Act, 1986; EIA Consultancy by NABET, QCI)

TEST REPORT

Lab Reference No: TL230581 **Date :** 28.02.2024

Indentor : Office of Executive Engineer, Nirman Shakha, Uttarakhand Peyjal Sansadhan Vikas Evam Nirman Nigam, Haridwar, Uttarakhand

Customer's Ref. No.: Letter No. 469/Testing/29 Dated 07.02.2024

Work Order No.: 23-0204-O-291

Sample Collected by: Indentor **Collection Date:** 07.02.2024

Sample/Job: Handpump Water Sample from Village Bandarjood Block Bhagwanpur Distt. Haridwar (Handpump No. 1)

PARAMETER	UNIT	OBTAINED VALUE	STANDARD LIMITS (IS 10500:2012)	
			Acceptable	Permissible
Arsenic (as As)	mg/L	ND	0.01	0.05
Fluoride (as F)	mg/L	0.44	1.0	1.5
Magnesium (as Mg)	mg/L	22.78	30	100
Iron (as Fe)	mg/L	0.56	0.3	NR
Nitrate (as NO_3)	mg/L	1.0	45	NR

ND – Not Detectable NR – No Relaxation

Prepared by

Ankur Mohan
Engineer (PCRI)

Approved by

Shailendra Kumar
Dy. General Manager (PCRI)

Remarks :- (1) This report refers only to the particular sample/job submitted for testing.
(2) This report is not to be reproduced wholly or partly and can not be used as an evidence in the court of law and should not be used in any advertising media without our special permission in writing.
(3) Samples will be disposed off after one month from the date of Issue of Test Certificate

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PCRI/051

प्रदूषण नियंत्रण अनुसंधान संस्थान

भारत हेवी इलेक्ट्रिकल्स लिमिटेड, रानीपुर, हरिद्वार (उत्तराखंड)

POLLUTION CONTROL RESEARCH INSTITUTE

(A Govt. of India – UNDP / UNIDO Project)
BHARAT HEAVY ELECTRICALS LIMITED
RANIPUR, HARIDWAR (U.K.) - 249 403
(Approved Lab under Environment (Protection) Act, 1986; EIA Consultancy by NABET, QCI)

TEST REPORT

Lab Reference No: TL230582 **Date :** 28.02.2024

Indentor : Office of Executive Engineer, Nirman Shakha, Uttarakhand Peyjal Sansadhan Vikas Evam Nirman Nigam, Haridwar, Uttarakhand

Customer's Ref. No.: Letter No. 469/Testing/29 Dated 07.02.2024

Work Order No.: 23-0204-O-291

Sample Collected by: Indentor **Collection Date:** 07.02.2024

Sample/Job: Handpump Water Sample from Village Bandarjood Block Bhagwanpur Distt. Haridwar (Handpump No. 2)

PARAMETER	UNIT	OBTAINED VALUE	STANDARD LIMITS (IS 10500:2012)	
			Acceptable	Permissible
Arsenic (as As)	mg/L	ND	0.01	0.05
Fluoride (as F)	mg/L	0.47	1.0	1.5
Magnesium (as Mg)	mg/L	38.32	30	100
Iron (as Fe)	mg/L	0.34	0.3	NR
Nitrate (as NO_3)	mg/L	0.59	45	NR

ND – Not Detectable NR – No Relaxation

Prepared by

Ankur Mohan
Engineer (PCRI)

Approved by

Shailendra Kumar
Dy. General Manager (PCRI)

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(2) This report is not to be reproduced wholly or partly and can not be used as an evidence in the court of law and should not be used in any advertising media without our special permission in writing.
(3) Samples will be disposed off after one month from the date of issue of Test Certificate.

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PCRI/051

प्रदूषण नियंत्रण अनुसंधान संस्थान

भारत हेवी इलेक्ट्रिकल्स लिमिटेड, रानीपुर, हरिद्वार (उत्तराखंड)

POLLUTION CONTROL RESEARCH INSTITUTE

(A Govt. of India – UNDP / UNIDO Project)
BHARAT HEAVY ELECTRICALS LIMITED
RANIPUR, HARIDWAR (U.K.) - 249 403
(Approved Lab under Environment (Protection) Act, 1986; EIA Consultancy by NABET, QCI)

TEST REPORT

Lab Reference No: TL230583 **Date :** 28.02.2024

Indentor : Office of Executive Engineer, Nirman Shakha, Uttarakhand Peyjal Sansadhan Vikas Evam Nirman Nigam, Haridwar, Uttarakhand

Customer's Ref. No.: Letter No. 469/Testing/29 Dated 07.02.2024

Work Order No.: 23-0204-O-291

Sample Collected by: Indentor **Collection Date:** 07.02.2024

Sample/Job: Handpump Water Sample from Village Govardhanpur Block Khanpur Distt. Haridwar (Handpump No. 1)

PARAMETER	UNIT	OBTAINED VALUE	STANDARD LIMITS (IS 10500:2012)	
			Acceptable	Permissible
Arsenic (as As)	mg/L	0.006	0.01	0.05
Fluoride (as F)	mg/L	0.81	1.0	1.5
Magnesium (as Mg)	mg/L	17.95	30	100
Iron (as Fe)	mg/L	0.26	0.3	NR
Nitrate (as NO_3)	mg/L	0.32	45	NR

ND – Not Detectable NR – No Relaxation

Prepared by

Ankur Mohan
Engineer (PCRI)

Approved by

Shailendra Kumar
Dy. General Manager (PCRI)

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भारत हेवी इलेक्ट्रिकल्स लिमिटेड, रानीपुर, हरिद्वार (उत्तराखंड)

POLLUTION CONTROL RESEARCH INSTITUTE

(A Govt. of India – UNDP / UNIDO Project)
BHARAT HEAVY ELECTRICALS LIMITED
RANIPUR, HARIDWAR (U.K.) - 249 403
(Approved Lab under Environment (Protection) Act, 1986; EIA Consultancy by NABET, QCI)

TEST REPORT

Lab Reference No: TL230584 **Date :** 28.02.2024

Indentor : Office of Executive Engineer, Nirman Shakha, Uttarakhand Peyjal Sansadhan Vikas Evam Nirman Nigam, Haridwar, Uttarakhand

Customer's Ref. No.: Letter No. 469/Testing/29 Dated 07.02.2024

Work Order No.: 23-0204-O-291

Sample Collected by: Indentor **Collection Date:** 07.02.2024

Sample/Job: Handpump Water Sample from Village Govardhanpur Block Khanpur Distt. Haridwar (Handpump No. 2)

PARAMETER	UNIT	OBTAINED VALUE	STANDARD LIMITS (IS 10500:2012)	
			Acceptable	Permissible
Arsenic (as As)	mg/L	0.006	0.01	0.05
Fluoride (as F)	mg/L	0.33	1.0	1.5
Magnesium (as Mg)	mg/L	17.96	30	100
Iron (as Fe)	mg/L	0.38	0.3	NR
Nitrate (as NO_3)	mg/L	0.38	45	NR

ND – Not Detectable NR – No Relaxation

Prepared by

Ankur Mohan
Engineer (PCRI)

Approved by

Shailendra Kumar
Dy. General Manager (PCRI)

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(Approved Lab under Environment (Protection) Act, 1986; EIA Consultancy by NABET, QCI)

TEST REPORT

Lab Reference No: TL230589 **Date :** 28.02.2024

Indentor : Office of Executive Engineer, Nirman Shakha, Uttarakhand Peyjal Sansadhan Vikas Evam Nirman Nigam, Haridwar, Uttarakhand

Customer's Ref. No.: Letter No. 469/Testing/29 Dated 07.02.2024

Work Order No.: 23-0204-O-291

Sample Collected by: Indentor **Collection Date:** 07.02.2024

Sample/Job: Handpump Water Sample from Village Laksar Block Laksar Distt. Haridwar (Handpump No. 1)

PARAMETER	UNIT	OBTAINED VALUE	STANDARD LIMITS (IS 10500:2012)	
			Acceptable	Permissible
Arsenic (as As)	mg/L	ND	0.01	0.05
Fluoride (as F)	mg/L	0.58	1.0	1.5
Magnesium (as Mg)	mg/L	15.04	30	100
Iron (as Fe)	mg/L	0.46	0.3	NR
Nitrate (as NO_3)	mg/L	0.26	45	NR

ND – Not Detectable NR – No Relaxation

Prepared by

Ankur Mohan
Engineer (PCRI)

Approved by

Shailendra Kumar
Dy. General Manager (PCRI)

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TEST REPORT

Lab Reference No: TL230590 **Date :** 28.02.2024

Indentor : Office of Executive Engineer, Nirman Shakha, Uttarakhand Peyjal Sansadhan Vikas Evam Nirman Nigam, Haridwar, Uttarakhand

Customer's Ref. No.: Letter No. 469/Testing/29 Dated 07.02.2024

Work Order No.: 23-0204-0-291

Sample Collected by: Indentor **Collection Date:** 07.02.2024

Sample/Job: Handpump Water Sample from Village Laksar Block Laksar Distt. Haridwar (Handpump No. 2)

PARAMETER	UNIT	OBTAINED VALUE	STANDARD LIMITS (IS 10500:2012)	
			Acceptable	Permissible
Arsenic (as As)	mg/L	ND	0.01	0.05
Fluoride (as F)	mg/L	0.48	1.0	1.5
Magnesium (as Mg)	mg/L	16.49	30	100
Iron (as Fe)	mg/L	0.29	0.3	NR
Nitrate (as NO_3)	mg/L	0.80	45	NR

ND – Not Detectable NR – No Relaxation

Prepared by

Ankur Mohan
Engineer (PCRI)

Approved by

Shailendra Kumar
Dy. General Manager (PCRI)

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RANIPUR, HARIDWAR (U.K.) - 249 403
(Approved Lab under Environment (Protection) Act, 1986; EIA Consultancy by NABET, QCI)

TEST REPORT

Lab Reference No: TL230579 **Date :** 28.02.2024

Indentor : Office of Executive Engineer, Nirman Shakha, Uttarakhand Peyjal Sansadhan Vikas Evam Nirman Nigam, Haridwar, Uttarakhand

Customer's Ref. No.: Letter No. 469/Testing/29 Dated 07.02.2024

Work Order No.: 23-0204-O-291

Sample Collected by: Indentor **Collection Date:** 07.02.2024

Sample/Job: Handpump Water Sample from Village Bahawalpur Block Bhagwanpur Distt. Haridwar (Handpump No. 1)

PARAMETER	UNIT	OBTAINED VALUE	STANDARD LIMITS (IS 10500:2012)	
			Acceptable	Permissible
Arsenic (as As)	mg/L	ND	0.01	0.05
Fluoride (as F)	mg/L	0.40	1.0	1.5
Magnesium (as Mg)	mg/L	28.15	30	100
Iron (as Fe)	mg/L	0.06	0.3	NR
Nitrate (as NO_3)	mg/L	0.75	45	NR

ND – Not Detectable NR – No Relaxation

Prepared by

Ankur Mohan
Engineer (PCRI)

Approved by

Shallendra Kumar
Dy. General Manager (PCRI)

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BHARAT HEAVY ELECTRICALS LIMITED
RANIPUR, HARIDWAR (U.K.) - 249 403
(Approved Lab under Environment (Protection) Act, 1986; EIA Consultancy by NABET, QCI)

TEST REPORT

Lab Reference No: TL230580 **Date :** 28.02.2024

Indentor : Office of Executive Engineer, Nirman Shakha, Uttarakhand Peyjal Sansadhan Vikas Evam Nirman Nigam, Haridwar, Uttarakhand

Customer's Ref. No.: Letter No. 469/Testing/29 Dated 07.02.2024

Work Order No.: 23-0204-O-291

Sample Collected by: Indentor **Collection Date:** 07.02.2024

Sample/Job: Handpump Water Sample from Village Bahawalpur Block Bhagwanpur Distt. Haridwar (Handpump No. 2)

PARAMETER	UNIT	OBTAINED VALUE	STANDARD LIMITS (IS 10500:2012)	
			Acceptable	Permissible
Arsenic (as As)	mg/L	ND	0.01	0.05
Fluoride (as F)	mg/L	0.29	1.0	1.5
Magnesium (as Mg)	mg/L	26.69	30	100
Iron (as Fe)	mg/L	0.43	0.3	NR
Nitrate (as NO_3)	mg/L	0.35	45	NR

ND – Not Detectable NR – No Relaxation

Prepared by

Ankur Mohan
Engineer (PCRI)

Approved by

Shailendra Kumar
Dy. General Manager (PCRI)

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RANIPUR, HARIDWAR (U.K.) - 249 403
(Approved Lab under Environment (Protection) Act, 1986; EIA Consultancy by NABET, QCI)

TEST REPORT

Lab Reference No: TL230587 **Date :** 28.02.2024

Indentor : Office of Executive Engineer, Nirman Shakha, Uttarakhand Peyjal Sansadhan Vikas Evam Nirman Nigam, Haridwar, Uttarakhand

Customer's Ref. No.: Letter No. 469/Testing/29 Dated 07.02.2024

Work Order No.: 23-0204-0-291

Sample Collected by: Indentor **Collection Date:** 07.02.2024

Sample/Job: Handpump Water Sample from Village Dallawala Block Khanpur Distt. Haridwar (Handpump No. 1)

PARAMETER	UNIT	OBTAINED VALUE	STANDARD LIMITS (IS 10500:2012)	
			Acceptable	Permissible
Arsenic (as As)	mg/L	0.025	0.01	0.05
Fluoride (as F)	mg/L	0.43	1.0	1.5
Magnesium (as Mg)	mg/L	7.76	30	100
Iron (as Fe)	mg/L	0.53	0.3	NR
Nitrate (as NO_3)	mg/L	0.66	45	NR

ND – Not Detectable NR – No Relaxation

Prepared by

Ankur Mohan
Engineer (PCRI)

Approved by

Shailendra Kumar
Dy. General Manager (PCRI)

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156

TEST REPORT

Lab Reference No: TL230588 **Date :** 28.02.2024

Indentor : Office of Executive Engineer, Nirman Shakha, Uttarakhand Peyjal Sansadhan Vikas Evam Nirman Nigam, Haridwar, Uttarakhand

Customer's Ref. No.: Letter No. 469/Testing/29 Dated 07.02.2024

Work Order No.: 23-0204-O-291

Sample Collected by: Indentor **Collection Date:** 07.02.2024

Sample/Job: Handpump Water Sample from Village Dallawala Block Khanpur Distt. Haridwar (Handpump No. 2)

PARAMETER	UNIT	OBTAINED VALUE	STANDARD LIMITS (IS 10500:2012)	
			Acceptable	Permissible
Arsenic (as As)	mg/L	0.029	0.01	0.05
Fluoride (as F)	mg/L	0.63	1.0	1.5
Magnesium (as Mg)	mg/L	13.10	30	100
Iron (as Fe)	mg/L	0.46	0.3	NR
Nitrate (as NO_3)	mg/L	0.74	45	NR

ND – Not Detectable NR – No Relaxation

Prepared by

Ankur Mohan
Engineer (PCRI)

Approved by

Shailendra Kumar
Dy. General Manager (PCRI)

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RANIPUR, HARIDWAR (U.K.) - 249 403
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TEST REPORT

Lab Reference No: TL230597 **Date :** 28.02.2024

Indentor : Office of Executive Engineer, Nirman Shakha, Uttarakhand Peyjal Sansadhan Vikas Evam Nirman Nigam, Haridwar, Uttarakhand

Customer's Ref. No.: Letter No. 469/Testing/29 Dated 07.02.2024

Work Order No.: 23-0204-O-291

Sample Collected by: Indentor **Collection Date:** 07.02.2024

Sample/Job: Handpump Water Sample from Village Bahadrabad Block Bahadrabad Distt. Haridwar (Handpump No. 1)

PARAMETER	UNIT	OBTAINED VALUE	STANDARD LIMITS (IS 10500:2012)	
			Acceptable	Permissible
Arsenic (as As)	mg/L	ND	0.01	0.05
Fluoride (as F)	mg/L	0.90	1.0	1.5
Magnesium (as Mg)	mg/L	16.50	30	100
Iron (as Fe)	mg/L	0.22	0.3	NR
Nitrate (as NO_3)	mg/L	0.45	45	NR

ND – Not Detectable NR – No Relaxation

Prepared by

Ankur Mohan
Engineer (PCRI)

Approved by

Shallendra Kumar
Dy. General Manager (PCRI)

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RANIPUR, HARIDWAR (U.K.) -249 403
(Approved Lab under Environment (Protection) Act, 1986; EIA Consultancy by NABET, QCI)

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TEST REPORT

Lab Reference No: TL230598 **Date :** 28.02.2024

Indentor : Office of Executive Engineer, Nirman Shakha, Uttarakhand Peyjal Sansadhan Vikas Evam Nirman Nigam, Haridwar, Uttarakhand

Customer's Ref. No.: Letter No. 469/Testing/29 Dated 07.02.2024

Work Order No.: 23-0204-0-291

Sample Collected by: Indentor **Collection Date:** 07.02.2024

Sample/Job: Handpump Water Sample from Village Bahadrabad Block Bahadrabad Distt. Haridwar (Handpump No. 2)

PARAMETER	UNIT	OBTAINED VALUE	STANDARD LIMITS (IS 10500:2012) Acceptable	Permissible
Arsenic (as As)	mg/L	ND	0.01	0.05
Fluoride (as F)	mg/L	0.29	1.0	1.5
Magnesium (as Mg)	mg/L	39.27	30	100
Iron (as Fe)	mg/L	0.12	0.3	NR
Nitrate (as NO_3)	mg/L	12.0	45	NR

ND – Not Detectable NR – No Relaxation

Prepared by

Ankur Mohan
Engineer (PCRI)

Approved by

Shailendra Kumar
Dy. General Manager (PCRI)

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RANIPUR, HARIDWAR (U.K.) - 249 403
(Approved Lab under Environment (Protection) Act, 1986; EIA Consultancy by NABET, QCI)

TEST REPORT

Lab Reference No: TL230591 **Date :** 28.02.2024

Indentor : Office of Executive Engineer, Nirman Shakha, Uttarakhand Peyjal Sansadhan Vikas Evam Nirman Nigam, Haridwar, Uttarakhand

Customer's Ref. No.: Letter No. 469/Testing/29 Dated 07.02.2024

Work Order No.: 23-0204-O-291

Sample Collected by: Indentor **Collection Date:** 07.02.2024

Sample/Job: Handpump Water Sample from Village Bhikkampur Block Laksar Distt. Haridwar (Handpump No. 1)

PARAMETER	UNIT	OBTAINED VALUE	STANDARD LIMITS (IS 10500:2012)	
			Acceptable	Permissible
Arsenic (as As)	mg/L	ND	0.01	0.05
Fluoride (as F)	mg/L	0.46	1.0	1.5
Magnesium (as Mg)	mg/L	26.69	30	100
Iron (as Fe)	mg/L	11.97	0.3	NR
Nitrate (as NO_3)	mg/L	0.51	45	NR

ND – Not Detectable NR – No Relaxation

Prepared by

Ankur Mohan
Engineer (PCRI)

Approved by

Shailendra Kumar
Dy. General Manager (PCRI)

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(Approved Lab under Environment (Protection) Act, 1986; EIA Consultancy by NABET, QCI)

TEST REPORT

Lab Reference No: TL230592 **Date :** 28.02.2024

Indentor : Office of Executive Engineer, Nirman Shakha, Uttarakhand Peyjal Sansadhan Vikas Evam Nirman Nigam, Haridwar, Uttarakhand

Customer's Ref. No.: Letter No. 469/Testing/29 Dated 07.02.2024

Work Order No.: 23-0204-O-291

Sample Collected by: Indentor **Collection Date:** 07.02.2024

Sample/Job: Handpump Water Sample from Village Bhikkampur Block Laksar Distt. Haridwar (Handpump No. 2)

PARAMETER	UNIT	OBTAINED VALUE	STANDARD LIMITS (IS 10500:2012)	
			Acceptable	Permissible
Arsenic (as As)	mg/L	ND	0.01	0.05
Fluoride (as F)	mg/L	0.52	1.0	1.5
Magnesium (as Mg)	mg/L	24.24	30	100
Iron (as Fe)	mg/L	0.16	0.3	NR
Nitrate (as NO_3)	mg/L	0.57	45	NR

ND – Not Detectable NR – No Relaxation

Prepared by

Ankur Mohan
Engineer (PCRI)

Approved by

Shailendra Kumar
Dy. General Manager (PCRI)

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BHARAT HEAVY ELECTRICALS LIMITED
RANIPUR, HARIDWAR (U.K.) - 249 403
(Approved Lab under Environment (Protection) Act, 1986; EIA Consultancy by NABET, QCI)

TEST REPORT

Lab Reference No: TL230595 **Date :** 28.02.2024

Indentor : Office of Executive Engineer, Nirman Shakha, Uttarakhand Peyjal Sansadhan Vikas Evam Nirman Nigam, Haridwar, Uttarakhand

Customer's Ref. No.: Letter No. 469/Testing/29 Dated 07.02.2024

Work Order No.: 23-0204-O-291

Sample Collected by: Indentor **Collection Date:** 07.02.2024

Sample/Job: Handpump Water Sample from Village Mohammadpur Block Roorkee Distt. Haridwar (Handpump No. 1)

PARAMETER	UNIT	OBTAINED VALUE	STANDARD LIMITS (IS 10500:2012)	
			Acceptable	Permissible
Arsenic (as As)	mg/L	ND	0.01	0.05
Fluoride (as F)	mg/L	0.96	1.0	1.5
Magnesium (as Mg)	mg/L	21.35	30	100
Iron (as Fe)	mg/L	5.12	0.3	NR
Nitrate (as NO_3)	mg/L	0.53	45	NR

ND – Not Detectable NR – No Relaxation

Prepared by

Ankur Mohan
Engineer (PCRI)

Approved by

Shailendra Kumar
Dy. General Manager (PCRI)

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PCRI/051

प्रदूषण नियंत्रण अनुसंधान संस्थान

भारत हेवी इलेक्ट्रिकल्स लिमिटेड, रानीपुर, हरिद्वार (उत्तराखंड)

POLLUTION CONTROL RESEARCH INSTITUTE

(A Govt. of India – UNDP / UNIDO Project)
BHARAT HEAVY ELECTRICALS LIMITED
RANIPUR, HARIDWAR (U.K.) - 249 403
(Approved Lab under Environment (Protection) Act, 1986; EIA Consultancy by NABET, QCI)

TEST REPORT

Lab Reference No: TL230596 **Date :** 28.02.2024

Indentor : Office of Executive Engineer, Nirman Shakha, Uttarakhand Peyjal Sansadhan Vikas Evam Nirman Nigam, Haridwar, Uttarakhand

Customer's Ref. No.: Letter No. 469/Testing/29 Dated 07.02.2024

Work Order No.: 23-0204-O-291

Sample Collected by: Indentor **Collection Date:** 07.02.2024

Sample/Job: Handpump Water Sample from Village Mohammadpur Block Roorkee Distt. Haridwar (Handpump No. 2)

PARAMETER	UNIT	OBTAINED VALUE	STANDARD LIMITS (IS 10500:2012)	
			Acceptable	Permissible
Arsenic (as As)	mg/L	ND	0.01	0.05
Fluoride (as F)	mg/L	0.83	1.0	1.5
Magnesium (as Mg)	mg/L	22.33	30	100
Iron (as Fe)	mg/L	0.26	0.3	NR
Nitrate (as NO_3)	mg/L	5.60	45	NR

ND – Not Detectable NR – No Relaxation

Prepared by

Ankur Mohan
Engineer (PCRI)

Approved by

Shailendra Kumar
Dy. General Manager (PCRI)

Remarks :- (1) This report refers only to the particular sample/job submitted for testing.
(2) This report is not to be reproduced wholly or partly and can not be used as an evidence in the court of law and should not be used in any advertising media without our special permission in writing.
(3) Samples will be disposed off after one month from the date of issue of Test Certificate.

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19 a

PCRI/051

प्रदूषण नियंत्रण अनुसंधान संस्थान

भारत हैवी इलेक्ट्रिकल्स लिमिटेड, रानीपुर, हरिद्वार (उत्तराखंड)

POLLUTION CONTROL RESEARCH INSTITUTE

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BHARAT HEAVY ELECTRICALS LIMITED
RANIPUR, HARIDWAR (U.K.) - 249 403
(Approved Lab under Environment (Protection) Act, 1986; Env. Consultancy by NABET, QCI)

TEST REPORT

Lab Reference No: TL230585 **Date :** 28.02.2024

Indentor : Office of Executive Engineer, Nirman Shakha, Uttarakhand Peyjal Sansadhan Vikas Evam Nirman Nigam, Haridwar, Uttarakhand

Customer's Ref. No.: Letter No. 469/Testing/29 Dated 07.02.2024

Work Order No.: 23-0204-0-291

Sample Collected by: Indentor **Collection Date:** 07.02.2024

Sample/Job: Handpump Water Sample from Village Khanpur Block Khanpur Distt. Haridwar (Handpump No. 1)

PARAMETER	UNIT	OBTAINED VALUE	STANDARD LIMITS (IS 10500:2012)	
			Acceptable	Permissible
Arsenic (as As)	mg/L	ND	0.01	0.05
Fluoride (as F)	mg/L	0.91	1.0	1.5
Magnesium (as Mg)	mg/L	12.62	30	100
Iron (as Fe)	mg/L	0.52	0.3	NR
Nitrate (as NO_3)	mg/L	0.36	45	NR

ND – Not Detectable NR – No Relaxation

Prepared by

Ankur Mohan
Engineer (PCRI)

Approved by

Shailendra Kumar
Dy. General Manager (PCRI)

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196

PCRI/051

प्रदूषण नियंत्रण अनुसंधान संस्थान

भारत हेवी इलेक्ट्रिकल्स लिमिटेड, रानीपुर, हरिद्वार (उत्तराखण्ड)

POLLUTION CONTROL RESEARCH INSTITUTE

(A Govt. of India – UNDP / UNIDO Project)

BHARAT HEAVY ELECTRICALS LIMITED

RANIPUR, HARIDWAR (U.K.) - 249 403

(Approved Lab under Environment (Protection) Act, 1986; EIA Consultancy by NABET, QCI)

TEST REPORT

Lab Reference No: TL230586 **Date :** 28.02.2024

Indentor : Office of Executive Engineer, Nirman Shakha, Uttarakhand Peyjal Sansadhan Vikas Evam Nirman Nigam, Haridwar, Uttarakhand

Customer's Ref. No.: Letter No. 469/Testing/29 Dated 07.02.2024

Work Order No.: 23-0204-O-291

Sample Collected by: Indentor **Collection Date:** 07.02.2024

Sample/Job: Handpump Water Sample from Village Khanpur Block Khanpur Distt. Haridwar (Handpump No. 2)

PARAMETER	UNIT	OBTAINED VALUE	STANDARD LIMITS (IS 10500:2012)	
			Acceptable	Permissible
Arsenic (as As)	mg/L	ND	0.01	0.05
Fluoride (as F)	mg/L	0.12	1.0	1.5
Magnesium (as Mg)	mg/L	47.10	30	100
Iron (as Fe)	mg/L	0.25	0.3	NR
Nitrate (as NO_3)	mg/L	0.26	45	NR

ND - Not Detectable NR – No Relaxation

Prepared by

Ankur Mohan
Engineer (PCRI)

Approved by

Shailendra Kumar
Dy. General Manager (PCRI)

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-418-

PCRI/851

प्रदूषण नियंत्रण अनुसंधान संस्थान

भारत हेवी इलेक्ट्रिकल्स लिमिटेड, रानीपुर, हरिद्वार (उत्तराखंड)

POLLUTION CONTROL RESEARCH INSTITUTE

(A Govt. of India – UNDP / UNIDO Project)
BHARAT HEAVY ELECTRICALS LIMITED
RANIPUR, HARIDWAR (U.K.) - 249 403
(Approved Lab under Environment (Protection) Act, 1986; EIA Consultancy by NABET, QCI)

20 a

TEST REPORT

Lab Reference No: TL230593 **Date :** 28.02.2024

Indentor : Office of Executive Engineer, Nirman Shakha, Uttarakhand Peyjal Sansadhan Vikas Evam Nirman Nigam, Haridwar, Uttarakhand

Customer's Ref. No.: Letter No. 469/Testing/29 Dated 07.02.2024

Work Order No.: 23-0204-O-291

Sample Collected by: Indentor **Collection Date:** 07.02.2024

Sample/Job: Handpump Water Sample from Village Bhogpur Block Laksar Distt. Haridwar (Handpump No. 1)

PARAMETER	UNIT	OBTAINED VALUE	STANDARD LIMITS (IS 10500:2012)	
			Acceptable	Permissible
Arsenic (as As)	mg/L	ND	0.01	0.05
Fluoride (as F)	mg/L	0.70	1.0	1.5
Magnesium (as Mg)	mg/L	19.39	30	100
Iron (as Fe)	mg/L	8.81	0.3	NR
Nitrate (as NO_3)	mg/L	1.20	45	NR

ND – Not Detectable NR – No Relaxation

Prepared by

Ankur Mohan
Engineer (PCRI)

Approved by

Shailendra Kumar
Dy. General Manager (PCRI)

Remarks :- (1) This report refers only to the particular sample/job submitted for testing.
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PCRI/051

प्रदूषण नियंत्रण अनुसंधान संस्थान

भारत हेवी इलेक्ट्रिकल्स लिमिटेड, रानीपुर, हरिद्वार (उत्तराखंड)

POLLUTION CONTROL RESEARCH INSTITUTE

(A Govt. of India – UNDP / UNIDO Project)
BHARAT HEAVY ELECTRICALS LIMITED
RANIPUR, HARIDWAR (U.K.) - 249 403
(Approved Lab under Environment (Protection) Act, 1986; EIA Consultancy by NABET, QCI)

TEST REPORT

Lab Reference No: TI.230594 **Date :** 28.02.2024

Indentor : Office of Executive Engineer, Nirman Shakha, Uttarakhand Peyjal Sansadhan Vikas Evam Nirman Nigam, Haridwar, Uttarakhand

Customer's Ref. No.: Letter No. 469/Testing/29 Dated 07.02.2024

Work Order No.: 23-0204-O-291

Sample Collected by: Indentor **Collection Date:** 07.02.2024

Sample/Job: Handpump Water Sample from Village Bhogpur Block Laksar Distt. Haridwar (Handpump No. 2)

PARAMETER	UNIT	OBTAINED VALUE	STANDARD LIMITS (IS 10500:2012)	
			Acceptable	Permissible
Arsenic (as As)	mg/L	0.016	0.01	0.05
Fluoride (as F)	mg/L	0.71	1.0	1.5
Magnesium (as Mg)	mg/L	21.32	30	100
Iron (as Fe)	mg/L	0.21	0.3	NR
Nitrate (as NO_3)	mg/L	4.40	45	NR

ND – Not Detectable NR – No Relaxation

Prepared by

Ankur Mohan
Engineer (PCRI)

Approved by

Shailendra Kumar
Dy. General Manager (PCRI)

Remarks :- (1) This report refers only to the particular sample/job submitted for testing.
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PCRI/051

प्रदूषण नियंत्रण अनुसंधान संस्थान

भारत हेवी इलेक्ट्रिकल्स लिमिटेड, रानीपुर, हरिद्वार (उत्तराखंड)

POLLUTION CONTROL RESEARCH INSTITUTE

(A Govt. of India – UNDP / UNIDO Project)
BHARAT HEAVY ELECTRICALS LIMITED
RANIPUR, HARIDWAR (U.K.) - 249 403
(Approved Lab under Environment (Protection) Act, 1986; EIA Consultancy by NABET, QCI)

TEST REPORT

Lab Reference No: TL230566 **Date :** 28.02.2024

Indentor : Office of Executive Engineer, Project Implementation Unit (AMRUT) Uttarakhand Peyjal Sansadhan Vikas Evam Nirman Nigam, Kashipur, Udham Singh Nagar, Uttarakhand

Customer's Ref. No.: Letter No. 266/Parikshan/04 Dated 07.02.2024

Work Order No.: 23-0202-0-291

Sample Collected by: Indentor **Collection Date:** 07.02.2024

Sample/Job: Handpump Water Sample from Basai Block Jaspur Distt. Udham Singh Nagar (Handpump No. 1) Bichoi

PARAMETER	UNIT	OBTAINED VALUE	STANDARD LIMITS (IS 10500:2012)	
			Acceptable	Permissible
Arsenic (as As)	mg/L	ND	0.01	0.05
Fluoride (as F)	mg/L	0.63	1.0	1.5

Prepared by

Ankur Mohan
Engineer (PCRI)

Approved by

Shailendra Kumar
Dy. General Manager (PCRI)

Remarks : 1) The report is only to the particular sample submitted for testing.
2) This report can not be reproduced wholly or partly and can not be used as an evidence in the court of law and shall not be used for advertising media without special permission in writing.
3) Samples will be disposed off after one month from the date of issue of Test Certificate.

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Devansh Testing & Research Laboratory Pvt. Ltd.

Test Report

94, Shiv Ganga Industrial Estate, Lakeshwari, Bhagwanpur, Roorkee - 247661(UK)
Contact No. : 01332-235418, 7060134448,E-mail : dtrlpvtltd@gmail.com,Website : www.dtrlab.org

Govt. Approved Test House

TC-6467

DRUG LICENSE No. : MH/CTL/7016

Sample	: HAND PUMP WATER(Sample No 1)(Kichha)	ULR No.	: TC846724600003328F
Customer Name	: UTTARAKHAND PAYJAL NIGAM,U.S NAGAR	Report No.	: DTRL/S-100224004
Customer Address	: Rudrapur Uttarakhand	Your Ref.	: 10/02/2024
		Sample Qty.	: 1 Ltr
		Date of Receipt	: 10/02/2024
Date of Sampling	: 10/02/2024	Sampling Procedure	: DTRL/SOP-QCC-150

Date of Test Performance Initiated : 10/02/2024

RESULTS OF ANALYSIS

Reference : IS:10500

Description : One Hand pump water (Sample No-1) sample was collected by us on 10-02-2024

S.No.	Test Parameters	Results	Permissible Limit IS 10500/2012 In the absence of alternate source amd No-1,2,3,4	Test Method
(i).Chemical Testing (Water)				
Table -1 Organoleptic and physical parameter (clause 4)				
1	Colour, Hazen Unit Max	<2	15	IS 3025 (P-4) 2021
2	Odour	Agreeable	Agreeable	IS 3025 (P-5) 2018
3	Turbidity NTU Max	<1	5	IS 3025 (P-10)-1984
4	pH Value	7.12	No relaxation	IS 3025(P-11) 2022
5	Total Dissolved Solids mg/L Max.	365	2000	IS:3025 (P-16):2023
6	Total Hardness(As CaCO3) mg/L Max.	297.9	600	IS:3025 (P-21)-2009
7	Chloride (as Cl) mg/L Max	21.8	1000	IS:3025 (P-32)-1988
8	Fluoride (as F) mg/L Max.	BLQ (0.1)	1.0	APHA 4500 F D 24th Edn
9	Calcium (as Ca) mg/L Max	168.8	200	IS 3025 (P-40) 1991
10	Magnesium (as Mg) mg/L Max	31.4	100	IS 3025 (P-46) 1994
11	Total Alkalinity (as CaCO3) mg/L Max	250.5	600	IS 3025 (P-23) 1986
12	Total Arsenic (as As) mg/L Max	BLQ (0.005)	0.01	IS 3025 (P-65)2022
Note-1. BLQ-Below limit of Quantification				

Date of Completion : 14/02/2024

14/02/2024
DATE OF ISSUE

REVIEWED BY

AUTHORISED SIGNATORY

NOTE:
1. Samples not drawn by us unless otherwise stated
2. The results of the analysis given in this report are related to the analysed amount
3. This report should not be reproduced except in full without written approval of the laboratory
4. The test certificate of the tests shall not be used for promotional or publicity purposes
5. Result given in report are related to sample tested only

1286

-422-

30 b

Devansh Testing & Research Laboratory Pvt. Ltd.

Test Report

94, Shiv Ganga Industrial Estate, Lakadwari, Bhagwanpur, Roorkee - 247661(UK)
Contact No. : 01332-235415, 7060134448 | e-mail : dtrlsvdltd@gmail.com,Website : www.dtrlab.org

DRUG LICENSE No. : UA/CTL/2010 TC-6467

Sample	: HAND PUMP WATER(Sample No.2)(Kichha)	ULR No.	: TC646724600003330F
Customer Name	: UTTARAKHAND PAYJAL NIGAM,U.S NAGAR	Report No.	: DTRLES-100224005
Customer Address	: Rudrapur Uttarakhand	Your Ref.	: 10/02/2024
		Sample Qty.	: 1 ltr
		Date of Receipt	: 10/02/2024
Date of Sampling	: 10/02/2024	Sampling Procedure	: DTRL-SOP-QCC-160

Date of Test Performance Initiated : 10/02/2024

RESULTS OF ANALYSIS

Reference : IS 10500
Description : One Hand pump water (Sample No-2) sample was collected by us on 10.02.2024

S.No.	Test Parameters	Results	Permissible Limit IS 10500/2012 In the absence of alternate source amd No-1,2,3,4	Test Method
(i) Chemical Testing (Water)				
Table -1 Organoleptic and physical parameter (clause 4)				
1	Colour, Hazen Unit Max.	<2	15	IS 3025 (P-4) 2021
2	Odour	Agreeable	Agreeable	IS 3025 (P-5) 2018
3	Turbidity NTU, Max.	<1	5	IS 3025 (P-10) 1984
4	pH Value	7.11	No relaxation	IS 3025(P-11)2022
5	Total Dissolved Solids mg/L Max.	348	2000	IS 3025 (P-16)2023
6	Total Hardness(As CaCO3) mg/L Max.	280	600	IS 3025 (P-21) 2009
7	Chloride (as Cl) mg/L Max.	22.3	1000	IS 3025 (P-32) 1988
8	Fluoride (as F) mg/L Max.	BLQ (0.1)	1.0	APHA 4500 F D 24th Ed
9	Calcium (as Ca) mg/L Max.	163.9	200	IS 3025 (P-40) 1991
10	Magnesium (as Mg) mg/L Max.	28.2	100	IS 3025 (P-46) 1994
11	Total Alkalinity (as CaCO3) mg/L Max.	254.5	600	IS 3025 (P-23) 1986
12	Total Arsenic (as As) mg/L Max.	BLQ (0.005)	0.01	IS 3025 (P-65)2022

Note-1. BLQ-Below limit of Quantification

Date of Completion : 14/02/2024

14/02/2024
DATE OF ISSUE

REVIEWED BY

AUTHORISED SIGNATORY

NOTE:
1-Sample(s) not drawn by us unless otherwise stated
2- Total liability of our analytical division is limited to the invoiced amount.
3-Sample will be destroyed after one month from the date of issue of test certificate unless otherwise specified
4-Test certificate in full or parts shall not be used for promotional or publicity purposes.
5-Result given in report are related to sample tested only

30 C

Devansh Testing & Research Laboratory Pvt. Ltd.

Test Report

98, Shiv Ganga Industrial Estate, Lakshwari, Bhagwanpur, Roorkee - 247661(UK)
Contact No. : 01332-235415, 7060114448,E-mail : dtlplvtltd@gmail.com,Website : www.dtlab.org

DRUG LICENSE No. : UA/ACTL/2018

TC-6467

Sample	: HAND PUMP WATER(Sample No.3)(Richha)	ULR No.	: TC646724600003326F
Customer Name	: UTTARAKHAND PAYJAL NIGAM,U.S NAGAR	Report No.	: DTRLES-10022/6006
Customer Address	: Rudrapur Uttarakhand	Your Ref.	: 10/02/2024
		Sample Qty.	: 1 Ltr
		Date of Receipt	: 10/02/2024
Date of Sampling	: 10/02/2024	Sampling Procedure	: DTRL-SOP OCC 160

Date of Test Performance Initiated : 10/02/2024

RESULTS OF ANALYSIS

Reference : IS:10500

Description : One Hand pump water (Sample No-3) sample was collected by us on 10-02-2024

S.No.	Test Parameters	Results	Permissible Limit IS 10500/2012 In the absence of alternate source amd No-1,2,3,4	Test Method
(i).Chemical Testing (Water)				
Table -1 Organoleptic and physical parameter (clause 4)				
1	Colour Hazen Unit Max	<2	15	IS 3025 (P-4) 2021
2	Odour	Agreeable	Agreeable	IS 3025 (P-5) 2018
3	Turbidity NTU, Max.	<1	5	IS 3025 (P-10) 1984
4	pH Value	7.20	No relaxation	IS 3025(P-11) 2022
5	Total Dissolved Solids mg/L Max.	375	2000	IS:3025 (P-16) 2023
6	Total Hardness(As CaCO3) mg/L Max.	310.4	600	IS:3025 (P-21) 2009
7	Chloride (as Cl) mg/L Max.	25.8	1000	IS:3025 (P-32) 1988
8	Fluoride (as F) mg/L Max	BLQ (0.1)	1.0	APHA 4500 F,D 24th Ed
9	Calcium (as Ca) mg/L Max.	171.7	200	IS 3025 (P-40) 1991
10	Magnesium (as Mg) mg/L Max.	33.7	100	IS 3025 (P-46) 1994
11	Total Alkalinity (as CaCO3) mg/L Max	250.5	600	IS:3025 (P-23) 1986
12	Total Arsenic (as As) mg/L Max.	BLQ (0.005)	0.01	IS 3025 (P-65):2022

Note-1. BLQ-Below limit of Quantification

Date of Completion : 14/02/2024

14/02/2024
DATE OF ISSUE

REVIEWED BY

AUTHORISED SIGNATORY

Arvind Khatayal

NOTE:
1 Sample(s) not drawn by us unless otherwise stated
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3 Sample will be destroyed after one month from the date of issue of test certificate unless otherwise specified
4 Test certificate or its parts shall not be used for promotional or publicity purposes
5 Result given in report are related to sample tested only

1288

-424-

District Level Water Quality Testing and Monitoring Laboratory
Uttarakhand Jal Sansthan, 32, Rajpur Road, Dehradun
Ph (O): 0135-2746137, E-mail: eenorth-ujs-uk@nic.in

32

Dated: 27/01/2024

TEST REPORT

Name and Address of Organization/ Customer	Executive Engineer, Uttarakhand Jal Sansthan, Uttarakashi		
Product Description	Drinking Water	Sample Description	One Water Sample collected from Maneri, Handpump
Reference Sample Identification:	DLWQTML/UJS/05		Date of Start of Analysis: 27/01/2024
			Date of End of Analysis: 27/01/2024
Date and Time of Sample Received: 27/01/24 & 01:45 PM		Sample Collected by:	Customer

SN	Water Quality Parameters Under Chemical Scope	Results	Acceptable Limit As per IS 10500:2012	Permissible Limit (BIS) in the Absence of alternative source	Std. Test Method
1	Arsenic, ppb	Not detected	10	No Relaxation	APHA 3500-As B

1. The results listed refer only to tested sample and applicable parameters.
2. This certificate is not be reproduced wholly or in parts promotional publicity or legal purpose without permission of authority of testing laboratory.
3. The samples will be destroyed after Seven days from the date of issue of test certificate, unless otherwise agreed with customer.
4. The results apply to the sample as received
5. The Laboratory is responsible for all the information provided in the report, except when information is provided by the customer

**** End of Report****

27/01/24

(Dr. Vikash Kandari)
Technical Manager, Lab

-End of Report-

District Level Water Quality Testing and Monitoring Laboratory
Uttarakhand Jal Sansthan, 32, Rajpur Road, Dehradun
Ph (O): 0135-2746137, E-mail: eenorth-uis-uk@nic.in

Dated: 01/02/2024

TEST REPORT

Name and Address of Organization/ Customer	Executive Engineer, Uttarakhand Jal Sansthan, Uttarakashi		
Product Description	Drinking Water	**Sample Description**	One Water Sample collected from Spring/ Gangnani Inlet
Reference Sample Identification:	DLWQTML/UJS/02		Date of Start of Analysis: 31/01/2024
			Date of End of Analysis: 01/02/2024
Date and Time of Sample Received: 31/01/24 & 02:25 PM		**Sample Collected by:**	Customer

SN	Water Quality Parameters Under Chemical Scope	Results	Acceptable Limit As per IS 10500:2012	Permissible Limit (BIS) in the Absence of alternative source	Std. Test Method
1	**Arsenic, ppb**	**Not detected**	0.01	No Relaxation	APHA 3500-As B

1. The results listed refer only to tested sample and applicable parameters.
2. This certificate is not be reproduced wholly or in parts promotional publicity or legal purpose without permission of authority of testing laboratory.
3. The samples will be destroyed after Seven days from the date of issue of test certificate, unless otherwise agreed with customer.
4. The results apply to the sample as received.
5. The Laboratory is responsible for all the information provided in the report, except when information is provided by the customer.

**** End of Report****

31/01/24

(Dr. Vikash Kandari)
Technical Manager, Lab

-End of Report

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प्रदूषण नियंत्रण अनुसंधान संस्थान

भारत हेवी इलेक्ट्रिकल्स लिमिटेड, रानीपुर, हरिद्वार (उत्तराखंड)

POLLUTION CONTROL RESEARCH INSTITUTE

(A Govt. of India – UNDP / UNIDO Project)
BHARAT HEAVY ELECTRICALS LIMITED
RANIPUR, HARIDWAR (U.K.) - 249 403
(Approved Lab under Environment (Protection) Act, 1986; EIA Consultancy by NABET, QCI)

TEST REPORT

Lab Reference No:	TL230577	Date :	28.02.2024
Indentor :	Office of Executive Engineer, Nirman Shakha, Uttarakhand Peyjal Sansadhan Vikas Evam Nirman Nigam, Haridwar, Uttarakhand		
Customer's Ref. No.:	Letter No. 469/Testing/29 Dated 07.02.2024		
Work Order No.:	23-0204-O-291		
Sample Collected by:	Indentor	Collection Date:	07.02.2024
Sample/Job:	Handpump Water Sample from Village Chudiyala Block Bhagwanpur Distt. Haridwar (Handpump No. 1)		

PARAMETER	UNIT	OBTAINED VALUE	STANDARD LIMITS (IS 10500:2012) Acceptable	Permissible
Arsenic (as As)	mg/L	ND	0.01	0.05
Fluoride (as F)	mg/L	0.98	1.0	1.5
Magnesium (as Mg)	mg/L	24.75	30	100
Iron (as Fe)	mg/L	0.43	0.3	NR
Nitrate (as NO_3)	mg/L	0.92	45	NR

ND - Not Detectable NR – No Relaxation

Prepared by

Ankur Mohan
Engineer (PCRI)

Approved by

Shailendra Kumar
Dy. General Manager (PCRI)

Remarks : (1) This report refers only to the particular sample/job submitted for testing
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10 (6)

PCRI/951

प्रदूषण नियंत्रण अनुसंधान संस्थान

भारत हेवी इलेक्ट्रिकल्स लिमिटेड, रानीपुर, हरिद्वार-249403

POLLUTION CONTROL RESEARCH INSTITUTE

(A Govt. of India – UNDP / UNIDO Project)
BHARAT HEAVY ELECTRICALS LIMITED
RANIPUR, HARIDWAR (U.K.) - 249 403
(Approved Lab under Environment (Protection) Act, 1986; EIA Consultancy by NABET, QCI)

TEST REPORT

Lab Reference No: TL230578 **Date :** 28.02.2024

Indentor : Office of Executive Engineer, Nirman Shakha, Uttarakhand Peyjal Sansadhan Vikas Evam Nirman Nigam, Haridwar, Uttarakhand

Customer's Ref. No.: Letter No. 469/Testing/29 Dated 07.02.2024

Work Order No.: 23-0204-O-291

Sample Collected by: Indentor **Collection Date:** 07.02.2024

Sample/Job: Handpump Water Sample from Village Chudiyala Block Bhagwanpur Distt. Haridwar (Handpump No. 2)

PARAMETER	UNIT	OBTAINED VALUE	STANDARD LIMITS (IS 10500:2012)	
			Acceptable	Permissible
Arsenic (as As)	mg/L	ND	0.01	0.05
Fluoride (as F)	mg/L	1.08	1.0	1.5
Magnesium (as Mg)	mg/L	20.87	30	100
Iron (as Fe)	mg/L	0.09	0.3	NR
Nitrate (as NO_3)	mg/L	0.55	45	NR

ND – Not Detectable NR – No Relaxation

Prepared by

Ankur Mohan
Engineer (PCRI)

Approved by

Shailendra Kumar
Dy. General Manager (PCRI)

Remarks :- (1) This report refers only to the particular sample/job submitted for testing.
(2) This report is not to be reproduced wholly or partly and can not be used as an evidence in the court of law and should not be used in any advertising media without our special permission in writing.
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TEST REPORT

Lab Reference No: TL230559 **Date :** 28.02.2024

Indentor : Office of Executive Engineer, Project Implementation Unit (AMRUT) Uttarakhand Peyjal Sansadhan Vikas Evam Nirman Nigam, Kashipur, Udham Singh Nagar, Uttarakhand

Customer's Ref. No.: Letter No. 266/Parikshan/04 Dated 07.02.2024

Work Order No.: 23-0202 C-291

Sample Collected by: Indentor **Collection Date:** 07.02.2024

Sample/Job: Handpump Water Sample from Dhanauri Patti Block Kashipur Distt. Udham Singh Nagar (Handpump No. 1)

PARAMETER	UNIT	OBTAINED VALUE	STANDARD LIMITS (IS 10500:2012)	
			Acceptable	Permissible
Arsenic (as As)	mg/L	ND	0.01	0.05
Fluoride (as F)	mg/L	0.74	1.0	1.5

Prepared by

Ankur Mohan
Engineer (PCRI)

Approved by

Shailendra Kumar
Dy. General Manager (PCRI)

Remarks : 1) The results relate only to the particular sample tested.
2) The report shall not be reproduced except in full without the written approval of the laboratory.
3) Sample will be disposed after one month from the date of issue of this report.

216

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BHARAT HEAVY ELECTRICALS LIMITED
RANIPUR, HARIDWAR (U.K.) - 249 403
(Approved Lab under Environment (Protection) Act, 1986; EIA Consultancy by NABET, QCI)

TEST REPORT

Lab Reference No: TL230560 **Date :** 28.02.2024

Indentor : Office of Executive Engineer, Project Implementation Unit (AMRUT) Uttarakhand Peyjal Sansadhan Vikas Evam Nirman Nigam, Kashipur, Udham Singh Nagar, Uttarakhand

Customer's Ref. No.: Letter No. 266/Parikshan/04 Dated 07.02.2024

Work Order No.: 23-0202-O-291

Sample Collected by: Indentor **Collection Date:** 07.02.2024

Sample/Job: Handpump Water Sample from Dhanauri Patti Block Kashipur Distt. Udham Singh Nagar (Handpump No. 2)

PARAMETER	UNIT	OBTAINED VALUE	STANDARD LIMITS (IS 10500:2012)	
			Acceptable	Permissible
Arsenic (as As)	mg/L	ND	0.01	0.05
Fluoride (as F)	mg/L	0.76	1.0	1.5

Prepared by

Ankur Mohan
Engineer (PCRI)

Approved by

Shailendra Kumar
Dy. General Manager (PCRI)

Remarks : 1. This report relates to the particular sample/s submitted for testing.
2. This report is not to be reproduced wholly or partly and can not be used as an evidence in the court of law and other for without prior written authority from the competent authority of PCRI.
3. Samples will be disposed off after one month from the date of issue of Test Certificate.

1294

-430-

22

Devansh Testing & Research Laboratory Pvt. Ltd.

Test Report

94, Shiv Ganga Industrial Estate, Lakshmpur, Bhagwanpur, Roorkee - 247661(UK)
Contact No. : 01332-325433, 7060934442 E-mail : dtrlpvtltd@gmail.com Website : www.dtrlab.org

Govt. Approved Test House

DRUG LICENSE No. : UTA/CTL/2015

TC-6467

location (latitude - 28.93649, longitude - 79.76667) (Tarsiri)

Sample : HAND PUMP WATER(Sitargarg)

Customer Name : UTTARAKHAND PAYJAL NIGAM,U.S NAGAR
Customer Address : Sitargarj Uttarakhand

ULR No. : TC646724600003324F
Report No. : DTRL/ES-100/224007
Your Ref. : 10/02/2024
Sample Qty. : 1 Ltr.
Date of Receipt : 10/02/2024
Sampling Procedure : DTRL-SOP-CCC-150

Date of Sampling : 10/02/2024

Date of Test Performance Initiated : 10/02/2024

RESULTS OF ANALYSIS

Reference : IS 10500
Description : One Hand pump water sample was collected by us on 10-02-2024

S.No.	Test Parameters	Results	Permissible Limit IS 10500/2012 In the absence of alternate source and No-1,2,3,4	Test Method
(i) Chemical Testing (Water)				
Table -1 Organoleptic and physical parameter (clause 4)				
1	Colour, Hazen Unit Max	<2	15	IS 3025 (P 4) 2021
2	Odour	Agreeable	Agreeable	IS 3025 (P 5) 2018
3	Turbidity N.T.U. Max	<1	5	IS 3025 (P 10) 1984
4	pH Value	7.11	No relaxation	IS 3025(P 11) 2002
5	Total Dissolved Solids mg/L Max.	349	2000	IS 3025 (P-16)2023
6	Total Hardness(As CaCO3) mg/L Max.	282.3	600	IS 3025 (P-21) 2009
7	Chloride (as Cl) mg/L Max.	21.8	1000	IS 3025 (P-32) 1988
8	Fluoride (as F) mg/L Max.	BLQ (0.1)	1.0	APHA 4500 F D 24th Edn
9	Calcium (as Ca) mg/L Max.	173.6	200	IS 3025 (P 40) 1991
10	Magnesium (as Mg) mg/L Max.	26.4	100	IS 3025 (P 46) 1994
11	Total Alkalinity (as CaCO3) mg/L Max.	250.5	600	IS 3025 (P 23) 1986
12	Total Arsenic (as As) mg/L Max	BLQ (0.005)	0.01	IS 3025 (P-65)2022
Note-1. BLQ-Below limit of Quantification				

Date of Completion 14/02/2024

14/02/2024
DATE OF ISSUE

REVIEWED BY

AUTHORISED SIGNATORY

NOTE:
1. Sample(s) not drawn by us unless otherwise stated
2. The liability of the analytical division is limited to the invoiced amount
3. Sample will be completed after one month from the date of issue of test certificate unless otherwise specified
4. This certificate is not to be used for promotional or publicity purposes
5. Result given in report are relative to sample tested only

Devansh Testing & Research Laboratory Pvt. Ltd.

Govt. Approved Test House

54, Shiv Ganga Industrial Estate, Lakeshwari, Bhagwanpur, Roorkee - 247661(UK)
Contact No. : 01332-235415, 7055134415 E-mail : drlpvtlab@gmail.com Website : www.dtrlab.org

DRUG LICENSE No. : 10UA/CTI-2618

Test Report

TC-6467

Sample	: HAND PUMP WATER(Sitarganj)	ULR No.	: TC646724600003324F
Customer Name	: UTTARAKHAND PAYJAL NIGAM,U.S NAGAR	Report No.	: DTRL/ES-100224007
Customer Address	: Sitarganj Uttarakhand	Your Ref.	: 10/02/2024
		Sample Qty.	: 1 Ltr
Date of Sampling	: 10/02/2024	Date of Receipt	: 10/02/2024
		Sampling Procedure	: DTRL/SOP/DCC-166

Date of Test Performance Initiated : 10/02/2024

RESULTS OF ANALYSIS

S.No.	Test Parameters	Results	Permissible Limit IS 10500/2012 In the absence of alternate source amd No-1,2,3,4	Test Method

2. Figure in brackets indicate minimum limit of Quantification.

Date of Completion : 14/02/2024

Note :- Party asked for the above tests only

The sample Conforms to the IS10500 with respect to above tests only.

14/02/2024
DATE OF ISSUE

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AUTHORISED SIGNATORY

NOTE:

1-Sample will be destroyed after one month from the date of issue of test certificate unless otherwise specified
4-Test certificate or its part shall not be used for propagation or publicity purposes
5-Result given in report are related to sample tested only

PCRI051

प्रदूषण नियंत्रण अनुसंधान संस्थान

भारत हेवी इलेक्ट्रिकल्स लिमिटेड, रानीपुर, हरिद्वार (उत्तराखंड)

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BHARAT HEAVY ELECTRICALS LIMITED
RANIPUR, HARIDWAR (U.K.) - 249 403
(Approved Lab under Environment (Protection) Act, 1986: EIA Consultancy by NABET, QCI)

TEST REPORT

Lab Reference No: TL230562 **Date :** 28.02.2024

Indentor : Office of Executive Engineer, Project Implementation Unit (AMRUT) Uttarakhand Peyjal Sansadhan Vikas Evam Nirman Nigam, Kashipur, Udham Singh Nagar, Uttarakhand

Customer's Ref. No.: Letter No. 266/Parikshan/04 Dated 07.02.2024

Work Order No.: 23-0202-0-291

Sample Collected by: Indentor **Collection Date:** 07.02.2024

Sample/Job: Handpump Water Sample from Jaspur Block Jaspur Distt. Udham Singh Nagar (Handpump No. 1)

PARAMETER	UNIT	OBTAINED VALUE	STANDARD LIMITS (IS 10500:2012)	
			Acceptable	Permissible
Arsenic (as As)	mg/L	ND	0.01	0.05
Fluoride (as F)	mg/L	1.11	1.0	1.5

Prepared by

Ankur Mohan
Engineer (PCRI)

Approved by

Shailendra Kumar
Dy. General Manager (PCRI)

Note: (1) This report relates only to the particular sample(s) submitted for testing.
(2) This report is not to be reproduced wholly or partly and is not to be used in any advertising media without any special permission in writing.
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-433-

236

PCRI/051

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(Approved Lab under Environment (Protection) Act. 1986; EIA Consultancy by NABET, QCI)

TEST REPORT

Lab Reference No: TL230563 **Date :** 28.02.2024

Indentor : Office of Executive Engineer, Project Implementation Unit (AMRUT) Uttarakhand Peyjal Sansadhan Vikas Evam Nirman Nigam, Kashipur, Udham Singh Nagar, Uttarakhand

Customer's Ref. No.: Letter No. 266/Parikshan/04 Dated 07.02.2024

Work Order No.: 23-0202-O-291

Sample Collected by: Indentor **Collection Date:** 07.02.2024

Sample/Job: Handpump Water Sample from Jaspur Block Jaspur Distt. Udham Singh Nagar (Handpump No. 2)

PARAMETER	UNIT	OBTAINED VALUE	STANDARD LIMITS (IS 10500:2012)	
			Acceptable	Permissible
Arsenic (as As)	mg/L	ND	0.01	0.05
Fluoride (as F)	mg/L	0.85	1.0	1.5

Prepared by

Ankur Mohan
Engineer (PCRI)

Approved by

Shailendra Kumar
Dy. General Manager (PCRI)

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TEST REPORT

Lab Reference No: TL230564 **Date :** 28.02.2024

Indentor : Office of Executive Engineer, Project Implementation Unit (AMRUT) Uttarakhand Peyjal Sansadhan Vikas Evam Nirman Nigam, Kashipur, Udham Singh Nagar, Uttarakhand

Customer's Ref. No.: Letter No. 266/Parikshan/04 Dated 07.02.2024

Work Order No.: 23-0202-O-291

Sample Collected by: Indentor **Collection Date:** 07.02.2024

Sample/Job: Handpump Water Sample from Durgapur Block Jaspur Distt. Udham Singh Nagar (Handpump No. 1)

PARAMETER	UNIT	OBTAINED VALUE	STANDARD LIMITS (IS 10500:2012)	
			Acceptable	Permissible
Arsenic (as As)	mg/L	ND	0.01	0.05
Fluoride (as F)	mg/L	0.30	1.0	1.5

Prepared by

Ankur Mohan
Engineer (PCRI)

Approved by

Shailendra Kumar
Dy. General Manager (PCRI)

Remarks :- (1) This report relates only to the particular sample/job submitted for testing.
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246

PCRI/051

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TEST REPORT

Lab Reference No: TL230565 **Date :** 28.02.2024

Indentor : Office of Executive Engineer, Project Implementation Unit (AMRUT) Uttarakhand Peyjal Sansadhan Vikas Evam Nirman Nigam, Kashipur, Udham Singh Nagar, Uttarakhand

Customer's Ref. No.: Letter No. 266/Parikshan/04 Dated 07.02.2024

Work Order No.: 23-0202-O-291

Sample Collected by: Indentor **Collection Date:** 07.02.2024

Sample/Job: Handpump Water Sample from Durgapur Block Jaspur Distt. Udham Singh Nagar (Handpump No. 2)

PARAMETER	UNIT	OBTAINED VALUE	STANDARD LIMITS (IS 10500:2012)	
			Acceptable	Permissible
Arsenic (as As)	mg/L	ND	0.01	0.05
Fluoride (as F)	mg/L	0.67	1.0	1.5

Prepared by

Ankur Mohan
Engineer (PCRI)

Approved by

Shailendra Kumar
Dy. General Manager (PCRI)

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(2) This report is not to be reproduced wholly or partly and can not be used as an evidence in the court of law and should not be used for any advertising media without our special permission in writing.
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(26a)

PCRI/851

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TEST REPORT

Lab Reference No: TL230567 **Date :** 28.02.2024

Indentor : Office of Executive Engineer, Project Implementation Unit (AMRUT) Uttarakhand Peyjal Sansadhan Vikas Evam Nirman Nigam, Kashipur, Udham Singh Nagar, Uttarakhand

Customer's Ref. No.: Letter No. 266/Parikshan/04 Dated 07.02.2024

Work Order No.: 23-0202-0-291

Sample Collected by: Indentor **Collection Date:** 07.02.2024

Sample/Job: Handpump Water Sample from Sand Kheda Block Kashipur Distt. Udham Singh Nagar (Handpump No. 1)

PARAMETER	UNIT	OBTAINED VALUE	STANDARD LIMITS (IS 10500:2012)	
			Acceptable	Permissible
Arsenic (as As)	mg/L	ND	0.01	0.05
Fluoride (as F)	mg/L	0.50	1.0	1.5

Prepared by

Ankur Mohan
Engineer (PCRI)

Approved by

Shailendra Kumar
Dy. General Manager (PCRI)

1. The report relates only to the particular sample(s) submitted for analysis.
2. This report is not to be reproduced wholly or partly and can not be used as evidence in the court of law and similar matters without the special permission in writing.
3. Samples will be disposed off after one week from the date of issue of Test Certificate.

(26 b)

PCRI-051

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BHARAT HEAVY ELECTRICALS LIMITED
RANIPUR, HARIDWAR (U.K.) - 249 403
(Approved Lab under Environment (Protection) Act, 1986; EIA Consultancy by NABET, QCI)

TEST REPORT

Lab Reference No: TL230568 **Date :** 28.02.2024

Indentor : Office of Executive Engineer, Project Implementation Unit (AMRUT) Uttarakhand Peyjal Sansadhan Vikas Evam Nirman Nigam, Kashipur, Udham Singh Nagar, Uttarakhand

Customer's Ref. No.: Letter No. 266/Parikshan/04 Dated 07.02.2024

Work Order No.: 23-0202-0-291

Sample Collected by: Indentor **Collection Date:** 07.02.2024

Sample/Job: Handpump Water Sample from Sand Kheda Block Kashipur Distt. Udham Singh Nagar (Handpump No. 2)

PARAMETER	UNIT	OBTAINED VALUE	STANDARD LIMITS (IS 10500:2012)	
			Acceptable	Permissible
Arsenic (as As)	mg/L	ND	0.01	0.05
Fluoride (as F)	mg/L	0.73	1.0	1.5

Prepared by

Ankur Mohan
Engineer (PCRI)

Approved by

Shailendra Kumar
Dy. General Manager (PCRI)

1302

-438-

26 C

प्रदूषण नियंत्रण अनुसंधान संस्थान

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BHARAT HEAVY ELECTRICALS LIMITED
RANIPUR, HARIDWAR (U.K.) - 249 403
(Approved Lab under Environment (Protection) Act, 1986; EIA Consultancy by NABET, QCI)

TEST REPORT

Lab Reference No: TL230569 **Date :** 28.02.2024

Indentor : Office of Executive Engineer, Project Implementation Unit (AMRUT) Uttarakhand Peyjal Sansadhan Vikas Evam Nirman Nigam, Kashipur, Udham Singh Nagar, Uttarakhand

Customer's Ref. No.: Letter No. 266/Pariksnan/04 Dated 07.02.2024

Work Order No.: 23-0202-O-291

Sample Collected by: Indentor **Collection Date:** 07.02.2024

Sample/Job: Handpump Water Sample from Sand Kheda Block Kashipur Distt. Udham Singh Nagar (Handpump No. 3)

PARAMETER	UNIT	OBTAINED VALUE	STANDARD LIMITS (IS 10500:2012)	
			Acceptable	Permissible
Arsenic (as As)	mg/L	ND	0.01	0.05
Fluoride (as F)	mg/L	0.10	1.0	1.5

Prepared by

Ankur Mohan
Engineer (PCRI)

Approved by

Shailendra Kumar
Dy. General Manager (PCRI)

Remarks : (1) This report relates only to the particular sample/s on which test are made.
(2) This report is not to be reproduced either in part or in full without written approval of the laboratory.
(3) Samples will be disposed off after one month unless otherwise requested.

-439-

(27)

Devansh Testing & Research Laboratory Pvt. Ltd.

Test Report

51, Shiv Ganga Industrial Estate, Lakshmipur, Bhagwanpur, Roorkee - 247661(UK)
Contact No. : 01332-235415, 7060134162, e-mail : info@drtrl.com, Website : www.drtrl.org

Govt. Approved Test House

TC-6467

DRUG LICENSE No. : 10/A-DTL-7918

Location (Latitude - 29.83111 , Longitude - 79.39750) (Elevation 1421 (4,663ft))

Sample : HAND PUMP WATER(Sample No 2)(Khatima)

Customer Name : UTTARAKHAND PAYJAL NIGAM,U.S NAGAR

Customer Address : Khatima Uttarakhand

ULR No. : TC646724600003329F

Report No. : DTRLES-160224010

Your Ref. : 10/02/2024

Sample Qty. : 1 Ltr.

Date of Receipt : 10/02/2024

Sampling Procedure : DTRL SOP-QCC-101

Date of Sampling : 10/02/2024

Date of Test Performance Initiated : 10/02/2024

RESULTS OF ANALYSIS

Reference : IS 10500

Description : One Hand pump water (Sample No-3) sample was collected by us on 10-02-2024 Kanchanpuri

S No.	Test Parameters	Results	Permissible Limit IS 10500/2012 In the absence of alternate source amd No-1,2,3,4	Test Method
(i).Chomical Testing (Water)				
Table -1 Organoleptic and physical parameter (clause 4)				
1	Colour, Hazen Unit Max	<2	15	IS 3025 (P-4) 2021
2	Odour	Agreeable	Agreeable	IS 3025 (P-5) 2018
3	Turbidity NTU, Max.	<1	5	IS 3025 (P-10) 1984
4	pH Value	7.06	No relaxation	IS 3025(P-11) 2022
5	Total Dissolved Solids mg/L Max.	341	2000	IS 3025 (P-16) 2023
6	Total Hardness(As CaCO3) mg/L Max.	282.3	600	IS 3025 (P-21) 2009
7	Chloride (as Cl) mg/L Max	15.4	1000	IS 3025 (P-32) 1988
8	Fluoride (as F) mg/L Max	BLQ (0.1)	1.0	APHA 4500 F D 24th Ed.
9	Calcium (as Ca) mg/L Max.	137.7	200	IS 3025 (P-40) 1991
10	Magnesium (as Mg) mg/L Max	35.1	100	IS 3025 P-46 1994
11	Total Alkalinity (as CaCO3) mg/L Max	246.4	600	IS 3025 (P-23) 1986
12	Total Arsenic (as As) mg/L Max	BLQ (0.005)	0.01	IS 3025 (P-65)2022

Note-1. BLQ-Below limit of Quantification

Date of Completion : 14/02/2024

14/02/2024
DATE OF ISSUE

REVIEWED BY

AUTHORISED SIGNATORY
Arvind Dhanwal
Authorised Signatory

NOTE:
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Devansh Testing & Research Laboratory Pvt. Ltd.

Test Report

94, Shiv Ganga Industrial Estate, Lakshmipur, Bhagwanpur, Roorkee - 247667(UK)
Contact No. : 01332-255415, 7060194458,E-mail : dtrl.pvtltd@gmail.com,Website : www.dtrlab.org

Govt. Approved Test House

DRUG LICENSE No. : 18/AACTL/2019

TC-6467

Sample	: HAND PUMP WATER(Sample No.3)(Khalima)	ULR No.	: TC646724600003329F
Customer Name	: UTTARAKHAND PAYJAL NIGAM,U.S NAGAR	Report No.	: DTRLES/100224010
Customer Address	: Khalima Uttarakhand	Your Ref.	: 10/02/2024
		Sample Qty.	: 1 Ltr.
Date of Sampling	: 10/02/2024	Date of Receipt	: 10/02/2024
		Sampling Procedure	: DTRL-SOP-GCC-100

Date of Test Performance Initiated : 10/02/2024

RESULTS OF ANALYSIS

S.No.	Test Parameters	Results	Permissible Limit IS 10500/2012 In the absence of alternate source amd No-1,2,3,4	Test Method

2. Figure in brackets indicate minimum limit of Quantification.

Date of Completion : 14/02/2024

Note : Party asked for the above tests only.

The sample Conforms to the IS10500 with respect to above tests only.

14/02/2024
DATE OF ISSUE

REVIEWED BY

AUTHORISED SIGNATORY

NOTE:
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5. Result given in report is related to sample tested only.

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Devansh Testing & Research Laboratory Pvt. Ltd.

Test Report

84, Shiv Ganga Industrial Estate, Latherawan, Bhagwanpur, Roorkee - 247661(UK)
Contact No. : 91331-235415, 7060124428 E-mail : devtest@gmail.com Website : www.dtrlab.org

Govt. Approved Test House

DRUG LICENSE No. : UA/CTL-2019

TC-6467

Location (latitude - 28.87139 , Longitude - 77.92253) (ANT Station)

Sample	: HAND PUMP WATER(Sample No 1)(Khatima)	**ULR No.**	: TC646724600003327F
		Report No.	: DTRL/S-100224008
Customer Name	: UTTARAKHAND PAYJAL NIGAM,U.S NAGAR	**Your Ref.**	: 10/02/2024
Customer Address	: Khatima Uttarakhand	**Sample Qty**	: 1 Ltr.
		Date of Receipt	: 10/02/2024
Date of Sampling	: 10/02/2024	**Sampling Procedure**	: DTRL SOP-GCC-*00

Date of Test Performance Initiated : 10/02/2024

RESULTS OF ANALYSIS

Reference : IS:10500

Description : One Hand pump water (Sample No-1) sample was collected by us on 10-02-2024

S No.	Test Parameters	Results	Permissible Limit IS 10500/2012 In the absence of alternate source amd No-1,2,3,4	Test Method
(i).Chemical Testing (Water)				
Table -1 Organoleptic and physical parameter (clause 4)				
1	Colour Hazen Unit Max	<2	15	IS 3025 (P-4) 2021
2	Odour	Agreeable	Agreeable	IS 3025 (P-5) 2018
3	Turbidity NTU Max.	<1	5	IS 3025 (P-10) 1984
4	pH Value	7.15	No relaxation	IS 3025(P-11) 2022
5	Total Dissolved Solids mg/L Max.	352	2000	IS 3025 (P-16) 2023
6	Total Hardness(As CaCO3) mg/L Max.	283.2	600	IS 3025 (P-21) 2009
7	Chloride (as Cl) mg/L Max	23.8	1000	IS 3025 (P-32) 1988
8	Fluoride (as F) mg/L Max.	BLQ (0.1)	1.0	APHA 4500 F D 24th Edn
9	Calcium (as Ca) mg/L Max	160.1	200	IS 3025 (P-40) 1991
10	Magnesium (as Mg) mg/L Max	29.2	100	IS 3025 (P-46) 1994
11	Total Alkalinity (as CaCO3) mg/L Max	254.5	600	IS 3025 (P-23) 1986
12	Total Arsenic (as As) mg/L Max	BLQ (0.005)	0.01	IS 3025 (P-65)2022
Note-1. BLQ-Below limit of Quantification				

Date of Completion : 14/02/2024

14/02/2024
DATE OF ISSUE

REVIEWED BY

AUTHORISED SIGNATORY
Arvind Kashyap

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Devansh Testing & Research Laboratory Pvt. Ltd.

Test Report

54, Shiv Ganga Industrial Estate, Lakshmipur, Bhagwanpur, Roorkee - 247661(UK)
Contact No. : 01332-338419 , 7060134448,E-mail : devanshlab@gmail.com,Website : www.dtrlab.org

Govt. Approved Test House

TC-6467

DRUG LICENSE No. : 10/UA/CL/2010

Sample	: HAND PUMP WATER(Sample No.1)(Khalima)	**ULR No.**	: TC646724600003327F
Customer Name	: UTTARAKHAND PAYJAL NIGAM,U.S NAGAR	**Report No.**	: DTRL/ES-100274308
Customer Address	: Khalima Uttarakhand	**Your Ref.**	: 10/02/2024
		Sample Qty.	: 1 Ltr
		Date of Receipt	: 10/02/2024
Date of Sampling	: 10/02/2024	**Sampling Procedure**	: DTRL/SOP/GCC/100

Date of Test Performance Initiated : 10/02/2024

RESULTS OF ANALYSIS

S.No.	Test Parameters	Results	Permissible Limit IS 10500/2012 In the absence of alternate source amd No-1,2,3,4	Test Method

2. Figure in brackets indicate minimum limit of Quantification.

Date of Completion : 14/02/2024

Note - Party asked for the above tests only

The sample Conforms to the IS10500 with respect to above tests only.

14/02/2024
DATE OF ISSUE

REVIEWED BY

AUTHORISED SIGNATORY

NOTE:

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Devansh Testing & Research Laboratory Pvt. Ltd.

Test Report

SL Shiv Ganga Industrial Estate, Lalkuwan, Bhagwanpur, Roorkee - 247661(UK)
Contact No. : 01332-235215, 7060132448,E-mail : dtrlpvtltd@gmail.com,Website : www.dtrllab.org

Govt. Approved Test House

DRUG LICENSE No. : 19/AICTE/2016

TC-6467

Location (Latitude - 29.87137 , Longitude - 77.92250) (GPS Method)

Sample	: HAND PUMP WATER(Sample No 2)Khatima)	**ULR No.**	: TC646724600003325F
Customer Name	: UTTARAKHAND PAYJAL NIGAM,U.S NAGAR	**Report No.**	: DTRLES 100224026
Customer Address	: Khatima Uttarakhand	**Your Ref**	: 10/02/2024
		Sample Qty.	: 1 Ltr.
		Date of Receipt	: 10/02/2024
Date of Sampling	: 10/02/2024	**Sampling Procedure**	: DTRL-SOP-QCC-162

Date of Test Performance Initiated : 10/02/2024

RESULTS OF ANALYSIS

Reference : IS:10500

Description : One Hand pump water (Sample No-2) sample was collected by us on 10-02-2024

S.No.	Test Parameters	Results	Permissible Limit IS 10500/2012 in the absence of alternate source and No-1,2,3,4	Test Method
(i) Chemical Testing (Water)				
Table -1 Organoleptic and physical parameter (clause 4)				
1	Colour, Hazen Unit Max	<2	15	IS 3025 (P 4) 2021
2	Odour	Agreeable	Agreeable	IS 3025 (P-5) 2018
3	Turbidity NTU, Max.	<1	5	IS 3025 (P 10) 1984
4	pH Value	7.16	No relaxation	IS 3025(P-11) 2022
5	Total Dissolved Solids mg/L Max.	398	2000	IS 3025 (P 16) 2023
6	Total Hardness(As CaCO3) mg/L Max.	385.2	600	IS 3025 (P-21) 2009
7	Chloride (as Cl) mg/L Max	17.9	1000	IS:3025 (P-32) 1988
8	Fluoride (as F) mg/L Max.	BLQ (0.1)	1.0	APHA 4500 F D 24th Edn
9	Calcium (as Ca) mg/L Max.	187.2	200	IS 3025 (P 40) 1991
10	Magnesium (as Mg) mg/L Max.	23.8	100	IS 3025 (P 46) 1994
11	Total Alkalinity (as CaCO3) mg/L Max.	252.5	600	IS 3025 (P-23) 1986
12	Total Arsenic (as As) mg/L Max.	BLQ (0.005)	0.01	IS:3025 (P-65)2022

Note-1. BLQ-Below limit of Quantification

Date of Completion : 14/02/2024

14/02/2024
DATE OF ISSUE

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AUTHORISED SIGNATORY

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Devansh Testing & Research Laboratory Pvt. Ltd.

Test Report

94, Sidh Ganga Industrial Estate, Lakhibagh, Bhagwanpur, Roorkee – 247667(UK)
Contact No. : 91332-235715, 7895124745 E-mail : drtrl.roo@gmail.com Website : www.drtrl.org

Govt. Approved Test House

DRUG LICENSE No. : UA/ROO/L-29/11

TC-6467

Sample : HAND PUMP WATER(Sample No 2)(Khatima)

Customer Name : UTTARAKHAND PAYJAL NIGAM,U.S NAGAR

Customer Address : Khatima Uttarakhand

Date of Sampling : 10/02/2024

ULR No. : TC646724600003325F

Report No : DTRLES-10032A009

Your Ref. : 10/02/2024

Sample Qty. : 1 Ltr

Date of Receipt : 10/02/2024

Sampling Procedure : DTRL SOP QCC 160

Date of Test Performance Initiated : 10/02/2024

RESULTS OF ANALYSIS

S.No.	Test Parameters	Results	Permissible Limit IS 10500/2012 In the absence of alternate source and No-1,2,3,4	Test Method

2. Figure in brackets indicate minimum limit of Quantification.

Date of Completion 14/02/2024

Note :- Party asked for the above tests only

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14/02/2024
DATE OF ISSUE

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Annexure - X1

Report on Groundwater Contamination of Arsenic and Fluoride in the State of West Bengal.

Reference: File No. CGWA-22/3/2024-CGWA-100 Dated: 08/03/2024 of The Chairman, CGWA, Department of Water Resources, Central Ground Water Authority, Ministry of Jal Shakti, Govt. of India.

Subject: News item appearing in Hindustan Dated 31/11/23 titled : "Arsenic found in Ground Water in 25 States, Fluoride in 27 States: Govt." -reg.

Arsenic:

83 Blocks in Districts of West Bengal are affected with Arsenic Contamination in Groundwater, above the permissible limit. The district wise name of the affected blocks are given below in table 1

TABLE -1: District wise list of Arsenic Affected Blocks

Sl. No.	District	Arsenic Affected Blocks	No of Blocks
1	Burdwan	Purbasthali-I, Purbasthali-II, Katwa-I, Katwa-II, Kalna-II	5
2	Howrah	Uluberia-II, Bally-Jagacha	2
3	Hooghly	Balagarh, Pandua	2
4	Maldah	English Bazar, Manikchak, Kallachak-I, Kaliachak-II, Kaliachak - III, Ratua-I, Ratua-II	7
5	Murshidabad	Raninagar-I, Raninagar-II, Domkal, Nawada, Jalangi, Hariharpara, Beldanga-I, Beldanga-II, Suti-I, Suti-II, Bhagwangola-I, Bhagwangola-II, Berhampur, Raghunathganj-I, Raghunathganj-II, Murshidabad-Jiaganj, Farakka, Samserganj, Lalgola, Kandi, Sagardighi	21
6	Nadia	Karimpur-I, Karimpur-II, Tehatta-I, Tehatta-II, Kaliganj, Nakashipara, Nabadwip, Hanskhali, Krishnaganj, Haringhata, Chakdaha, Santipur, Chapra, Ranaghat-I, Ranaghat-II, Krishnanagar -I, Krishnanagar-II	17
7	North 24 Parganas	Habra-I, Habra-II, Barasat-I, Barasat-II, Deganga, Basirhat-I, Basirhat-II, Swarupnagar, Sandeshkhali-II, Baduria, Gaighata, Rajarhat, Bagda, Amdanga, Bongaon, Haroa, Hasnabad, Barrackpur-I, Barrackpore-II, Hingalganj, Minakhan	21
8	South 24 Parganas	Baruipur, Sonarpur, Bhangar-I, Bhangar-II, Bishnupur-I, Bishnupur-II, Joynagar-I, Magrahat-II	8
TOTAL NO. OF ARSENIC AFFECTED BLOCKS			83

The Public Health Engineering Department, Govt. of West Bengal had taken up a massive water quality survey in the Arsenic affected areas of 8 districts of West Bengal in the year 2003-2004. This water quality survey was carried out under Joint Plan of Action (JPOA) with UNICEF and a total 1,32,267 nos. of water sources were tested with acquiring their geographical locations (latitude/longitude). It was found

that 6,586 habitations are affected with arsenic contamination in groundwater beyond the permissible limit.

Table 2: District Wise number of mouzas and habitations found to be affected with Arsenic contamination in Groundwater

Sl No.	District	No. of affected Blocks	No. of affected Mouzas	No. of affected Habitations
1	Burdwan	5	79	98
2	Howrah	2	4	4
3	Hooghly	2	41	88
4	Maldah	7	311	867
5	Murshidabad	21	788	1,191
6	Nadia	17	938	1,943
7	North 24 Parganas	21	938	2,128
8	South 24 Parganas	8	143	267
TOTAL		**83**	**3,242**	**6,586**

Initially soon after the Arsenic contamination in ground water of Gangetic plains of West Bengal was known, several short term and medium-term measures were taken by this department like, hand pump attached Arsenic removal units, installation of mini arsenic purification plants etc.

Afterwards, to address the situation in a more comprehensive way it was decided to implement Piped Water Supply Schemes as long term measures based on Surface Water as well as Ground Water sources. Gangetic West Bengal is worstly affected with Arsenic contamination but it is blessed with the existence of perennial River Bhagirathi/ Hooghly. The Surface Water based schemes based on river Bhagirathi/ Hooghly is the best long term solution to tackle the Arsenic menace.

However, there are areas which are far away from the perennial rivers, where planning for Surface Water Based schemes are technically difficult and economically not viable. In these areas implementation of Ground Water Based Piped Water Supply Schemes tapping from Arsenic free aquifer is another solution as a long term measure for eradication of Arsenic problem. It is noteworthy that if Arsenic free safe aquiver is not available then 'Arsenic and Iron Removal Plants (AIRP)' are constructed with the Ground Water based Schemes to lower down the Arsenic concentration below the permissible limit before supply to the consumers.

The Public Health Engineering Department, Government of West Bengal has already implemented 739 nos. of Piped Water Supply Schemes in Arsenic affected Blocks of the State, covering a total 5,608 nos. of villages. Also, under Jal Jeevan Mission (JJM) Public Health Engineering Department, has taken up 398

nos. of water supply schemes at a sanctioned cost of Rs. 9536.29 crores and a total 3,418 nos. of villages will be covered by the ongoing schemes.

Table 3: Table showing district wise number of Commissioned and Ongoing Schemes and villages covered in Arsenic affected areas

District	Commissioned		On Going		TOTAL (Commissioned + Ongoing)	
	No. of Scheme	No. of villages covered	No. of Scheme	No. of villages to be covered	Total No. of Scheme	Total No. of villages
HOOGHLY	27	177	20	337	47	514
HOWRAH	11	39	11	87	22	126
MALDAH	56	637	21	282	77	919
MURSHIDABAD	189	995	126	702	315	1697
NADIA	184	1491	51	445	235	1936
NORTH 24 PARGANAS	204	1252	69	1108	273	2360
PURBA BARDHAMAN	40	194	61	376	101	570
SOUTH 24 PARGANAS	28	823	39	81	67	904
Grand Total	**739**	**5,608**	**398**	**3,418**	**1,137**	**9,026**

Out of the 739 nos. of commissioned schemes in Arsenic affected areas 710 nos. are Ground Water based and 29 are Surface Water based. Similarly out of 398 Ongoing schemes, 369 nos. are Groundwater based and 29 nos. are Surface Water based.

Table 4: Table showing district wise number of Ground water based and Surface water based Schemes in Arsenic affected areas

District	Commissioned			On Going			Total
	Ground Water	Surface Water	Total	Ground Water	Surface Water	Total	
HOOGHLY	27		27	19	1	20	**47**
HOWRAH	9	2	11	10	1	11	**22**
MALDAH	53	3	56	19	2	21	**77**
MURSHIDABAD	182	7	189	121	5	126	**315**
NADIA	181	3	184	49	2	51	**235**
NORTH 24 PARGANAS	193	11	204	52	17	69	**273**
PURBA BARDHAMAN	39	1	40	61		61	**101**
SOUTH 24 PARGANAS	26	2	28	38	1	39	**67**
Grand Total	**710**	**29**	**739**	**369**	**29**	**398**	**1137**

In this connection, it may also be noted that a large number of villages which were previously covered by Ground Water based Schemes are now again being covered by Mega Surface Water based Pipe Water Supply Scheme with a river Hooghly as the source of water, which is a more sustainable solution.

Also, 143 nos. of Arsenic Iron Removal Plants (AIRP) have been implemented for Groundwater based Piped Water Supply Schemes in arsenic affected areas of the state. Also, work for 47 AIRPs are ongoing for Ground Water based Piped Water Supply schemes (PWSS) under Jal Jeevan Mission (JJM).

Table 5: District wise number of commissioned and ongoing Arsenic & Iron Removal Plants (AIRPs)

Arsenic & Iron removal Plants (AIRP) SUMMARY			
District	**No of Commissioned AIRP**	**No of Ongoing AIRP**	**Total**
Maldah	11		11
Murshidabad	31	35	66
Nadia	73	4	77
North 24 Parganas	28	8	36
Total	**143**	**47**	**190**

Furthermore, in the Arsenic affected villages where Piped Water Supply Scheme (PWSS) are yet to be commissioned, PHE Department has already installed Community Water Purification Plants (CWPP) to extend immediate relief to the affected people. CWPPs are temporary measures to supply Arsenic free purified water @10 lpcd for 1000 people only for drinking and working purposes. These villages will be covered by Piped Water Supply schemes (PWSS) under Jal Jeevan Mission (JJM) in due course.

Table 6: District wise number of CWPP installed by this department

Community Water Purification Plants (CWPP) SUMMARY	
Row Labels	**Total number of CWPP provided in affected district**
Maldah	371
Murshidabad	424
Nadia	590
North 24 Parganas	132
Grand Total	**1,517**

Therefore, as of now all the Arsenic affected villages of the State have been covered by either long term measures through implementation of Piped Water Supply schemes (PWSS) or covered by Community Water Purification Plants (CWPP). After implementation of all Piped Water Supply schemes (PWSS) all the Arsenic affected blocks will be brought under long term solution.

Fluoride

Fluoride contamination in groundwater in the state of West Bengal was first detected during 1997 at Nasipur area of Nalhati - I block in Birbhum District. In West Bengal excess fluoride in groundwater has been detected so far in 43 blocks spread over 7 Districts viz. Purulia, Bankura, Birbhum, South 24-Parganas, Maldah, Uttar Dinajpur and Dakshin Dinajpur.

The District Wise name of the blocks with Fluoride contamination above the permissible limit is given below in table below.

TABLE-7: District wise list of Fluoride Affected Blocks

Sl No.	District	Fluoride Affected Blocks	No of Blocks
1	Bankura	Gangajalghati, Raipur, Indapur, Bankura-II, Chatna, Taldangra, Saltora, Simlapal, Hirbundh, Barjara	10
2	Birbhum	Nalhati-I, Rampurhat-I, Mayureswar-I, Sainthia, Suri-II, Rajnagar, Khayrasole	7
3	Dakshin Dinajpur	Gangarampur, Kumarganj, Banshihari, Kushmandi, Tapan	5
4	Maldah	Bamongola, Ratua-II	2
5	Purulia	Raghunathpur-I, Raghunathpur-II, Puncha, Joypur, Neturia, Santuri, Baghmundi, Purulia-I, Purulia-II, Kashipur, Jhalda-I, Arsha, Barabazar, Manbazar-I, Hura, Para, Balarampur	17
6	South 24 Parganas	Baruipur	1
7	Uttar Dinajpur	Itahar	1
TOTAL NO. OF FLUORIDE AFFECTED BLOCKS			**43**

In March 2006 a programme for tasting of all public tubewells in the Fluoride affective 43 Blocks of 7 Districts of this States had been conducted under 'Joint Plan of Action' (JPOA) with UNICEF. It was found that 1021 no of Habitations in 729 Moujaes are affected with Fluoride contamination.

Table - 8: District Wise summary of Fluoride affected Mouzas and Habitations in West Bengal

Sl. No.	District	No. of affected Blocks	No. of affected Mouzas	No. of affected Habitations
1	Purulia	17	227	247
2	Bankura	10	148	177
3	Birbhum	7	46	55
4	South 24 Parganas	1	3	4
5	Maldah	2	23	32
6	Uttar Dinajpur	1	5	5

Sl. No.	District	No. of affected Blocks	No. of affected Mouzas	No. of affected Habitations
7	Dakshin Dinajpur	5	278	501
Total		**43**	**729**	**1021**

Initially soon after the Fluoride contamination in West Bengal was known, several short term and medium-term measures were taken by this department.

In order to supply fluoride free safe drinking water, a number of measures have already been taken by the PHED, Govt. of West Bengal.

- Extent of fluoride contamination in the State of West Bengal has been analyzed by testing all the drinking water source samples in all the Fluoride affected 43 (forty three) blocks of 7 (seven) districts.
- GP level maps on the GIS platform showing fluoride affected habitations have been prepared which serve as an important tool in the GP level for planning various mitigation programs.
- A number of water supply schemes have been prepared tapping sub–surface water in the river beds. Based on the scientific studies already carried out on similar sub–surface sources in different river beds, more drinking water supply schemes are being drawn up for execution.
- Feasibilities of rain water harvesting in a number of schools within the affected areas have been studied and it could be established that such projects can supply drinking water to those schools throughout a considerable time during the lean period of the year.
- Extraction of Ground water from deeper aqulfers free from fluoride contamination.
- Pilot studies on feasibility of Fluoride Treatment Unit in Mechanical pump fitted Bore wells based on Adsorption of Activated Alumina have been done by BESU at Rampurhat - I Block (Birbhum district) and Para Block (Purulia district). The water supply schemes are being maintained by the Beneficiaries.
- R&D studies for defluoridation using Nano–technology.

A considerable number of PWSS in Fluoride affected areas of different districts has already been sanctioned and are under implementation phases, action taken report on these fluorides affected mouzas. The Public Health Engineering Department, Government of West Bengal has already implemented 185 nos. of Piped Water Supply Schemes in Fluoride affected Blocks of the State. Covering a total 4,634 nos. of villages. Also, under Jal Jeevan Mission (JJM) Public Health Engineering Department, has taken up 542 nos. of water supply schemes at a sanctioned list of Rs. 8,818.59 crores, and a total of 8,950 nos. of villages will be covered by the ongoing schemes.

Table 9: Table showing district wise number of Commissioned and Ongoing Schemes and villages covered in Fluoride affected areas

District	Commissioned		On Going		TOTAL (Commissioned + Ongoing)	
	No. of Scheme	No. of villages covered	No. of Scheme	No. of villages to be covered	Total No. of Scheme	Total No. of villages
BANKURA	28	2690	222	959	250	3649
BIRBHUM	34	284	116	1008	150	1292
DAKSHIN DINAJPUR	31	213	150	1194	181	1407
MALDAH	18	111	3	377	21	488
PURULIA	46	459	16	5259	62	5718
SOUTH 24 PARGANAS	6	729	17	31	23	760
UTTAR DINAJPUR	22	148	18	122	40	270
Grand Total	**185**	**4,634**	**542**	**8,950**	**727**	**13,584**

Out of the 185 nos. of commissioned schemes in Fluoride affected areas 132 nos. are Ground Water based, 14 are Surface Water based and 39 are Subsurface Water based. Similarly out of 542 Ongoing schemes, 479 nos. are Ground Water based, 17 are Surface Water based, 43 are Subsurface Water based and 3 schemes are based on multiple sources.

Table 10: Table showing district wise number of Ground water based and Surface water based Schemes in Fluoride affected areas

District	Ground Water			Multiple Source		SubSurface Water			Surface Water			Total
	Commissioned	On Going	Total	On Going	Total	Commissioned	On Going	Total	Commissioned	On Going	Total	
BANKURA	18	215	233	1	1	8	5	13	2	1	3	250
BIRBHUM	22	80	102			12	33	45		3	3	150
DAKSHIN DINAJPUR	30	146	176				3	3	1	1	2	181
MALDAH	17	1	18			1	1	2		1	1	21
PURULIA	19	3	22	2	2	18	1	19	9	10	19	62
SOUTH 24 PARGANAS	4	16	20						2	1	3	23
UTTAR DINAJPUR	22	18	40									40
Grand Total	**132**	**479**	**611**	**3**	**3**	**39**	**43**	**82**	**14**	**17**	**31**	**727**

In this connection, it may also be noted that a large number of villages which were previously covered by Ground Water based Schemes are now again being covered by Surface Water and SubSurface water based Pipe Water Supply Schemes, which are more sustainable solutions.

Also, in the Fluoride affected villages where Piped Water Supply Scheme (PWSS) are yet to be commissioned, PHE Department has installed Community Water Purification Plants (CWPP) to extend immediate relief to the affected people. These villages will be covered by Piped Water Supply schemes (PWSS) under Jal Jeevan Mission (JJM) in due course.

Table 11: District wise number of CWPP installed in the Fluoride affected areas:

Community Water Purification Plants (CWPP) SUMMARY	
Row Labels	**Total number of CWPP provided in affected district**
Bankura	20
Birbhum	10
Purulia	5
Uttar Dinajpur	79
Grand Total	**114**

Therefore, as of now all the Fluoride affected villages of West Bengal have been covered by either long term measures through implementation of Piped Water Supply schemes (PWSS) or covered by Community Water Purification Plants (CWPP). After implementation of ongoing Water Supply schemes (PWSS) all the Fluoride affected areas will be brought under long term solution.

STANDARD OPERATING PROCEDURE (SOP) FOR ARSENIC DETECTION IN GROUNDWATER AND ITS MITIGATION

Central Ground Water Board

Ministry of Jal Shakti
Department of Water Resources, River Development and Ganga Rejuvenation

STANDARD OPERATING PROCEDURE (SOP) FOR ARSENIC DETECTION IN GROUNDWATER AND ITS MITIGATION

(June: 2024)

Central Ground Water Board

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TABLE OF CONTENTS

	TOPIC	PAGE
1.0	Introduction 1.1 Scope 1.2 Definition	1-2
2.0	Designation of Hotspot 2.1 Sampling protocol for Hotspot area	2-4
3.0	Sampling Method for Arsenic Analysis 3.1 Equipment and Materials 3.2 Site Selection and Preparation 3.3 Sample Collection 3.4 Sample Preservation and Storage	5-6
4.0	Analytical Techniques for Arsenic analysis in Laboratory 4.1 Sample Preparation 4.2 Analytical Methods 4.3 Quality Control and Assurance	6-16
5.0	Data Analysis and Reporting 5.1 Data Validation 5.2 Reporting	16
6.0	Mitigation Measures 6.1 Short-Term Mitigation 6.2 Long-Term Mitigation 6.3 Arsenic Remediation Mechanism 6.4 Technology for tapping of Arsenic free aquifers Developed by CGWB 6.5 Detail methodologies for Household level mitigation of Arsenic from drinking water developed by different organization 6.6 Detail methodologies for Community level mitigation of Arsenic from drinking water developed by different organization 6.7 Recommendations for management of Arsenic enriched groundwater	16-34
7.0	References	35

AMENDMENT RECORD

Amend No.	Page No.	Clause No.	Date of Amendment	Amendment made	Reasons of amendment	Remarks/ Signature
1						
2						
3						
4						
5						
6						
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1. General Introduction

Groundwater arsenic contamination has exponentially endangered human life and significantly complicated efforts to achieve and maintain safe drinking water standards. This deadly contaminant has sparked an alarming and catastrophic crisis worldwide, particularly in South Asia. Countries such as Bangladesh, India, Nepal, Vietnam, China, and Myanmar are especially affected by severe groundwater arsenic contamination issues.

Arsenic is a naturally occurring element, ranking as the 20th most prevalent in the earth's crust, the 14th most common in seawater, and the 12th most abundant in the human body [**Mandal *et al.*, 2002**]. The primary source of arsenic in groundwater is natural geological processes. However, human activities such as geothermal energy production, mining, agriculture, medical applications, the use of feed additives, and landfill operations also contribute significantly to its presence. The Agency for Toxic Substances and Disease Registry (ATSDR) lists arsenic as the top substance posing the greatest potential threat to human health. Both the International Agency for Research on Cancer (IARC) and the United States Environmental Protection Agency (EPA) have classified arsenic as a Group 1 and Group A carcinogen, respectively [**Walensky *et al.*, 2023; Samman *et al.*, 2023**].

In ground water, arsenic can combine with other elements to form inorganic as well as organic compounds; the inorganic derivatives are considered more toxic than the organic forms. The inorganic forms usually exist in potable water in two chemical valence states: as arsenite (As III) or arsenate (As V). Arsenic can exist in four oxidation states: 3-, 0, 3+, and 5 +. Arsenic (As (III)) is 25–60 times more toxic than arsenic (As (V)) [**Fu *et al.*, 2021; Postek *et al.*, 2019**].

With this background this SOP aims to establish a comprehensive framework for the analysis of arsenic in groundwater and to outline effective mitigation measures. This SOP is documented to ensure accurate, consistent, and reproducible results in the detection and quantification of arsenic, supporting efforts to maintain water quality standards and protect public health.

Objectives

i. Protocol for designating hotspot area and sampling method for hotspot area.
ii. Outlining standardized procedures for sample collection, preservation, and preparation.
iii. Defining the analytical techniques and instruments to be used for arsenic detection.
iv. Ensuring compliance with regulatory requirements and guidelines for arsenic analysis.
v. Providing clear instructions for data interpretation, reporting, and quality control measures.
vi. Promoting the safety and efficiency of laboratory personnel during arsenic analysis.
vii. Mitigation measures (Household and Community level)

1.1 Scope

Notification of Hotspots for Arsenic contamination and suggesting mitigation measures in individual and community level is also highlighted in this document.

Further, this SOP outlines the procedures for sampling, preservation, analysis, and mitigation of arsenic in groundwater. It ensures consistent, accurate, and reliable data collection and analysis.

1.2 Definitions

- **Arsenic (As):** A toxic element commonly found in groundwater, especially in certain geographical areas.
- **Groundwater:** Groundwater is water that exists in saturated zones below the ground level.

2. Designation of Hotspot

The maximum permissible limit for arsenic in drinking water is 0.01 mg/L, as per BIS guidelines (2012). In an area encountered with arsenic concentration close to 0.01 mg/L, during Pre-monsoon/ Post-monsoon season, should be re-sampled (for confirmation) in the next season or in the same season (wherever possible) from same well. If the similar concentration detected in the next season, then the area should be considered for detailed sampling/studies.

Based on baseline/ background data of arsenic, continuous monitoring of minimum 3 seasons has to be carried out for the location/well, where the concentration of reported arsenic was more than permissible limit of 0.01 mg/L. If the arsenic values are beyond permissible limit for 2 seasons, then the location may be considered as Hotspot area for arsenic contamination.

2.1 Sampling protocol for Hotspot area

1. Detailed sampling should be carried out on a grid of 2 km X 2 km from the hotspot area or contaminated block in pre and post monsoon for comprehensive study from an area of 5 sq. km radius (**Fig. 1**).
2. Samples should be collected in all directions, from phreatic and confined aquifer to confirm the extent of contamination in the aquifer.
3. If more than 50% of water samples exhibit concentration of contaminant beyond permissible limit such hotspot area should be treated as notified area (**Flow diagram Fig. 2**).

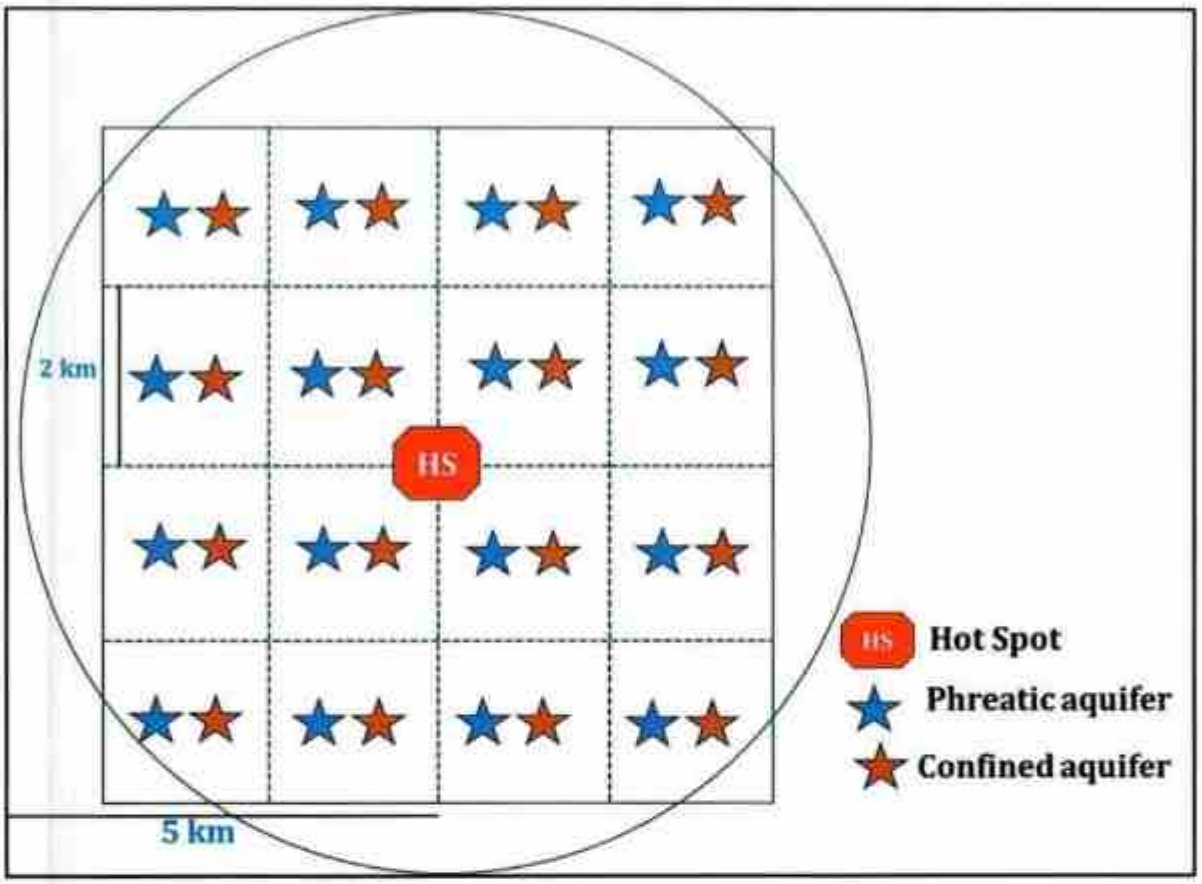

Fig. 1. Sampling design for study of New Hotspot area

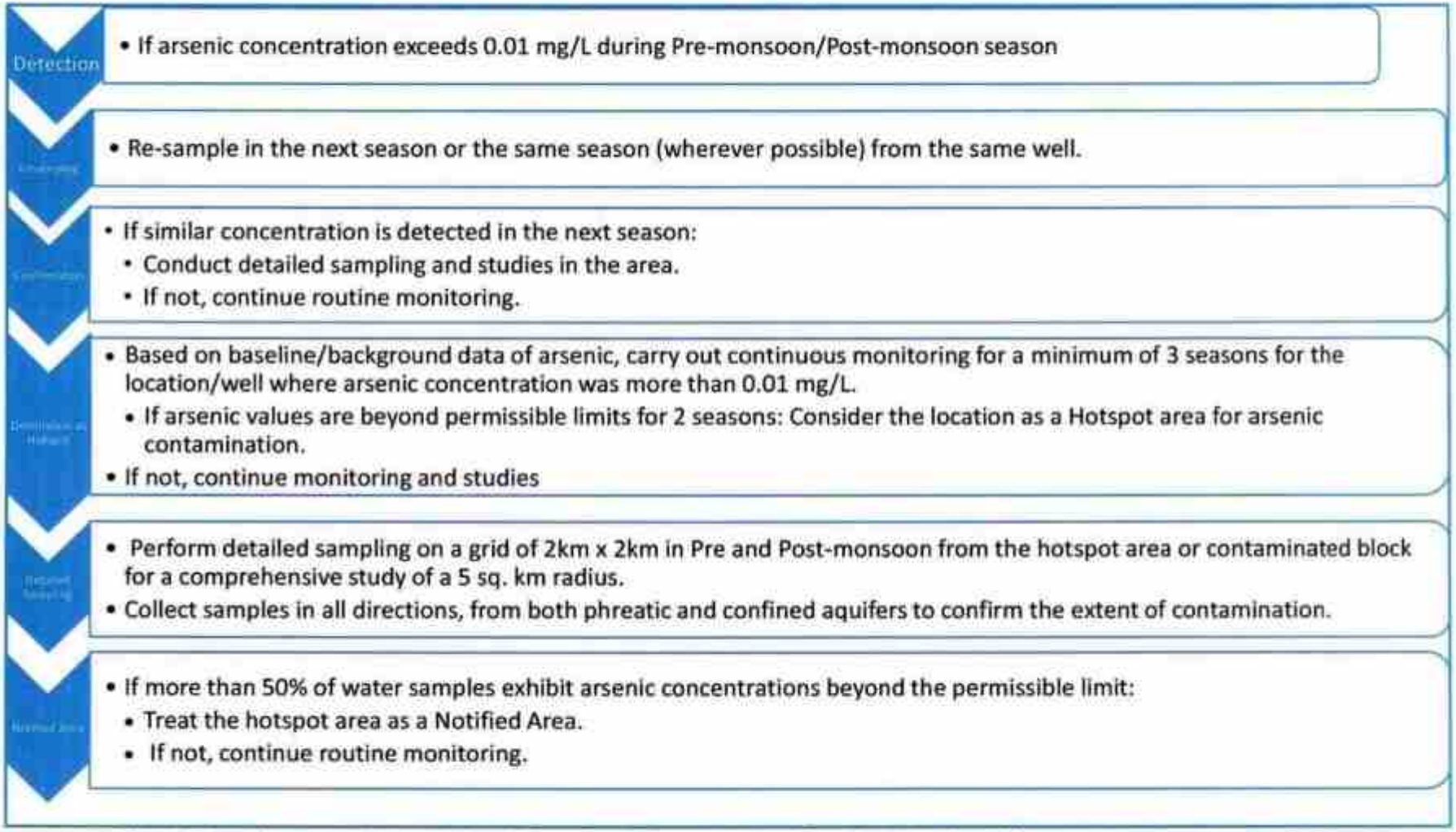

Fig. 2 Flow diagram: Protocol for delineating Hot spot, sampling detail and notify an area

3. Sampling Method for Arsenic Analysis

3.1 Equipment and Materials

- Sampling bottles (polyethylene or glass, pre-cleaned)
- Sampling pump or bailer
- Gloves and safety gear
- Labels and waterproof markers
- Field logbook and chain-of-custody forms
- Ice chest and ice packs
- Preservatives (HNO_3)
- Filtration apparatus (0.45-micron filter) or Syringe filter for field use

3.2 Site Selection and Preparation

- Select sampling sites based on study objectives/background data for Arsenic analysis.
- Record GPS coordinates of each sampling location.

GUIDELINES FOR COLLECTION OF GROUNDWATER SAMPLE

1. **Open-dug Wells**
   - Wells that are not in use or have been abandoned should not be considered for water quality monitoring stations.
   - These wells, however, can be utilized for monitoring water levels.
2. **Production Tube Wells**
   - Collect samples after running the tube well for approximately five minutes to ensure the water quality sample is representative.
3. **Non-production Piezometers**
   - Purge these piezometers using a submersible pump before collecting samples.
   - The volume of purged water should be 4 to 5 times the standing water volume to ensure the samples are representative of the groundwater quality.

3.3 Sample Collection

- Purge the well to remove stagnant water.
- Collect samples directly into pre-cleaned polyethylene (HDPE) bottles of 1000 ml.
- If required, filter the samples using a 0.45-micron filter to remove particulate matter.
- Label each sample bottle with the location, date.

3.4 Sample Preservation and Storage

- Add preservatives (e.g., Nitric acid) to samples to prevent changes in arsenic concentration (**Table 1**).
- Place samples in an ice chest immediately after collection to maintain a temperature of 6°C.
- Transport samples to the laboratory within 24 hours of collection.

Table 1. Sample Collection and Preservation Process (As per APHA protocol)

Sample	Preservative added	Approx. volume collected (ml)	No. of bottles required	Filtration
Arsenic	1:1 HNO_3 (pH<2 to be maintained for the sample)	1000	1	Samples should be Filtered before analysis

***INSTRUCTION FOR SAMPLING IN GROUND WATER**

1. Water samples should be collected in to completely cleaned and dried good quality polyethylene (high density) or glass bottles with inner caps.
2. Bottles should be filled and tightly capped to avoid any evaporation.
3. Air bubbles inside the bottles should be minimized
4. Bottles should be properly labeled with date, location/project and sample code using permanent marker
5. **Filtering required in Arsenic samples**
6. On spot measurements of pH, EC, DO, TDS, Temperature is appreciated.
7. Fill the bottles in the field itself and avoid any contamination from any other water source.
8. **Arsenic samples to be collected with Detailed sampling on a grid of 2 km x 2 km from the new Hotspot area in both Pre-Monsoon and Post-Monsoon season from a radius of 5 sq km in horizontal direction and from Phreatic and confined aquifer.**

4. Analytical Techniques for Arsenic analysis in Laboratory

4.1 Sample Preparation

- Allow samples to reach room temperature before analysis.
- Mix samples thoroughly to ensure homogeneity.

4.2 Analytical Methods

- **Atomic Absorption Spectroscopy (AAS):** Hydride Generation Atomic Absorption (***Ref: APHA 24th Edition: Method: 3114; Page No. 220-225***).
- **Inductively Coupled Plasma Mass Spectrometry (ICP-MS):** Highly sensitive technique for detecting trace levels of arsenic (***Ref: APHA 24th Edition: Method: 3125; Page No. 232-242***).

Table 2. Comparison between the Atomic Absorption Spectroscopy (AAS) and Inductively Coupled Plasma Mass Spectrometry (ICP-MS) in Arsenic analysis

Parameter	Atomic Absorption Spectroscopy (AAS)	Inductively Coupled Plasma Mass Spectrometry (ICP-MS)
Sensitivity	Lower sensitivity (detection limits in ppm range)	Higher sensitivity (detection limits in ppb range)
Sample Throughput	Lower, analyzes one element at a time	Higher, capable of simultaneous multi-element analysis
Interference	Susceptible to chemical interferences	Less chemical interference, but susceptible to spectral interference

Cost	Lower initial and operational costs	Higher initial and operational costs
Dynamic Range	Limited dynamic range	Wide dynamic range
Accuracy	Affected by interferences, requires careful sample preparation	High accuracy, with proper calibration and correction techniques
Analysis Time	Longer for multi-element analysis	Shorter for multi-element analysis

4.2.1 Arsenic Determination by Continuous Hydride Generation/Atomic Absorption Spectrometric Method (*Ref: APHA 24th Edition: Method: 3114; Page No. 220-225*)

1. General Discussion

This method is applicable to the determination of arsenic by conversion to its hydride by sodium borohydride reagent and transport into an atomic absorption atomizer.

2. Principle

Arsenous acid, the As (III) oxidation states of arsenic, is instantaneously converted by sodium borohydride reagent in acid solution to its volatile hydrides. The hydrides are purged continuously by argon or nitrogen into a quartz cell heated electrically or by the flame of an atomic absorption spectrometer and converted to the gas-phase atoms. The sodium borohydride reducing agent, by rapid generation of the elemental hydrides in an appropriate reaction cell, minimizes dilution of the hydrides by the carrier gas and provides rapid, sensitive determinations of arsenic.

CAUTION: Arsenic and its hydride is toxic. Handle with care.

At room temperature and solution pH values of 1 or less, arsenic acid, the As (V) oxidation state of arsenic, is reduced relatively slowly by sodium borohydride to As (III), which is then instantaneously converted to arsine. The arsine atomic absorption peaks commonly are decreased by one-fourth to one-third for As(V) when compared to As(III). Determination of total arsenic requires that all inorganic arsenic compounds be in the As (III) state. Organic and inorganic forms of arsenic are first oxidized to As (V) by acid digestion. The As(V) then is quantitatively reduced to As (III) with sodium or potassium iodide before reaction with sodium borohydride. Efficiency of reduction depends on temperature, reduction time, and HCl concentration. For 4N HCl, heat 1 h at 100°C. For 6N HCl, boiling for 10 min is sufficient. Alternatively, autoclave samples in sealed containers at 121°C for 1 h.

3. Apparatus

a. Atomic absorption spectrometer equipped with air–acetylene flame and quartz cell with mounting bracket or an electrically heated quartz cell, As and Se electrodeless discharge lamps with power supply, background correction at measurement wavelengths, and appropriate strip-chart recorder. A good-quality 10-mV recorder with high sensitivity and a fast response time is needed.

b. Atomizer: Certain atomic absorption atomizers are available commercially for use with the sodium borohydride reagent.

Use one of the following:
1) Cylindrical quartz cell, 10 to 20 cm long, bracket-mountable above air–acetylene burner.
2) Cylindrical quartz cell, 10 to 20 cm long, electrically heated by external nichrome wire to 800 to 900°C.
3) Cylindrical quartz cell with internal fuel-rich hydrogen–oxygen (air) flame.

The sensitivity of quartz cells deteriorates over several months of use. Sensitivity sometimes may be restored by treatment with 40% HF. Quartz atomization cells provide for the most sensitive arsenic hydride determinations. The quartz cell can be heated electrically or by an air–acetylene flame in an atomic absorption unit.

a. Continuous hydride generator: The basic unit is composed of two parts: a precision peristaltic pump, which is used to meter and mix reagents and sample solutions, and the gas–liquid separator. At the gas–liquid separator, a constant flow of argon strips out the hydrogen and metal hydride gases formed in the reaction and carries them to the heated quartz absorption cell which is supported by a metal bracket mounted on top of the regular air acetylene burner head. The spent liquid flows out of the separator via a constant level side drain to a waste bucket.

Check flow rates frequently to ensure a steady flow; an uneven flow in any tubing will cause an erratic signal. Remove tubings from pump rollers when not in use. Typical flow rates are: sample, 7 mL/min; acid, 1 mL/min; and borohydride reagent, 1 mL/min. Argon flow usually is pre-fixed, typically at 90 mL/min.

4. Reagents

a. Sodium borohydride reagent: Dissolve 8 g $NaBH_4$ in 200 mL 0.1N NaOH. Prepare fresh daily.
b. Potassium iodide prereductant solution: Dissolve 50 g KI in 500 mL water. Prepare fresh daily. Alternatively, use an equivalent NaI solution.
c. Sulfuric acid (H_2SO_4), 18N.
d. Sulfuric acid, 2.5N: Cautiously add 35 mL conc H_2SO_4 to about 400 mL water, let cool, and adjust volume to 500 mL.
e. Potassium persulfate, 5% solution: Dissolve 25 g $K_2S_2O_8$ in water and dilute to 500 mL. Store in glass and refrigerate. Prepare weekly.
f. Nitric acid (HNO_3), conc.
g. Perchloric acid ($HClO_4$), conc.
h. Hydrochloric acid (HCl), conc.
i. Argon (or nitrogen), commercial grade.
j. **Arsenic(III) solutions:**

1) Stock As(III) solution—Dissolve 1.320 g arsenic trioxide, As_2O_3, in water containing 4 g NaOH. Dilute to 1 L; 1.00 mL=1.00 mg As(III).

2) Intermediate As (III) solution—Dilute 10 mL stock As solution to 1000 mL with water containing 5 mL conc HCl; 1.00 mL=10.0 g As(III).
3) Standard As (III) solution—Dilute 10 mL intermediate As(III) solution to 1000 mL with water containing the same concentration of acid used for sample preservation (2 to 5 mL conc HNO_3); 1.00 mL 0.100 g As(III). Prepare diluted solutions daily.

k. **Arsenic(V) solutions:**

1) Stock As(V) solution—Dissolve 1.534 g arsenic pentoxide (As_2O_5) in distilled water containing 4 g NaOH. Dilute to 1 L; 1.00 mL=1.00 mg As(V).
2) Intermediate As(V) solution—Prepare as for As(III) above; 1.00 mL=10.0 µg As(V).
3) Standard As(V) solution—Prepare as for As(III) above; 1.00 mL=0.100 µg As(V).

l. ***Organic arsenic solutions*:**

1) Stock organic arsenic solution—Dissolve 1.842 g dimethylarsinic acid (cacodylic acid) [$(CH_3)_2AsOOH$] in water containing 4 g NaOH. Dilute to 1 L; 1.00 mL 1.00 mg As. [NOTE: Check purity of cacodylic acid reagent against an intermediate arsenic standard (50 to 100 mg As/L) using flame atomic absorption.]
2) Intermediate organic arsenic solution—Prepare as for As(III) above; 1.00 mL=10.0 µg As.
3) Standard organic arsenic solution—Prepare as for As(III) above; 1.00 mL=0.100 µg As.

Standard As solution can also be prepared from 1000 mg/L solution (traceable to NIST).

5. Procedure

a. **Digestion techniques:** Waters and wastewaters may contain varying amounts of organic arsenic compounds and inorganic compounds of As(III), As(V). To measure total arsenic in these samples requires sample digestion to solubilize particulate forms, oxidize reduced forms of arsenic, and convert any organic compounds to inorganic ones. ***Annexure II may be referred for Detail sample digestion technique***.

b. **Apparatus setup:** Before using the hydride generation/analysis system, optimize operating parameters. Align quartz atomizers for maximum absorbance. Aspirate a blank until memory effects are removed. Establish purging gas flow, concentration and rate of addition of sodium borohydride reagent, solution volume, and stirring rate for optimum instrument response for the chemical species to be analyzed. Optimize quartz cell temperature. Rapid injection of sodium borohydride reagent will increase sensitivities, so injection rates should be both consistent and as rapid as the system will tolerate. Recommended wavelength is 193.7 nm for As.

c. **Instrument calibration standards:** Prepare at least three standards and a blank by transferring appropriate volumes of As(III) standard solutions to 100-mL volumetric flasks and bring to volume with water containing the same acid concentration used for

sample preservation (typically 2 to 5 mL conc HNO_3/L). Standards should be prepared to cover the linear range of the instrument used (generally from 1 to 20 µg/L). Prepare fresh daily. In all cases, standards must be carried through the same digestion protocol as the samples to monitor digestion effectiveness (**Calibration curve Fig. 3**).

d. **Preparation of samples and standards for total recoverable arsenic By Recoverable HNO_3/HCl:** For this less rigorous digestion procedure, transfer a measured volume of well-mixed, acid preserved sample to a flask or beaker. Add 2 mL 1 : 1 HNO_3 and 10 mL 1 : 1 HCl and cover with a ribbed watch glass. Heat on a steam bath or hot plate until volume has been reduced to near 25 mL, making certain sample does not boil. Cool and filter to remove insoluble material or alternatively centrifuge or let settle overnight. Quantitatively transfer sample to volumetric flask, adjust volume to 100 mL, and mix.

e. **Determination of arsenic with sodium borohydride:** To 20 mL digested standard or sample in a beaker, add 2 mL conc HCl and mix. Add 2 mL KI prereductant solution, mix, and wait at least 30 min. Put the sample to the hydride pump set up attached with sodium borohydride reagent and 10% HCl. After the instrument absorbance has reached a maximum and returned to the baseline, remove beaker, rinse dispersion tube with water, and proceed to the next sample or standard. Periodically compare standard As(III) and As(V) curves for response consistency. Check for presence of chemical interferences that suppress instrument response for arsine by treating a digested sample with 10 µg/L As(III) or As(V), as appropriate. Average recoveries should be not less than 90%.

6. Calculation

Construct a standard curve by plotting peak heights or areas of standards and blanks versus concentration of standards. Measure peak heights or areas of samples and read concentrations from curve. If sample was diluted (or concentrated) before sample digestion, apply an appropriate factor.

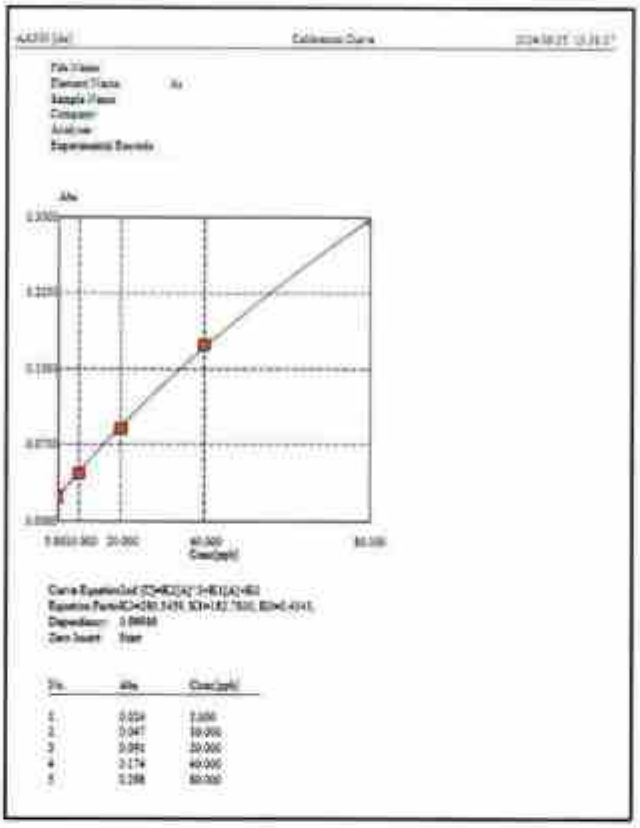

Fig. 3 Calibration curve for Arsenic analysis in AAS

4.2.2 Inductively Coupled Plasma-Mass Spectrometry (ICP-MS) Method ***(Ref: APHA 24th Edition: Method: 3125; Page No. 232-242)***

1. General Discussion

a. Principle

In this method, analysts introduce sample material to an argon-based, high-temperature radio-frequency plasma, usually via pneumatic nebulization. As energy transfers from the plasma to the sample stream, the target element dissolves, atomizes, and ionizes. The resulting ions are extracted from the plasma through a differential vacuum inte1face and separated based on their mass-to-charge (miz) ratio by a mass spectrometer. Typically, either a quadrupole (with or without CCT or DRC) or magnetic sector (high-resolution) mass spectrometer is used. An electron multiplier detector counts the separated ions, and a computer-based data-management system processes the resulting information.

b. Applicable elements and analytical limits: This method has been demonstrated to be suitable for aluminum, antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, lead, manganese, molybdenum, nickel, selenium, silver, strontium, thallium, uranium, vanadium,

and zinc. It is also acceptable for other elemental analytes as long as the same quality assurance practices are followed, with documented acceptance limits. Before implementing the method, determine the instrument detection limit (IDL) and method detection limit (MDL) for all analytes.

2. Apparatus

a) Inductively coupled plasma-mass spectrometer

b) Available from several manufacturers, this instrument includes a mass spectrometer, detector, an ICP source, mass flow controllers for regulating ICP gas flows, a peristaltic pump for introducing samples, and a computerized data acquisition and instrument control system. An x-y autosampler also may be used with appropriate control software.

c) Laboratory ware

d) Use pre-cleaned plastic laboratory ware for standard and sample preparation. Either tetrafluoroethylene hexafluoropropylene-copolymer (FEP), polytetrafluoroethylene (PTFE), or perfluoroalkoxy (PFA) is preferred for standard preparation and sample digestion, while high-density polyethylene (HDPE) and other dense, metal-free plastics may be acceptable for interna! standards, known-addition solutions, etc. Check each new lot of autosampler tubes for suitability, and pre clean autosampler tubes and pipet tips if certificate of analysis is unavailable.

e) Air-displacement pipets, sized 10 to 100 µL, 100 to 1000 µL, and 1 to 10 mL.

f) Analytical balance, accurate to 0.1 mg.

g) Sample-preparation apparatus, such as hot plates, microwave digesters, and heated sand baths. Any sample-preparation device could introduce trace levels of target analytes to the sample.

h) clean hood (optional), Class 100 (certified to contain less than 100 particles/m^3), for sample preparation and manipulation. If possible, perform all sample manipulations, digestions, dilutions, etc. in a certified Class 100 environment. Alternatively, handle samples in glove boxes, plastic fume hoods, or other environments that minimize random contamination by trace metals.

3. Reagents

a. Acids: Use ultra-high-purity grade (or equivalent) acids to prepare standards and process samples. Redistilled acids are acceptable if each batch is demonstrated to be uncontaminated by target analytes. Use extreme care when handling acids in the lab oratory to avoid

contaminating them with trace levels of metals. 1) Nitric acid (HNO_3), conc. (specific gravity 1.41). 2) Nitric acid, l:1-Add 500 mL conc HNO_3 to 500 mL reagent water. 3) Nitric acid, (v/v) 2%-Add 20 mL conc HNO3 to 100 mL reagent water; dilute to 1000 mL. 4) Nitric acid, (v/v) 1 %-Add 10 mL conc HNO3 to 100 mL reagent water; dilute to 1000 mL.

b. Reagent water: When preparing blanks, standards, and samples, use metal-free water. Use only high-purity water to prepare samples and standards. Reagent water containing trace amounts of analyte elements will skew results.

c. Stock, standard, and other required solutions: On preparing standard stock solutions from elemental materials (pure metals, salts). Preferably, purchase high-purity, commercially prepared stock solutions and dilute to required concentrations. Single- or multi element stock solutions (1000 mg/L) of the following elements are required: aluminum, antimony, arsenic, barium, beryllium, cadmium, cerium, chromium, cobalt, copper, germanium, indium, lead, magnesium, manganese, molybdenum, nickel, rhodium, scandium, selenium, silver, strontium, terbium, thallium, thorium, uranium, vanadium, and zinc.

i. Calibration standards-A 5-standard calibration is recommended, from O to 100 µg/L (performance data for the method were obtained with these concentrations). Other calibration regimens are acceptable if the full suite of quality assurance samples and standards is run to validate any method changes. Fewer standards may be used, and a 2-point blank and a midrange calibration technique commonly used in ICP optical methods should also produce acceptable results. Calibrate all analytes using the selected concentrations. Prepare all calibration standards and blanks in a matrix of 2% nitric acid. Add internal standard mix to all calibration standards to provide appropriate count rates for interference correction. Note: Add the same ratio of internal standard mix to all standards and blanks used in this method.

ii. Method blank (MB -A method blank (also known as reagent blank) is a portion of reagent water (treated exactly as a sample, including exposure to all equipment, glassware, procedures, and reagents. It is used to assess whether analytes or interferences are present in the analytical process or system. No MB should contain a warning level of any analyte of interest (based on the end user's requirements). Undertake immediate corrective action for MB measurements above the minimum reporting level. Include at least one MB with each batch of samples prepared. For dissolved samples, take reagent water through same filtration and preservation

processes used for samples. For samples requiring digestion, process reagent water with the same digestion techniques as samples. Add internal standard mix to method blank.

iii. Calibration verification standard- Prepare a midrange standard using a different source than that used for the calibration standards, in 2% HNO_3, with equivalent addition of internal standard.

iv. Calibration verification blank- Use 2% HNO_3, the same solution as the zero calibration standard.

v. Laboratory-fortified blank (LFB)-The laboratory-fortified blank (also known as a blank spike) is a method blank that has been fortified with a known concentration of analyte. It is used to evaluate ongoing laboratory performance and analyte recovery in a clean matrix. Prepare fortified concentrations approximating the midpoint of the calibration curve (50 ng/mL) or lower with stock solutions prepared from a different source than that used to develop working standards. Calculate percent recovery, plot con trol charts, and determine control limits for these measurements. Ensure that the LFB meets the method's performance criteria when such criteria are specified. Establish corrective actions to be taken in case the LFB does not satisfy acceptance criteria. Include at least one LFB with each batch of samples prepared. This standard, sometimes also called a laboratory control sample (LCS), is used to validate digestion techniques and known-addition levels.

vi. Reference materials- Use externally prepared reference material, preferably from National Institute of Standards and Technology or equivalent.

vii. Known-addition solution for samples-Add stock standard to sample so the volume change is less than 5%. In the absence of information on analyte levels in the sample, prepare known additions at around 50 µg/L or lower. If analyte concentration levels are known, add at 50% to 200% of the sample levels. For samples undergoing digestion, make additions before digestion. For dissolved metals determinations, make additions after filtration, preferably immediately before analysis.

4. Procedures

a) Sample preparation: Recommended sample-digestion technique for all analytes except silver and antimony. Ideally, use a clean environment when handling, manipulating, or preparing samples. Preferably perform all sample manipulations in a Class 100 clean hood or room to minimize potential contamination artifacts in. digested or filtered

samples.

b) Instrument operating conditions: Follow manufacturer's standard operating procedures for initialization, mass calibration, gas flow optimization, and other instrument operating conditions. Maintain complete, detailed information on the instrument's operating status whenever it is used.

c) Analytical run sequence: Analytical run sequence, including tuning and optimizing the instrument, checking reagent blanks, calibrating the instrument, verifying the calibration, analyzing samples, and analyzing quality control samples and blanks.

d) Instrument tuning and optimization: Follow manufacturer's instructions for optimizing instrument performance. The most important optimization criteria include nebulizer gas flows, detector and lens voltages, radio-frequency forward power, and mass calibration. Periodically check mass calibration and instrument resolution. Ideally, optimize the instrument to minimize the formation of oxide and doubly charged species.

e) Instrument calibration: After optimization and tuning, calibrate the ICP-MS using an appropriate range of calibration standards. Use appropriate regression techniques to determine calibration responses for each analyte. For acceptable calibrations, the regression curves' correlation coefficients are ideally 0.995 or greater. Immediately after calibration, run initial calibration verification standard; acceptance criteria are ±10% of known analyte concentration. Next, run initial calibration verification blank; acceptance criteria are ideally ± the absolute value of the instrument detection limit for each analyte, but in practice, the absolute value of the laboratory reporting limit or the laboratory method detection limit for each analyte is acceptable. If analyte concentrations are less than 5 µg/L, verify low-level calibration by using a standard at 40% to 50% of the highest low-level standard.

f) Sample analysis: Ensure that all vessels and reagents are uncontaminated. During the analytical run, include quality-control analyses according to schedule. Internal standard recoveries must be between 70% and 125% of internal standard response in the laboratory-fortified blank; otherwise, dilute sample, add internal standard mix, and reanalyze. Make known-addition analyses for each matrix in a digestion or filtration batch.

5. Calculations and Corrections

Configure instrument software to report internal-standard- corrected results. Water sample results should be reported in micro grams per liter. Report appropriate number of significant figures.

Correction for dilutions and solids: Correct all dilution results, and raise the related reporting limits accordingly:

$$Rcorr = \frac{\text{Runcorr} * V}{Vs/V}$$

where:

R_{corr} = diluted corrected results (µg/L),

Run_{corr} = uncorrected elemental results (µg/L),

V= volume of digestate after digestion (L), and

V_s= volume of undiluted sample (L).

4.3 Quality Control and Assurance

- Appropriate Standard reference materials (SRMs) to be used to calibrate the Instrument.
- Milli-Q water served as a blank (1 blank per 10 samples).
- Precision (reproducibility) to be ascertained using within-day replicate analysis of SRMs and samples. Replicates of SRMs each day provided an indication of within-day precision.
- Retest in every 20 samples.

5. Data Analysis and Reporting

5.1 Data Validation

- Validate data by comparing it with quality control samples.
- Flag any outliers or suspicious results for further investigation.

5.2 Reporting

- Report arsenic concentrations in micrograms per liter (µg/L).
- Include information on the sampling location, date and analytical method used.
- Provide interpretation of results with respect to regulatory standards (e.g., BIS/WHO guideline of 10 µg/L for drinking water).

6. Mitigation Measures

Central Ground Water Board (CGWB) is not directly involved in the mitigation or remediation of contaminated groundwater sources. However, states adopt technical guidance based on field application measures formulated by various organizations to address the contaminants.

In Arsenic contaminated area, the most effective strategy for prevention and mitigation involves supplying alternative sources of drinking water (deep tube wells, or surface water), and adopting an arsenic-free diet [**Singh *et al.* 2024**].

6.1 Short-Term Mitigation

- Adoption of household treatment plants which are effective, efficient and low cost
- Conjunctive use of piped surface and GW
- Construction of hand pumps with removal plants
- Installing community water supply systems
- Replacement of affected wells with tube wells of As free aquifer.

6.2 Long-Term Mitigation

- Tapping alternate safe aquifer for drinking purposes
- Adoption of Mini water supply scheme attached with treatment plants
- Construction of deeper wells with cement sealing technique method of CGWB
- Adoption of rain water harvesting
- Public awareness and education
- Research and Development: To explore new and more efficient treatment technologies and strategies

6.3 Arsenic Remediation Mechanism

1. Oxidation
2. Precipitation
3. Membrane Techniques
4. Bioremediation

The features of different treatment technologies for Arsenic analysis is depicted in **Fig. 4.**

Oxidation is a pre-requisite process that converts more mobile form As (III) into comparatively stable As (V), and subsequent removal of As (V) takes place by employing adsorption/ sedimentation/filtration or other techniques.

6.3.1 Limitations and challenges in removing arsenic from drinking water

- **Competing Anions**: In natural waters or wastewater, arsenic often competes with common anions present in larger amounts, making its selective removal difficult. These anions may interfere with arsenic adsorption processes.

- **Oxidation State Variations**: Arsenic exists in multiple oxidation states, primarily As(III) and As(V), each with distinct physical and chemical properties. Effective removal requires different strategies tailored to each oxidation state.

- **pH Dependence**: Materials used for arsenic removal typically perform optimally within a narrow pH range, usually between 6 and 8. Natural fluids can have a wider pH range, and deviations from the optimal range can reduce the efficiency of arsenic removal.

- **Economic Viability**: The economic viability of arsenic removal techniques depends on factors such as raw material availability, pre-adjustment requirements, waste disposal, regeneration capacity, and energy consumption.

- **Scalability**: While lab experiments with prepared arsenic solutions show promise, applying these strategies to large-scale water treatment systems poses significant challenges. More research is needed to confirm their effectiveness and feasibility on a larger scale.

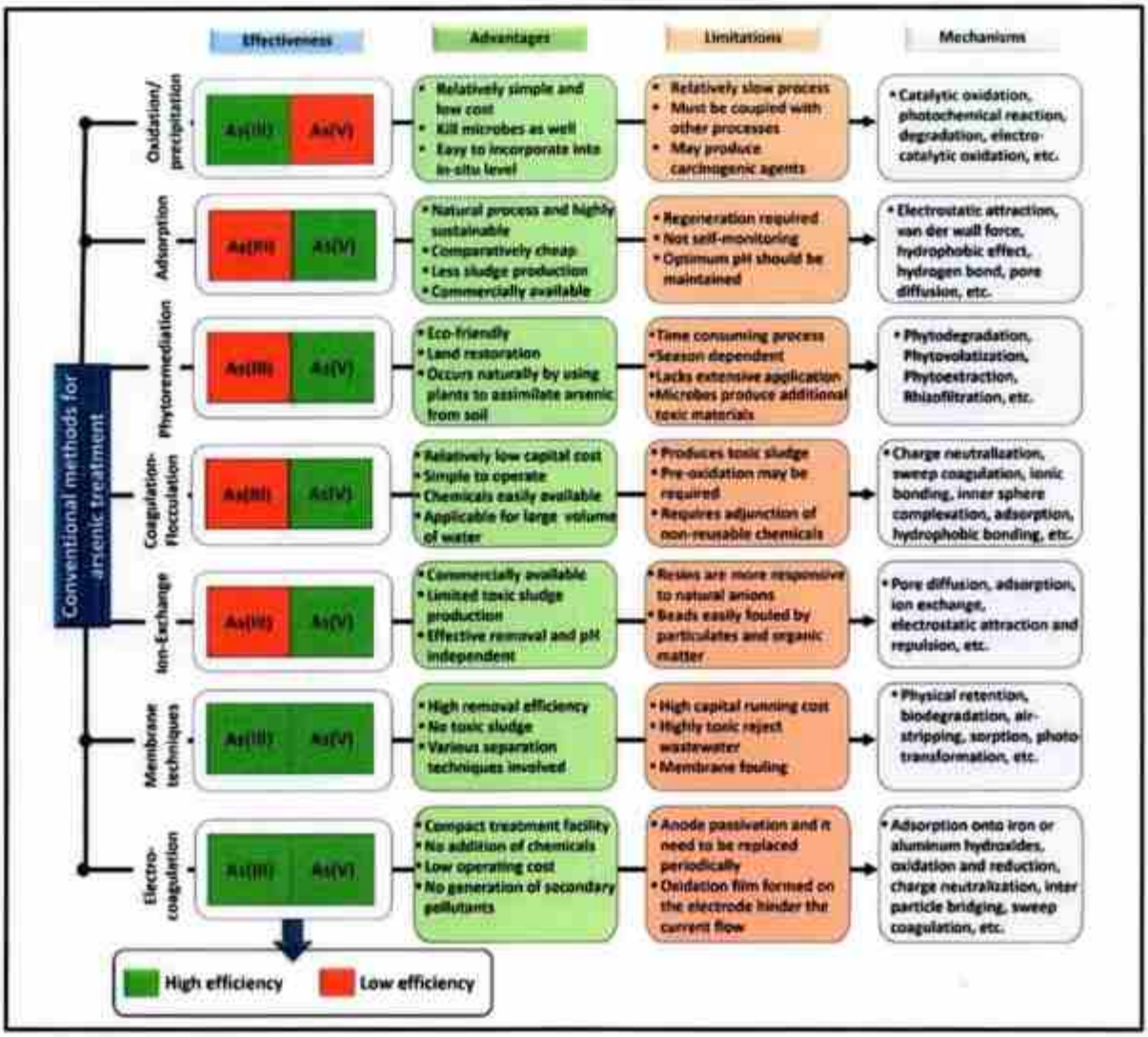

Fig. 4 Features of various treatment technology for arsenic removal (*Ref. Yadav et al., 2021*)

6.4 Technology for tapping of Arsenic free aquifers developed by CGWB

It has been observed that deeper aquifers (greater than 100 meters) are generally free of arsenic. Central Ground Water Board has developed a technology to construct arsenic-free wells by tapping into these deeper aquifers. These specially designed wells use a cement seal technique to address the issue of interconnection between the lower and upper aquifers.

The cement sealing is applied to a sufficiently thick intervening clay layer that separates the arsenic-contaminated aquifer from the arsenic-free aquifer. This seal prevents contaminated water from seeping through the annular space, which is filled with gravel material. **Fig. 5** shows a schematic diagram of the innovative well design adopted by the Central Ground Water Board for constructing arsenic-free wells. It is recommended that this design be used in arsenic-affected areas of Bihar, Uttar Pradesh, and West Bengal, where deeper aquifers are underlain by a thick separating clay layer.

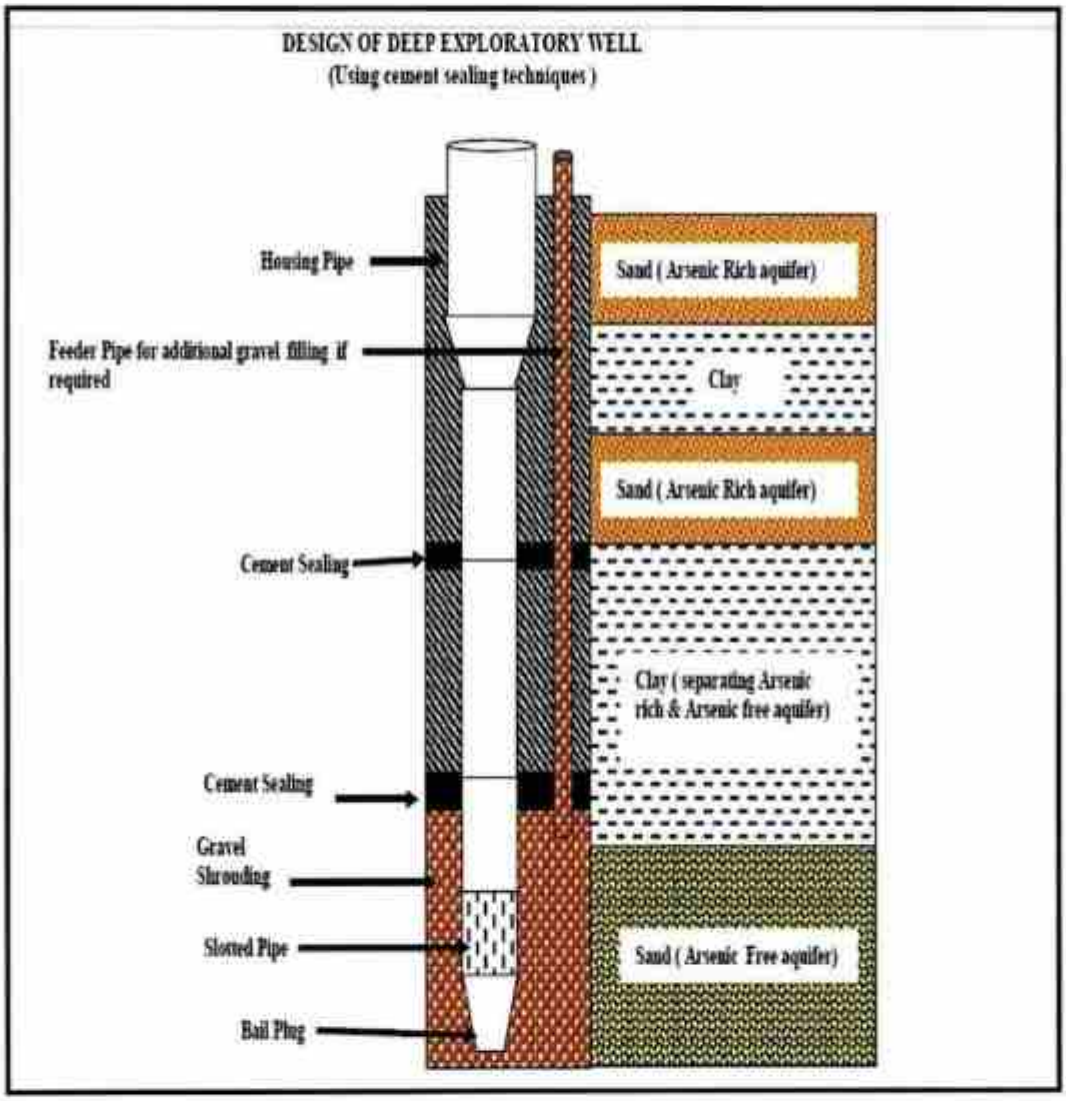

Fig. 5 Innovative Well Design for Tapping Arsenic-Free Aquifers, developed by CGWB

6.5 Detail methodologies for Household Level mitigation of arsenic from drinking water developed by different organization

(Source: *Handbook on Drinking Water Treatment Technologies; Government of India, Ministry of Jal Shakti Department of Drinking Water & Sanitation, National Jal Jeevan Mission*)

6.5.1 Solar Oxidation and Removal of Arsenic (SORAS)

It is a simple method that uses irradiation of water with sunlight in Polyethylene Terephthalate PET or other Ultraviolet (UV) transparent bottles to reduce Arsenic level from drinking water (Figure 1). The process is developed by Swiss Federal Institute of Environmental Science and Technology, Switzerland (EAWAG) and Swiss Agency for Development and Cooperation (SDC) (Wegelin et al., 2001). The method is based on photo-chemical oxidation of As (III) followed by precipitation or filtration of As(V) adsorbed on Fe(III) oxides. Field tests in Bangladesh show removal efficiency between 45-78% with an average of 67%. Concerning the Bangladesh guideline value of 50 µg/L, SORAS can treat raw water having an Arsenic concentration below 100 – 150 µg/L. The method is conceived for usage at household level to treat small quantities of drinking water at virtually no cost.

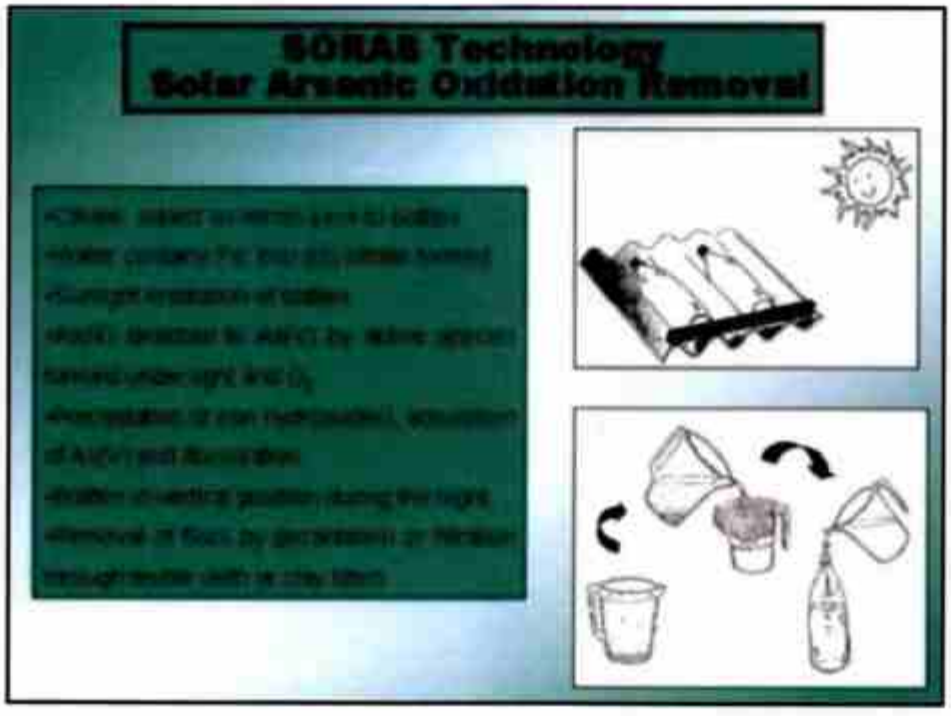

Fig. 6 Solar Oxidation and Removal of Arsenic (SORAS) ***Source: D'Hiriat et al., 2006***

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6.5.2 NMRL-DRDO household water filter

Naval Materials Research Laboratory - Defence Research and Development Organisation (NMRL- DRDO) household Arsenic removal filter has been designed and fabricated both in plastic and in stainless steel (Figure 2). The filter comprises of three chambers. The first chamber contains reactant material enclosed in a fine cloth bag. In the second chamber fine cloth bag containing treated sand is placed. The third chamber simply acts as a collector chamber for treated water. Arsenic contaminated water can enter the first chamber of the filter at a predetermined flow rate from where it passes down to the second chamber and finally gets collected in the third chamber. The Arsenic removal filter works on the simple principle of co-precipitation of Arsenic with Iron and adsorption of this precipitate on Iron Oxyhydroxides, followed by further retention of this precipitate in treated sand. Sodium salts of arsenite and arsenate get ionized in the water medium. The arsenite and arsenate ions are removed further by co-precipitation as $FeAsO_4$ and $FeAsO_3$ and by adsorption of these oxides onto Ferric Oxyhydroxide solids. The filter material and sand are to be replaced periodically as per usage. This filter can treat Arsenic contaminated water to bring down concentration below 50 µg/L.

Fig. 7 NMRL-DRDO Household Water Filter

The cost of the unit is around Rs. 500 for the stainless- steel filter and Rs. 150 for the plastic parts. The cost of removing Arsenic from the contaminated waters works out to be Rs. 27-30 per 1,000 litres of water.

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6.5.3 Sono Arsenic mitigation filter

The primary active material used in this filter is the Composite Iron Matrix (CIM), a mass made up of Iron turnings. The filter consists of two chambers made up of plastic buckets (Figure 3). The upper chamber is fitted with tap and flow control junction with a plastic pipe which enters the second chamber. The upper chamber consists of layers of brick chips, and CIM sandwiched between two layers of coarse sand. The lower chamber is filled with brick chips as the lowest layer followed by fine sand, on the top of which is spread wood charcoal followed by the top layer of coarse sand. The CIM removes inorganic Arsenic species quantitatively. The process does not require pre-treatment of water with external oxidizing agents. Further the filter does not require any special maintenance other than replacement of the upper sand layers when the apparent flow rate decreases. The filter can produce potable water for at least 5 years. The cost of this filter is Rs. 2,000.

Fig. 8 Sono Arsenic Mitigation Filter

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6.5.4 School of Environmental Studies (SOES) filter tablet system

(Source for 6.5.4 & 6.5.5: Report of the Task Force on formulating action plan for removal of arsenic contamination in West Bengal. Government of India Planning Commission Yojana Bhavan New Delhi 110 001 (July, 2007).

SOES developed a tablet and filter system for the removal of Arsenic at household level. The removal is based on the principle of oxidation-coagulation-precipitation-filtration route. The unit consists of two containers, the upper container is fitted with a filter candle and the lower container is collector for Arsenic free water. The tablet consists of an oxidizing agent, Fe (III) salt and activated carbon. The tablet is added to the contaminated water. The oxidizing agent converts entire Arsenic into As (V). Fe (III) salt gets hydrolyzed into hydroxide which attaches As (V) with it and eventually gets adsorbed onto activated carbon. Water is then transferred into the top container containing the filter candle and the clean water is collected into the bottom container through filtration. 3 Indian patents have been filed for this filter tablet invention jointly with CSIR. SOES scientists have also proposed to dispose the generated sludge in a cow dung medium through bio-methylation route. Scientists from SOES have reported field testing of their filter-tablet system during 1993-95 with Arsenic removal of 93-

100%. These units were also evaluated by agencies like, ITRC, Lucknow, NTH, Kolkata, NEERI, Nagpur. The results showed Arsenic removal in the range 93-97.5%. 300 filter tablet units were also evaluated by PHED, West Bengal but the complete report is not available with SOES.

6.5.5 AIIH&PH domestic Arsenic removal system

AIIH&PH domestic Arsenic removal units use the same route as SOES, i.e., oxidation coagulation-precipitation-filtration. However, they use bleaching powder solution as the oxidizing agent, and ferric alum as the coagulator. This technique also uses a two-container system in which the upper container is fitted with a candle. They have tried with different types of candles and proposed that candle making may be used as way of self-sustenance for the villagers. For this, Self Help Groups may be considered. Tripura candles have been found to be very attractive as a low-cost filter. AIIH&PH have distributed a number of their filtering units in various households of West Bengal through NGOs but a systematic evaluation of their system by a third party could not be obtained.

Both SOES and AIIH&PH domestic Arsenic removal techniques adopt a robust principle for Arsenic removal, which perhaps, is also the oldest Arsenic removal technique. The final water quality, however, needs to be carefully monitored. Free residual Chlorine is essential to fight bacterial contamination that may occur during handling and storage of drinking water.

6.6 Detail methodologies for Community Level mitigation of arsenic from drinking water developed by different organization

(Source: *Handbook on Drinking Water Treatment Technologies; Government of India, Ministry of Jal Shakti Department of Drinking Water & Sanitation, National Jal Jeevan Mission*)

6.6.1. Community scale IIT Bombay Arsenic filter

Summary of the Product

The IIT Bombay Arsenic removal filter developed under the DST project involves the co-oxidation of Fe(II) and As(III) in the presence of dissolved Oxygen and subsequent Arsenic removal by Hydrous Ferric Oxide, which is formed from oxidation of Fe(II) naturally present in groundwater and from leaching of Iron nails, thus As(III) oxidation is achieved without addition of any chemicals. This filter can be fabricated by local plumbers and masons in field using locally available materials. The unit is cost- effective and robust, does not require extensive monitoring. This filter provides drinking water to meet the daily needs of 200-300 families and can achieve Arsenic level of < 10 µg/L (WHO guideline) for initial Arsenic concentrations of up to 500 µg/L at a flow rate of 600-1000 L/h. The cost for producing 1000 L of water varies from Rs. 0.1 to 1.0 (inclusive of mainte- nance of

handpump, Iron replenishment and filter washing labour cost) and the contribution required per family for sustaining the filter is around Rs. 10 per month.

Contaminants that can be removed through this Technology	Arsenic, Iron and Phosphate from groundwater
Estimated Capital Cost (In Rs.)	70,000.00

Technical details of the Technology

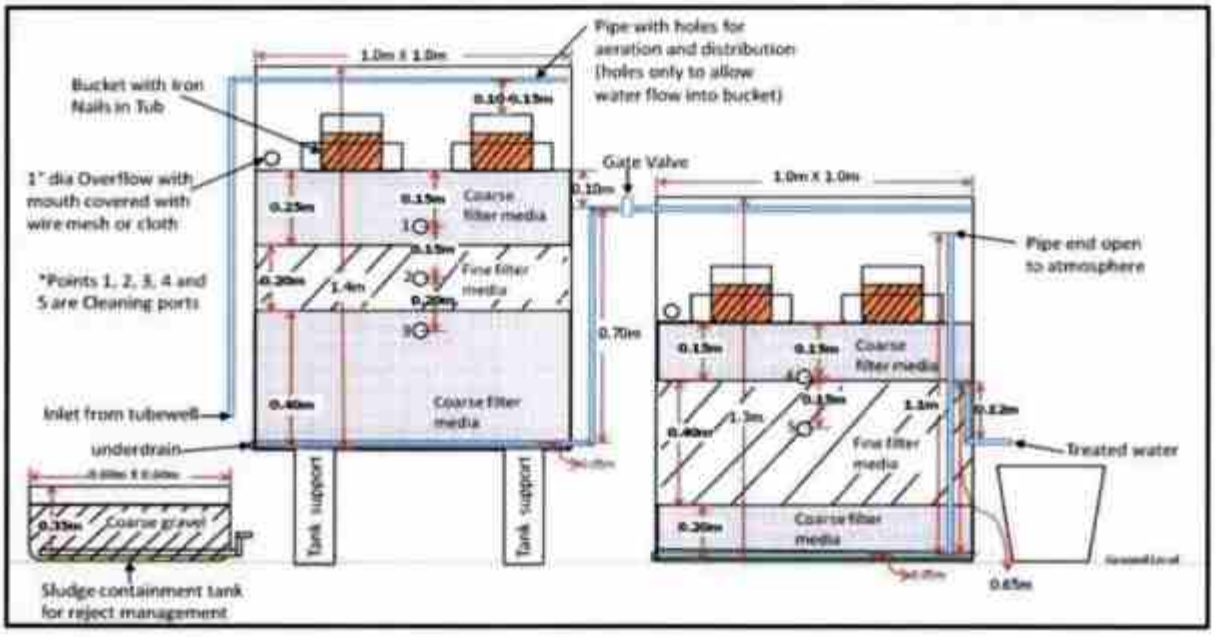

Fig. 9 Schematic Representation of IITB Arsenic Filter

The IIT Bombay Arsenic filter consists of the following units:

(I) Inlet pipe

A lift and force or Mark 2 hand-pump with third plate arrangement is used for lifting groundwater into the IIT Bombay Arsenic filter. A GI pipe of 1" dia is connected to the handpump and this is then connected, via a 1" socket, to a 1" dia HDPE pipe which is present inside the filter. This HDPE pipe has 3mm dia holes such that water falls uniformly into the Iron contactor. The inlet pipe should be horizontal so that water is equally distributed throughout the length of pipe. The free end of this pipe should be closed and secured to the opposite side of the filter. Care should be taken to ensure that water surges do not disturb the levelling of the pipe and that the holes are allowing water to fall only in the Iron contactor and not on the gravel filter chamber.

(II) **Iron Contactor:** The Iron contactor is one of the following, i.e. (a) or (b)

(a) The Iron contactor is present below the Inlet pipe. The Iron contactor t ray has ungalvanized Iron nails of size ranging from ¾" to 1" and is placed on a tray with support from the sides. It comprises of 2 rectangular trays of 0.44m x 0.9m with overflow pipes covering its entire area. These 2 trays are placed alongside each other. The bottom of the tray is drilled, and the overflow pipes are welded to it. Each overflow pipe is a hollow pipe of diameter 2.5cm and height of 11.5cm. The height and number of overflow pipes may vary as per the influent water flow. The top opening of the overflow pipe is covered with conical cover, as per the design. This cover should not be higher than 2.0 cm from the tray bottom. The lower 1.3 cm of the overflow pipe is below the tray. All the welds and joints in the tray are made leak proof. In rural areas Iron contactor tray fabrication takes a lot of time and the workmanship is also not good. Though Iron tray contactor is easy from operational purpose but type b) Iron contactor mentioned below is easy to fabricate.

(b) The Iron contactor can also be of bucket and tub type. The inlet pipe is constructed/ modified in such a way that the incoming water is equally divided into 4 or 6 parts. Some (4 or 6) such bucket-tray setups are placed under each part of the inlet. A plastic bucket of diameter 8 inches is taken and 20- 30 holes of diameter 2mm are drilled on the bottom of the bucket. The bottom 4 cm of the bucket is filled with gravel of size 10-15 mm. This is done to avoid the clogging of the holes of the bucket by the Iron nails or the corrosion products. Iron nails (1 inch long) are filled into the bucket up to half of the bucket height. Generally, each bucket has 3- 4 kg Iron nails. These buckets are now placed on plastic tubs/ trays. The plastic trays are of diameter approximately 12-14 inches. Holes of diameter 2-4 mm are drilled along the side of the plastic tray in a straight line 6cm from the bottom of the tray. It is important to maintain the straight line as otherwise there maybe water flow from only one side of the tray which might lead to short-circuiting in the filter. This bucket and tray arrangement can be used instead of the tray as the tray is difficult to fabricate and can be expensive.

(III) Gravel filter: The filtration zone for separation of Hydrous Ferric Oxide floccules (HFO). This is the design used for the pilot plant. The filtration chamber consists of a tank of dimensions 1 m x 1 m x 1.5 m. The tank is filled with gravel and aggregates of the size of 5-10 mm up to the height of 0.65 m from the bottom. Then another 0.15 m is filled with gravel and aggregates of the size 10- 15 mm. The top 0.6 m is left free for Iron contactor tray/ bucket and inlet pipe. If required, Iron mesh (available in hardware stores and called "Jali" in the local language) are added in the filter media at intervals of 10 cm starting from 5cm below the water level, so as to provide extra Iron for forma tion of HFO. This Iron mesh is cut into 1 m X 1 m squares and 3 such squares are placed on top of each other, and this is layered on the gravel at the desired intervals. This is done in areas where there is low groundwater Iron and high Arsenic. Generally, 3-4 such Iron mesh layers are sufficient to meet the extra Iron requirements. An overflow is provided at 0.80m from the bottom of the tank. Another filter tank with similar configuration is set up along with the first tank. This is for double stage filtration, as an added failsafe mechanism. The pipe connecting these tanks should have a gate valve. It is important to have the water level no more than 10 cm below the top surface of the gravel layer. This can be ensured by measuring the length

of the collection pipe which rises from bottom and ensuring that it is more than 5-7 cm less than total gravel layer depth. These tanks can be fabricated either by brick masonry or from 10 gauge Iron sheets. Even commercially avail- able PVC tanks can be used (but not recommended as the exact dimensions are difficult to find). It is essential to make all the welds, joints and pipe connections leak- proof.

(IV) Cleaning ports: Cleaning ports are located in the gravel filter. These ports consist of 1" HDPE pipes with 3 mm dia holes all along their length on the top half of the circumference.

(V) Cleaning mechanism: The cleaning mechanism can be divided into 2 activities:

- **Cleaning of nails**
- **Cleaning of gravel**

Cleaning of nails to dislodge the Iron oxide layer: The Iron nails are stirred with a rod/ stick in the tray. The action of the nails rubbing against each other dislodges most of the deposited HFO on the nails and the nails become ready for reuse. In the case of bucket and tub arrangement the nails have to be taken out of the bucket and washed under running water. The simple action of emptying the buckets and then refilling under running water can dislodge most of the HFO which sticks onto the nails. The cleaning of nails should be done every fortnight.

Cleaning of filter to remove the HFO flocs from the gravel: This is the scheme to be followed while cleaning the IIT Bombay Arsenic filter. The ZVI unit is first dissembled, and the inlet pipe is disconnected from the sludge laden wastewater is directed to the sludge tank using a flexible pipe. The other cleaning ports are sequentially opened, and the wastewater is allowed to drain out. The top 10-15 cm of the gravel layer is taken out manually and cleaned separately by vigor- ous shaking in bamboo tubs. The friction caused by rubbing of the gravel particles amongst themselves is sufficient for cleaning them. Other reactors require cleaning by backwashing, but it is known to be quite ineffective and cumbersome and require frequent backwashing. In this method complete cleaning can be achieved with low effort and the dirty wash water can be safely directed into a collection tank. The gravel filter may be cleaned once in two- three months (depending upon usage).

(VI) Collection pipe: The collection pipe is similar to the cleaning port pipe arrangement. But instead of the 1" nipple from the cross leading directly out of the filter, using a 1" dia HDPE pipe the collected water is directed upwards. The outlet of the pipe is raised to a height of 65 cm from the bottom and only 10 cm from the top surface of the gravel. It is essential that the top surface of the gravel be no more than 10 cm from this pipe outlet.

Operations and Maintenance Cost and Protocol: The contribution required per family for sustaining the filter is around Rs. 10/- per month.

Test Trailed: Installed in Assam, Bihar, Uttar Pradesh & West Bengal States.

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(Source: ***Handbook on Drinking Water Treatment Technologies; Government of India, Ministry of Jal Shakti Department of Drinking Water & Sanitation, National Jal Jeevan Mission*****)**

6.6.2 Anion and Metal Removal by Indian Technology (AMRIT) by IIT Madras

Brief on the technology

AMRIT technology is based on world's best engineered nanomaterials for the removal of health-related contaminants from drinking water. The solution has been widely implemented as affordable point-of use water purifiers in the worst **Arsenic, Iron and Fluoride affected regions of India**. These materials-based solutions are green and sustainable (PNAS, 110 (2013) 8459-8464). AMRIT technology has been widely implemented across the country. AMRIT technology was conceptualized, developed, piloted, and implemented through Prof. Pradeep's research laboratory at IIT Madras. There are many contaminants found in water; yet all contami- nants do not occur simultaneously. A tailored solution for each contaminant is the key to ensure that local water is made healthy for drinking, without affecting its qualities such as taste. This is possible affordably with the advent of nanotechnology. Contamination of drinking water by diverse species (Fluoride, Arsenic, Iron, and microorganisms in different regions) contributes to major health hazards across the country. Governmental agencies, through proactive efforts, have made a significant difference at grass roots level. However, challenges in drinking water purification are immense. There is an urging need to implement products based on new technologies; two critical reasons are described here:

1. Old technologies are increasingly becoming outdated: Activated Alumina for water purification is over 55 years old technology and is outdated today. Adsorption of Fluoride on alumina is extremely poor, which leads to the use of huge quantities of the adsorbent thereby increasing the size of water treatment plants. We are becoming increasingly aware of the health risks of Aluminum due to Alzheimer's disease; and

2. Reducing limits of allowed concentration of contaminants in water: Allowed concentration of Arsenic in water was 200 ppb in 1960; today it is at 10 ppb (World Health Organization).

Newer technologies must evolve to address this issue. As guardians of the health of the society, we must be prepared to handle them. This is only possible with products based on new technologies – nominee has contributed to making a significant step forward in this direction.

Using nanomaterials, it is possible to effectively destroy microorganisms, including enteric viruses, adsorb Arsenic/ Fluoride, remove heavy metals, and degrade pesticides found in drinking water. The technology behind the product has been scientifically validated by the international research community through research articles and patents. Adsorbents used for water purification are typically produced through high temperature synthesis. There are several associated challenges: by-products, power consumption and loss of surface area due to sintering. Nominee has co-developed a new protocol for material production which can be done at room temperature and yet produce a material which is exceptionally strong like river sand and has a large adsorption capacity. AMRIT technology is continu- ously being implemented by various state govern- ments and non-governmental agencies to provide clean drinking water for people in India, especially those living in rural areas.

Product variants based on AMRIT technology

a) Handpump attached unit (1000 Liters per hour)
b) School and community centre unit (3000 Liters per day)
c) Standalone community unit (10000 Liters per day)
d) Automatic Water Dispensation Unit (1000 Liters per hour)
e) Village water supply unit (up to 10,00,000 Liters per day).

The technology has been applied in various forms for community water purifiers. The products based on these technologies are designed considering the indigenous context in the products. There are a number of new engineering novelties associated with this work. It is also well-known that water purification units for Iron removal often fail because they require daily maintenance. AMRIT technology has an Iron removal water purification unit which requires no backwashing and generates no sludge. This is the only example of a maintenance-free Iron removal product world-wide. The cost of clean water using this technology in the Arsenic affected areas is under between 2 to 4 paise per litre. It can be implemented at any level - domestic, community, or municipal - levels.

Salient features of AMRIT

- Pre-treatment is required for adopting the technology
- Overall life cycle cost of the technology excluding taxes: Rs. 2,500/-
- The technology has warranty period of 5 years
- The technology can be retrofitted into existing system
- The technology is scalable
- The sludge generated will be in solid form and can be used for landfill
- Maximum allowable TDS for inlet water is 1,500 mg/L
- It is a patented technology
- The cost of production of Arsenic free water is under between 2 to 4 paise per litre
- The technology can be fully automated.

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(Source: *Handbook on Drinking Water Treatment Technologies; Government of India, Ministry of Jal Shakti Department of Drinking Water & Sanitation, National Jal Jeevan Mission*)

6.6.3 Laterite based technology for Arsenic removal by IIT Kharagpur

Brief on the technology

The laterite-based filter assembly is designed to remove Arsenic, Iron and bacteria from groundwater to provide low-cost drinking water in Arsenic affected areas. Naturally abundant laterite soil is used to prepare the filter media which has high Arsenic adsorption capacity (32 mg/g). The Arsenic removal media has a life of 5 years, and the filter life can be extended for several years by changing the Arsenic removal media every 5 years. The filter does not require any regeneration during its service life and meets the toxicology leaching protocol (TCLP) for safe disposal. Domestic filter does not require any power for operation. The filter has been scaled up from 100 l/day to 10 kl/day.

Salient features of Laterite based technology for Arsenic removal

- Pre-treatment is required for removal of Iron from raw water;
- Overall life cycle cost of the technology excluding taxes: Rs. 9,00,000/-;
- The technology has warranty period of 5 years;
- The technology can be retrofitted into existing system;
- Arsenic removal media does not generate any effluent. However, Iron removal unit requires backwash once in a fortnight. The effluent thus generated is passed through a soak pit containing treated laterite, gravels and sand bed;
- The technology is scalable;
- Maximum allowable TDS for inlet water is 2,000 mg/L;
- It is a patented technology;
- Life of filter media is 5 years; and
- The technology can be adopted for any terrain.

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Based on the above-mentioned mechanisms, various technological options are being evaluated for either lab scale or field/pilot scale and compared in Table 3 (A&B).

Table 3. (A) Centralized or Community-Type Systems for Arsenic Removal (Used in India in Field Scale)

Technology option	Removal Efficiency/ Capacity	Working Principle/Advantage	Uses/State adopted
All India Institute Hygiene and Public Health (AIIH&PH) Technology	-	Chemical oxidation by sodium hypochlorite; coagulation by addition of alum; mixing; coagulation-flocculation; followed by sedimentation; and up-flow filtration.	Installed as an attachment to the contaminated hand pump tube wells in the villages of West Bengal, India
Arsenic and Metal Removal by Indian Institute of Technology, Madras (AMRIT Method)	five to six times more efficient than any other adsorbent available currently	The AMRIT is composed of nanoscaled iron oxy-hydroxide measuring particle size less than 3nm. This filter could accommodate an input load up to 5 ppm of arsenic [equally well for both forms of arsenic, As(III) and As(V)] and reduce the levels to less than 1ppb	field tested in the states of Andhra Pradesh and West Bengal. The solution has been widely implemented as affordable point-of use water purifiers in the worst Arsenic, Iron and Fluoride affected regions of India.
Indian Institute of Technology, Bombay (IITB) Arsenic Filter (ZVI Based)	-	The developers claim that this system ensures adequate oxygen transfer, separation of hydrous ferric oxide (HFO) flocs, and makes use of locally available low-cost granular media for arsenic removal from drinking water. Co-oxidation of Fe(II) and As(III) in the presence of dissolved Oxygen and subsequent Arsenic removal by Hydrous Ferric Oxide, which is formed from oxidation of Fe(II) naturally present in groundwater and from leaching of Iron nails, thus As(III) oxidation is achieved without addition of any chemicals.	Installed in various regions of Assam, Bihar, Uttar Pradesh, and West Bengal
Arsiron Nilogon—Tezpur University, Tezpur, Assam	-	Three common chemicals viz., baking soda, potassium permanganate, and ferric chloride are added in specific amounts to the water under treatment. The entire process takes about 3min, followed by filtration after 1h of resting. It does not require electricity.	Could be customized at home with easily available materials.

Water Systems International (WSI) Technology	Reduce arsenic levels from 1500 to 50 µg/L	The unit is a rectangular container attached to a tube-well hand pump. It consists of three cylinders: first cylinder serves the purpose of mixing water with an oxidizing agent to convert As(III) into As(V); the second one is filled with the WSI patented resin which removes As(V).	-
RPM Technology	3600L of arsenic-free water per day for 100families	Activated alumina (adsorption) enhanced by a proprietary additive (AAFS-50) engineered to accomplish excellent arsenic removal. The system consists of two containers; out of which the second one made up of AAFS-50media removes the arsenic and other heavy metals. It is easy in installation, user friendly, and works with gravity force.	-
Public Health Engineering Department (PHED) Technology	Remove arsenic from very high levels in water	1. The PHED, Government of West of Bengal has devised a four-chambered ARU. The groundwater is forced by the hand pump to which it is attached and is sprayed as droplets over a hematite lumps packed bed. 2. Public Health Engineering Department, Govt. of West Bengal is implementing IRPs with indigenous technology, developed in consultation with Arsenic Task Force, Govt. of West Bengal. Mainly 2 (two) types of models, viz. Modified Sujapur-Sadipur Model (capacity 20m^3/hr. – 170 m^3/hr.) & Gobardanga Model (low capacity – 5 m^3/hr. - <20 m^3/hr.) have been adopted.	West Bengal
Laterite based technology for Arsenic removal by IIT Kharagpur.	Remove arsenic from very high levels in water. Iron and bacteria can also be removed.	Naturally abundant laterite soil is used to prepare the filter media which has high Arsenic adsorption capacity (32 mg/g). The Arsenic removal media has a life of 5 years, and the filter life can be extended for several years by changing the Arsenic removal media every 5 years. The filter does not require any regeneration during its service life and meets the toxicology leaching protocol (TCLP) for safe disposal. Domestic filter does not require any power for operation. The filter has been scaled up from 100 l/day to 10 kl/day.	Arsenic removal media does not generate any effluent. However, Iron removal unit requires backwash once in a fortnight.

Table 3. (B) Household Systems for Arsenic Removal

Technology option	Working Principle/Advantage	Uses/State adopted
AIIH&PH Domestic Arsenic Removal System	A two-container system in which the upper container is fitted with a candle (Tripura candle) which is made up of clay and rice husk. Tripura candles have been found to be very attractive as a low-cost filter.	Distributed to numerous households in West Bengal through NGOs
Naval Materials Research Laboratory (NMRL)-Defense Research and Development Organization (DRDO) Household Arsenic Removal Filter	Successfully evaluated in the field for its efficiency in the removal of arsenic, iron, and bacteria from groundwater.	More than 5000 such filters have been installed in Bihar, West Bengal, and Uttar Pradesh and are monitored regularly
SONO Arsenic Mitigation Filter	Remove iron, manganese, heavy metals, nitrate, and many anions quantitatively. The process does not need any pretreatment of water with external oxidizing agents. Further the filter does not require any special maintenance (no backwash or regeneration is necessary). The filter could provide potable water for at least 5 years.	-

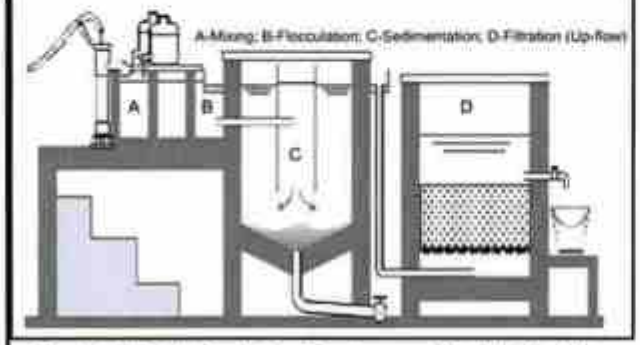

Fig. 1 All India Institute Hygiene and Public Health (AIIH&PH) Technology

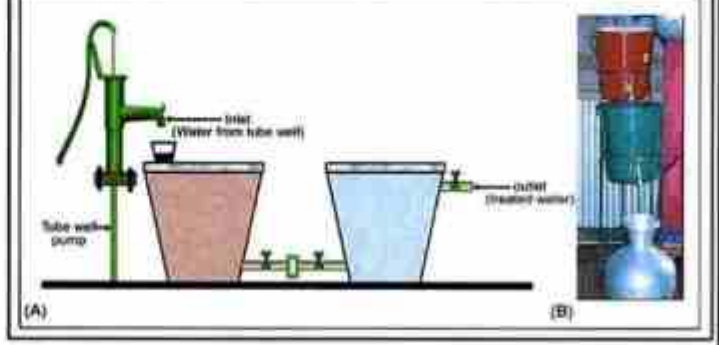

Fig. 2 (A) Alcan AAFS-50 media technology (RPM Marketing Pvt Ltd. Kolkata, India); (B) Its set-up in an Indian village

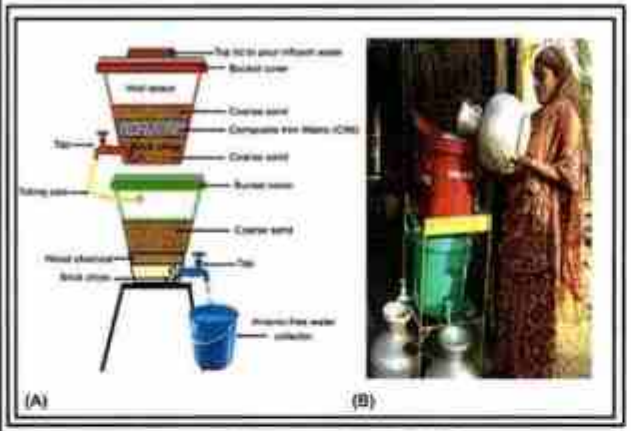

Fig. 3 A schematic diagram of (A) SONO arsenic mitigation filter (B) and its setup in a household in an Indian village.

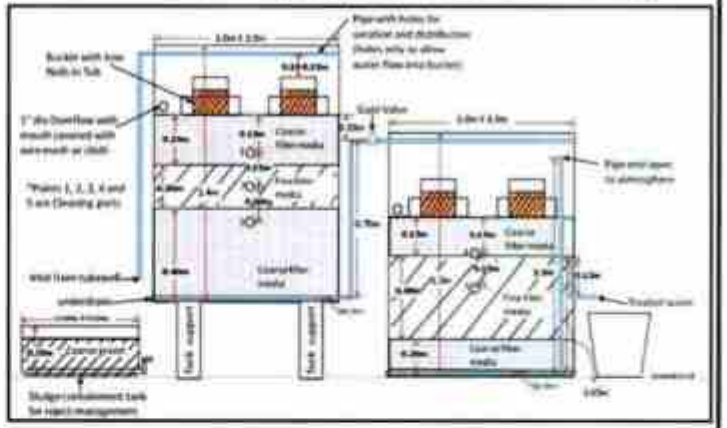

Fig. 4 Schematic of IITB Arsenic Filter

Fig. 10 Field Level Arsenic Removal Techniques Used in India

6.7 Recommendations for management of Arsenic enriched Groundwater

- It has been observed from earlier studies of CGWB that Arsenic contamination is constricted to 80m depth from the surface. Various researchers have also opined that the arsenic contaminated zones are generally at the shallow/intermediate depth ranged largely between 20m and 50m. The groundwater in deeper aquifer ≥ 100 m, which is separated by clay from shallower aquifer has been reported arsenic-free. Hence, safe deeper aquifers containing arsenic free water can be used in the arsenic contaminated areas.
- It has also been observed that not all tubewells/handpumps are arsenic contaminated in the arsenic affected habitat. Hence, it is often feasible to get uncontaminated tube wells in many areas within fair distances and well switching to an uncontaminated shallow tube well can be a suitable option. Among the various tried mitigation strategies, well switching to shallow tube wells has been found as most preferred strategy.
- By constructing open dug wells (DWs) with large diameters, As free safe drinking water can be obtained from As contaminated shallow aquifers. Studies have shown that the As level in most of the DWs is very low due to prevailing oxidative environment and precipitation of Fe or due to groundwater recharge of the DWs with rainwater with few deviation.
- In the absence of any alternate options Surface Water may be used in Arsenic affected areas.
- Arsenic contamination obviously can take place in significant ranges of hydrogeological and socioeconomic conditions. Therefore, any mitigation strategy will have to be customized to suit the local geological and financial situation.

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STANDARD OPERATING PROCEDURE (SOP) FOR FLUORIDE DETECTION IN GROUNDWATER AND ITS MITIGATION

Central Ground Water Board

Ministry of Jal Shakti
Department of Water Resources, River Development and Ganga Rejuvenation

STANDARD OPERATING PROCEDURE (SOP) FOR FLUORIDE DETECTION IN GROUNDWATER AND ITS MITIGATION

(June: 2024)

Central Ground Water Board

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TABLE OF CONTENTS

	TOPIC	PAGE
1.0	Introduction	1-2
	1.1 Scope	
	1.2 Definition	
2.0	Designation of Hotspot	2-4
	2.1 Sampling protocol for Hotspot area	
3.0	Sampling Method for Fluoride Analysis	5-6
	3.1 Equipment and Materials	
	3.2 Site Selection and Preparation	
	3.3 Sample Collection	
	3.4 Sample Preservation and Storage	
4.0	Analytical Techniques for Fluoride analysis in Laboratory	6-16
	4.1 Sample Preparation	
	4.2 Analytical Methods	
	4.3 Quality Control and Assurance	
5.0	Data Analysis and Reporting	15
	5.1 Data Validation	
	5.2 Reporting	
6.0	Mitigation Measures	16-31
	6.1 Short-Term Mitigation	
	6.2 Long-Term Mitigation	
	6.3 Fluoride Remediation Mechanism	
	6.4 Detail methodologies for mitigation of Fluoride from drinking water developed by different organization	
7.0	References	32

AMENDMENT RECORD

Amend No.	Page No.	Clause No.	Date of Amendment	Amendment made	Reasons of amendment	Remarks/ Signature
1						
2						
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Standard Operating Procedure for Fluoride in Groundwater

1. General Introduction

Fluoride contamination has become a significant global risk. Chronic exposure to high levels of naturally occurring fluoride in groundwater can adversely affect the health of millions worldwide. While fluoride at low concentrations is essential for maintaining dental health, chronic exposure to elevated levels can have severe adverse effects on human health. It is estimated that more than 200 million people across 25 nations suffer from fluorosis due to the consumption of fluoride-rich drinking water. The highest among these are from Africa (38), Asia (28), and Europe (24).

The primary sources of fluoride contamination are geogenic (80%), including fluoride-rich soils, geothermal hot springs, and volcanic rocks. However, in some instances, anthropogenic factors such as industrial discharges also contribute to elevated fluoride levels. The World Health Organization (WHO) recommends a maximum fluoride concentration of 1.5 mg/L in drinking water to mitigate health risks. Excessive fluoride intake can lead to dental and skeletal fluorosis, along with other health issues such as arthritis, osteoarthritis, muscle damage, fatigue, joint problems, and various chronic disorders. In severe cases, it can cause damage to the heart, veins, kidneys, liver, sensory organs, and nervous system.

To detect fluoride contamination in water, ion-selective and colorimetric techniques are commonly used [**Solanki *et al.*, 2022; APHA 24th Edition**]. Several defluoridation techniques are available to remove fluoride from drinking water, such as membrane technology, coagulation, the Nalgonda technique, and ion exchange [**Vithanage *et al.*, 2015; Khan *et al.*, 2021**]. Implementing these advanced treatment methods, combined with ensuring an adequate supply of safe water, can greatly enhance health outcomes, especially in regions affected by high fluoride levels [**Jamwal *et al.*, 2022**].

With this context, this SOP is prepared to establish a comprehensive framework for analysing fluoride in groundwater and to outline effective mitigation measures. This document ensures accurate, consistent, and reproducible results in the detection and quantification of fluoride, thereby supporting efforts to maintain water quality standards and protect public health.

Objectives

i. Protocol for designating hotspot area and sampling method for hotspot area.
ii. Outlining standardized procedures for sample collection, preservation, and preparation.
iii. Defining the analytical techniques and instruments to be used for Fluoride detection.
iv. Ensuring compliance with regulatory requirements and guidelines for Fluoride analysis.
v. Providing clear instructions for data interpretation, reporting, and quality control measures.
vi. Mitigation measures (Household and Community level)

1.1 Scope This SOP outlines the procedures for sampling, preservation, analysis, and mitigation of Fluoride in groundwater. It ensures consistent, accurate, and reliable data collection and analysis. Further, notification of Hotspots for Fluoride contamination and suggesting mitigation measures in individual and community level is also highlighted in this document.

1.2 Definitions

- **Fluoride (F):** An inorganic, monatomic anion of fluorine with the chemical formula F^-.
- **Groundwater:** Groundwater is water that exists in saturated zones below the ground level.

2. Designation of Hotspot

The maximum permissible limit for Fluoride in drinking water is 1.5 mg/L, as per BIS guidelines (2012). In an area encountered with Fluoride concentration close to 1.5 mg/L, during Pre-monsoon/ Post-monsoon season, should be re-sampled (for confirmation) in the next season or in the same season (wherever possible) from same well. If the similar concentration detected in the next season, then the area should be considered for detailed sampling/studies.

Based on baseline/ background data of Fluoride, continuous monitoring of minimum 3 seasons has to be carried out for the location/well, where the concentration of reported Fluoride was more than permissible limit of 1.5 mg/L. If the fluoride values are beyond permissible limit for 2 seasons, then the location may be considered as Hotspot area for fluoride contamination.

2.1 Sampling protocol for Hotspot area

1. Detailed sampling should be carried out on a grid of 2 km X 2 km from the hotspot area or contaminated block in pre and post monsoon for comprehensive study from an area

of 5 sq. km radius (**Fig. 1**).

2. Samples should be collected in all directions, from phreatic and confined aquifer to confirm the extent of contamination in the aquifer.
3. If more than 50% of water samples exhibit concentration of contaminant beyond permissible limit such hotspot area should be treated as notified area (**Flow diagram Fig. 2**).

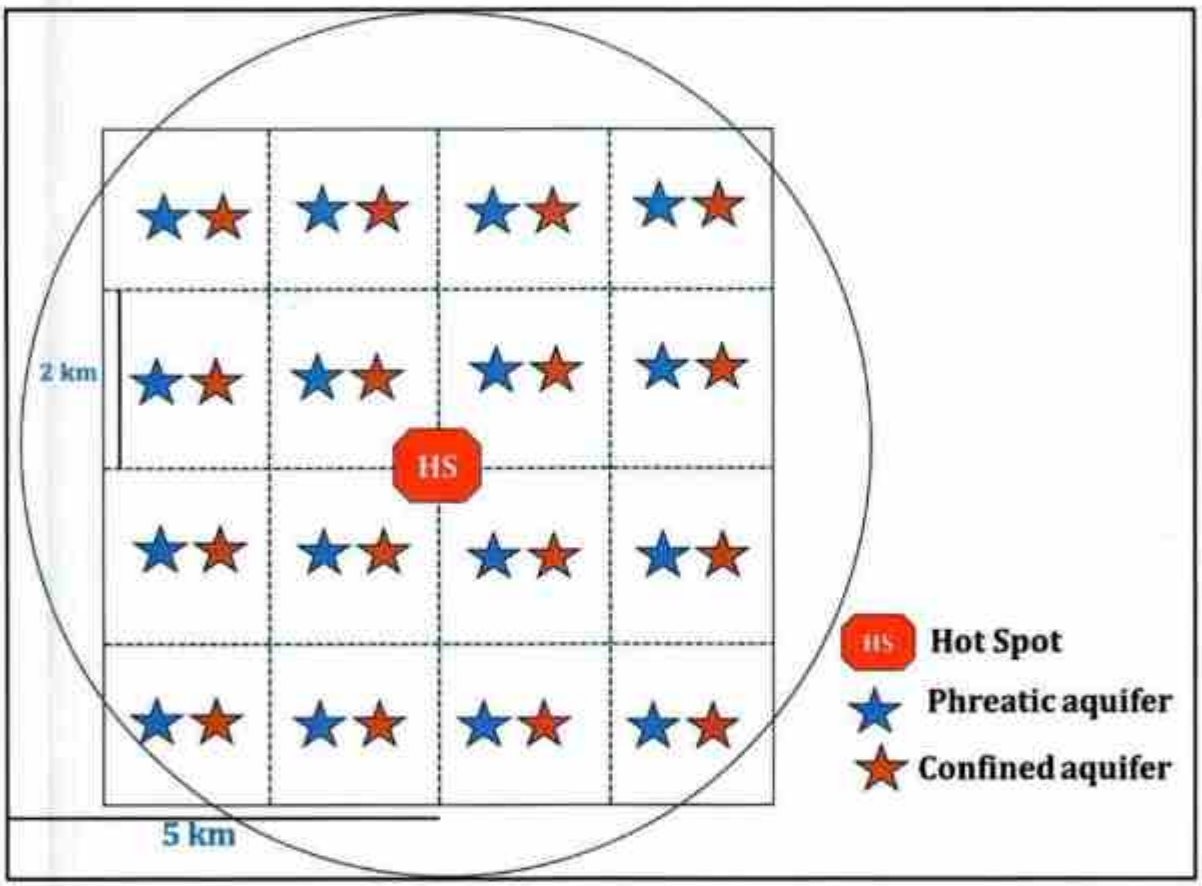

Fig. 1. Sampling design for study of New Hotspot area

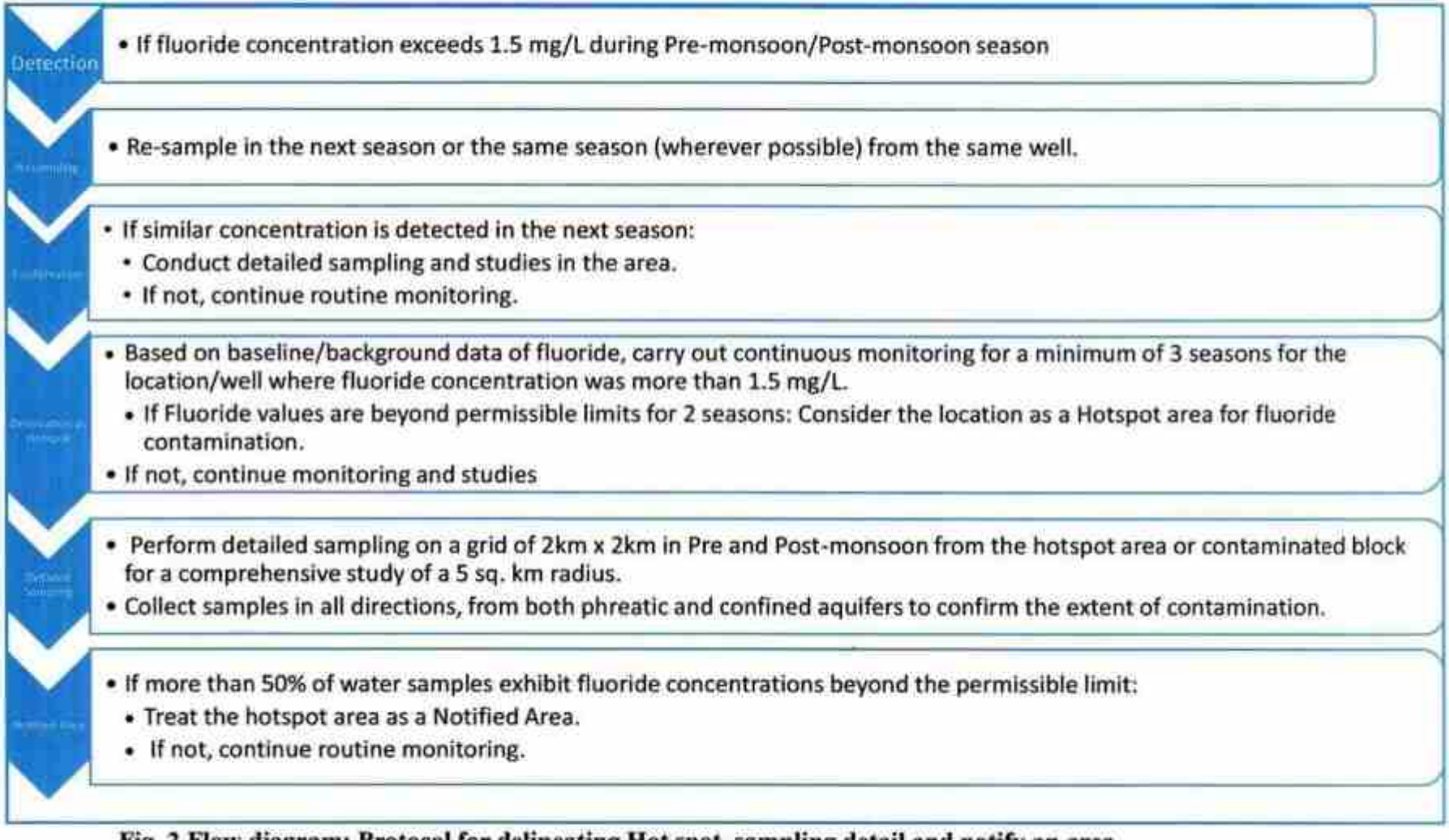

Fig. 2 Flow diagram: Protocol for delineating Hot spot, sampling detail and notify an area

3. Groundwater Sampling Method for Fluoride Analysis

3.1 Equipment and Materials

- Sampling bottles (polyethylene or glass, pre-cleaned)
- Sampling pump or bailer
- Gloves and safety gear
- Labels and waterproof markers
- Field logbook and chain-of-custody forms
- Ice chest and ice packs
- Filtration apparatus (0.45-micron filter) or Syringe filter for field use

3.2 Site Selection and Preparation

- Select sampling sites based on study objectives and groundwater flow characteristics.
- Record GPS coordinates of each sampling location.

GUIDELINES FOR WELL SELECTION FOR COLLECTION OF GROUNDWATER SAMPLE

1. **Open-dug Wells**

- Wells that are not in use or have been abandoned should not be considered for water quality monitoring stations.
- These wells, however, can be utilized for monitoring water levels.

2. **Production Tube Wells**

- Collect samples after running the tube well for approximately five minutes to ensure the water quality sample is representative.

3. **Non-production Piezometers**

- Purge these piezometers using a submersible pump before collecting samples.
- The volume of purged water should be 4 to 5 times the standing water volume to ensure the samples are representative of the groundwater quality.

3.3 Sample Collection

- Purge the well to remove stagnant water.
- Collect samples directly into pre-cleaned polyethylene (HDPE) bottles of 100 ml.
- If required, filter the samples using a 0.45-micron filter to remove particulate matter.
- Label each sample bottle with the location, date.

3.4 Sample Preservation and Storage

- Place samples in an ice chest immediately after collection to maintain a temperature of 6°C (**Table 1**).
- Transport samples to the laboratory within 24 hours of collection.

***INSTRUCTION FOR SAMPLING IN GROUND WATER**

1. Water samples should be collected in to completely cleaned and dried good quality polyethylene (high density) or glass bottles with inner caps.
2. Bottles should be filled and tightly capped to avoid any evaporation.
3. Air bubbles inside the bottles should be minimized
4. Bottles should be properly labeled with date, location/project and sample code using permanent marker
5. **Filtering required in Fluoride samples**
6. On spot measurements of pH, EC, DO, TDS, Temperature is appreciated.
7. Fill the bottles in the field itself and avoid any contamination from any other water source.
8. **Fluoride samples to be collected with Detailed sampling on a grid of 2 km x 2 km from the notified area or contaminated blocks in both Pre-Monsoon and Post-Monsoon season**

Table 1. Sample Collection and Preservation Process (As per APHA protocol)

Sample	Preservative added	Approx. volume collected (ml)	No. of bottles required	Filtration
Fluoride	No Preservative to be added. Temperature to be maintained: 6^0C	100	1	Samples should be Filtered

4. Analytical Techniques for Fluoride analysis in Laboratory

4.1 Sample Preparation

- Allow samples to reach room temperature before analysis.
- Mix samples thoroughly to ensure homogeneity.

4.2 Analytical Methods

- SPADNS method (UV-Vis Technique) (***Ref: APHA 24th Edition: Method: 4500.f; Page No. 400-401***)
- Ion-Selective Electrode Method (***Ref: APHA 24th Edition: Method: 4500.f; Page No. 398-400***)
- Determination of Anions by Ion Chromatography (***Ref: APHA 24th Edition: Method: 4110.f; Page No. 309-311).***

Table 2. Detection Range for Available Methods in Fluoride Analysis

Method	Range of Detection (mg/L F^-)
SPADNS method	Linear analytical range 0 to 1.40
	Nonlinear calibration 0 to 3.5
Ion-Selective Electrode Method	0.1 to > 10
Ion Chromatography	> 0.002 (Highly Sensitive)

4.2.1 Fluoride determination by SPADNS Method (*Ref: APHA 24th Edition: Method: 4500.f; Page No. 400-401*)

1. General Discussion

a) Principle

The SPADNS colorimetric method is based on the reaction between fluoride and a zirconium-dye lake. Fluoride reacts with the dye lake, dissociating a portion of it into a colorless complex anion (ZrF_6^{2-}); and the dye. As the amount of fluoride increases, the color produced becomes progressively lighter. The reaction rate between fluoride and zirconium ions is influenced greatly by the acidity of the reaction mixture. If the proportion of acid in the reagent is increased, the reaction can be made almost instantaneous. Under such conditions, however, the effect of various ions differs from that in the conventional alizarin methods. The selection of dye for this rapid fluoride method is governed largely by the resulting tolerance to these ions.

b) Interference

Alkalinity, aluminium, chloride, color and turbidity, iron, hexametaphosphate, phosphate, sulphate are some of the common interferences in fluoride determination. Because these are neither linear in effect nor algebraically additive, mathematical compensation is impossible. Whenever any one of the substances is present in sufficient quantity to produce an error of 0.1 mg/L or whenever the total interfering effect is in doubt, distill the sample. Also distill colored or turbid samples. In some instances, sample dilution or adding appropriate amounts of interfering substances to the standards may be used to compensate for the interference effect. If alkalinity is the only significant interference, neutralize it with either hydrochloric or nitric acid. Chlorine interferes and provision for its removal is made.

2. Apparatus

Colorimetric equipment UV-Visible Spectrophotometer, for use at 570 nm, providing a light path of at least 1 cm.

3. Reagents

a. Stock fluoride solution: Fluoride solution of strength 10 mg/kg is available.

b. SPADNS solution: Dissolve 958 mg SPADNS, sodium 2-(parasulfophenylazo)-1,8-dihydroxy-3,6-naphthalene disulfonate, also called 4,5-dihydroxy-3-(parasulfophenylazo)-2,7- naphthalenedisulfonic acid trisodium salt, in distilled water

and dilute to 500 mL. This solution is stable for at least 1 year if protected from direct sunlight.

c. Zirconyl-acid reagent: Dissolve 133 mg zirconyl chloride octahydrate, $ZrOCl_2.8H_2O$, in about 25 mL distilled water. Add 350 mL conc HCl and dilute to 500 mL with distilled water.

d. Acid zirconyl-SPADNS reagent: Mix equal volumes of SPADNS solution and zirconyl-acid reagent. The combined reagent is stable for at least 2 years.

e. Reference solution: Add 10 mL SPADNS solution to 100 mL distilled water. Dilute 7 mL conc HCl to 10 mL and add to the diluted SPADNS solution. The resulting solution, used for setting the instrument reference point (zero), is stable for at least 1 year. Alternatively, use a prepared standard of 0 mg F^-/L as a reference.

f. Sodium arsenite solution: Dissolve 5.0 g $NaAsO_2$ and dilute to 1 L with distilled water. (CAUTION: Toxic—avoid ingestion.)

4. Procedure

a. Preparation of standard curve: Prepare fluoride standards in the range of 0 to 1.40 mg F^-/L by diluting appropriate quantities of standard fluoride solution to 50 mL with distilled water. Pipet 5.00 mL each of SPADNS solution and zirconylacid reagent, or 10.00 mL mixed acid-zirconyl-SPADNS reagent, to each standard and mix well. Avoid contamination. Set photometer to zero absorbance with the reference solution and obtain absorbance readings of standards. Plot a curve of the milligrams fluoride-absorbance relationship. Prepare a new standard curve whenever a fresh reagent is made or a different standard temperature is desired. As an alternative to using a 0.500 absorbance) with the prepared 0 mg F^-/L standard.

b. Sample pretreatment: If the sample contains residual chlorine, remove it by adding 1 drop (0.05 mL) $NaAsO_2$ solution/ 0.1 mg residual chlorine and mix. (Sodium arsenite concentrations of 1300 mg/L produce an error of 0.1 mg/L at 1.0 mg F^-/L.)

c. Color development: Use a 50.0-mL sample or a portion diluted to 50 mL with distilled water. Adjust sample temperature to that used for the standard curve. Add 5.00 mL each of

b. SPADNS solution and zirconyl-acid reagent, or 10.00 mL acidzirconyl- SPADNS reagent; mix well and read absorbance, first setting the reference point of the

photometer as above. If the absorbance falls beyond the range of the standard curve, repeat using a diluted sample.

5. Calculation

$$mgF^{-}/L = \frac{A}{ml\ sample} \times \frac{B}{C}$$

where: A=µg F^- determined from plotted curve,
B=final volume of diluted sample, mL, and
C= volume of diluted sample used for color development, mL

When the prepared 0 mg F/L standard is used to set the photometer, alternatively calculate fluoride concentration as follows:

$$mgF^{-}/L = \frac{A_0 - A_x}{A_0 - A_1}$$

where:

A_0 =absorbance of the prepared 0 mg F^-/L standard,
A_x= absorbance of the prepared sample, and
A_1 =absorbance of a prepared 1.0 mg F^-/L standard.

SELECTION OF METHOD FOR FLUORIDE DETERMINATION

Among the methods suggested for determining fluoride ion (F-) in water, the electrode and colorimetric methods are the most satisfactory for determining fluoride ion (F^-) in water. Both methods provide reliable and accurate results for routine analysis.

Ion-Selective Electrode Method

- Suitable for wide range of fluoride concentrations (0 to >10 mg/L).
- Offers greater accuracy and reliability, even in high concentration scenarios.
- Preferred over the SPADNS method for higher fluoride levels.

SPADNS Method

- Suitable for lower to moderate fluoride concentrations.
- May not be as accurate or reliable as the Ion-Selective Electrode Method for higher concentrations.

4.2.2 Fluoride determination by Ion-Selective Electrode Method (*Ref: APHA 24th Edition: Method: 4500.f; Page No. 398-400*)

1. General Discussion

a. Principle:

Fluoride is determined potentiometrically by using a combination fluoride ion selective electrode (ISE) in a flow cell. The fluoride electrode consists of a lanthanum fluoride crystal across which a potential is developed by fluoride ions. The reference cell is a Ag/ AgCI/Cl - cell. The reference junction is of the annular liquid-junction type and encloses the fluoride-sensitive crystal.

b. Interferences

Remove large or fibrous particulates by filtering the sample through glass wool. Guard against contamination from reagents, water, glassware, and the sample preservation process. The polyvalent cations Si^{4+}, Al^{+3}, and Fe^{3+} interfere by forming complexes with fluoride. As part of the buffer reagent, CDTA is added to preferentially complex these cations and eliminate this interference when these concentrations do not exceed 3.0 mg/L Al^{+3} and 20 mg/L Fe^{3+}. Some interferents are removed by distillation. Drinking water samples generally do not require sample distillation.

2. Apparatus

Flow injection analysis equipment consisting of: a. FIA injection valve with sample loop or equivalent.

b. Multichannel proportioning pump.

c. FIA manifold with tubing heater and ion-selective electrode flow cell. Use manifold tubing of an inert material, such as TFE.

d. Combination ion-selective electrode.

e. Injection valve control and data acquisition system.

4. Reagents

Use reagent water (>10 megohm) for all solutions. To prevent bubble formation, degas the carrier and buffer with helium. Pass He at 140 kPa (20 psi) through a helium degassing tube. Bubble He through 1 L solution for 1 min.

a. Carrier, 1.0 mg/L F-: Add 10 mL or 10 g stock fluoride standard to 990 mL water and mix well.

b. Buffer: To a tared 1-L polyethylene container add 929.5 g water, 59.8 g glacial acetic acid, 30.0 g sodium hydroxide (NaOH), 58.0 g sodium chloride (NaCl), 0.5 g stock fluoride standard and 4.0 g CDTA (also called trans-1,2 diaminocyclohexane). Stir on a magnetic stir plate until all mate rial has dissolved.

c. Electrode conditioning solution: To a tared 1-L container, add 534 g buffer Shake or stir to mix thoroughly. Store the fluoride electrode in this solution when it is not in use.

d. Stock fluoride standard, 100.0 mg/L F-: In a 1-L volumetric flask, dissolve 0.2210 g sodium fluoride, NaF, in approximately 950 mL water. Dilute to mark with water and mix well. Store in a polyethylene bottle.

e. Standard fluoride solutions: Prepare fluoride standards in the desired concentration range, using the stock standard and diluting with water. A blank or zero concentration standard cannot be prepared for this method because it will give an undefined response from the fluoride electrode.

5. Procedure

Set up a manifold equivalent and follow the method supplied by manufacturer or laboratory standard operating procedure for this method.

5. Calculations

Prepare standard curves by plotting the electrode response to standards processed through the manifold versus fluoride con centration. Standards greater than 1.0 mg/L F- give positive peaks, standards less than 1.0 mg/L F- give negative peaks, and the 1.0 mg/L F- standard having the same concentration as the carrier gives no peak. The calibration curve gives a good fit to a second-order polynomial. It is not necessary to plot the response versus log[F-]. If this is done, the calibration curve will still be a second-order polynomial because there is a concentration-dependent kinetic effect in the flowing stream electrode system.

4.2.3 Determination of Anions by Ion Chromatography (*Ref: APHA 24th Edition: Method: 4110.f; Page No. 309-311)*

1. General Discussion

a. Principle

A water sample is injected into a stream of eluent and passed through a series of ion exchangers. The anions of interest are separated on the basis of their relative affinities for a low-capacity, strongly basic anion exchanger (guard and analytical columns). The separated anions are directed through a suppressor device that provides continuous suppression of eluent conductivity and enhances analyte response. In the suppressor the separated anions are converted to their highly conductive acid forms while the conductivity of the eluent is greatly decreased. The separated anions in their acid forms are measured by conductivity. They are identified on the basis of retention time as compared to standards. Quantitation is by measurement of peak area or peak height.

b. Interferences

Any substance will interfere if it has a retention time coinciding with that of any anion to be determined and produces a detector response. Low-molecular-weight organic acids, bromate,

and chlorite may interfere with the determination of chloride and fluoride. A high concentration of any one ion also interferes with the resolution, and sometimes retention, of others. Sample dilution or gradient elution overcomes many interferences. To resolve uncertainties of identification or quantitation use the method of known additions. Spurious peaks may result from contaminants in reagent water, glassware, or sample processing apparatus. Modifications such as preconcentration of samples, gradient elution, or reinjection of portions of the eluted sample may alleviate some interferences but require individual validation for precision and bias and are beyond the scope of this method.

2. Apparatus

a. Ion chromatograph, including an injection valve, a sample loop, guard column, analytical column, suppressor device, a temperature-compensated small-volume conductivity cell and detector (6 µL or less), and an electronic peak integrator or chromatography data acquisition system. Use an ion chromatograph capable of delivering 2 to 5 mL of eluent per minute at a pressure of 5600 to 28000 kPa (800 to 4000 psi).

b. Analytical column: Any commercially available anion exchange column capable of resolving fluoride, bromide, chloride, nitrate, nitrite, phosphate, and sulfate is acceptable.

c. Guard column, identical to separator column (to protect analytical column from fouling by particulates or organics. d. Suppressor device: Place this ion-exchange-based device between column and detector to reduce background conductivity of the eluent and enhance conductivity of the target analytes. Several such devices with different operational principles are available commercially; any that provide the required sensitivity and baseline stability may be used.

3. Reagents

a. Reagent water free from interferences at the method detection level of each constituent with 18 megohm resistivity and containing no particles larger than 0.2 µm.

b. Eluent solution, appropriate to column used to resolve target anions. Sodium bicarbonate-Sodium carbonate, 1.7 mM $NaHCO_3^-$, 1.8 mM Na_2CO_3 eluent is used. Dissolve 0.5712 g $NaHCO_3^-$ and 0.7632 g Na_2CO_3 in water and dilute to 4 L. Degas the eluent before use either by vacuum filtration to simultaneously remove particles greater than 0.45 µm or by purging with helium for 10 min.

c. Regenerant solution: Required with some types of suppressors. See manufacturer's recommendations.

d. Standard anion solutions, 1000 mg/L: Purchase stock standard solutions as certified solutions or prepare from ACS reagent grade salts. Prepare standard anion solutions by weighing the indicated amount of salt, dried to a constant weight at 105°C, and diluting to 100 mL with reagent water [**Table 3**]. Store in plastic bottles at 4°C. These solutions are stable for at least 6 months except for the nitrite and phosphate standards, which should be discarded after 1 month. Prepare most dilute working standards monthly, nitrite and phosphate, daily.

Table 3. Stock Standard Preparations

Anion	Salt	Amount (g/100 mL)
Fluoride	NaF	0.2210
Chloride	NaCl	0.1649
Bromide	NaBr	0.1288
Nitrate	$NaNO_3$	0.6068
Nitrite	$NaNO_2$	0.4926
Phosphate	KH_2PO_4	0.4394
Sulfate	K_2SO_4	0.1814

4. Procedure

a. System equilibration: Turn on the ion chromatograph and adjust the eluent flow rate to manufacturer's recommendations for the column-eluent combination being used. A representative chromatogram is presented in **Fig. 1**. Adjust detector to desired setting (usually 10 to 30 µS) and let system come to equilibrium (15 to 20 min). A stable base line indicates equilibrium conditions. Adjust detector offset to zero out eluent conductivity. If regenerant is used with the suppressor, adjust the flow rate to manufacturer's specifications.

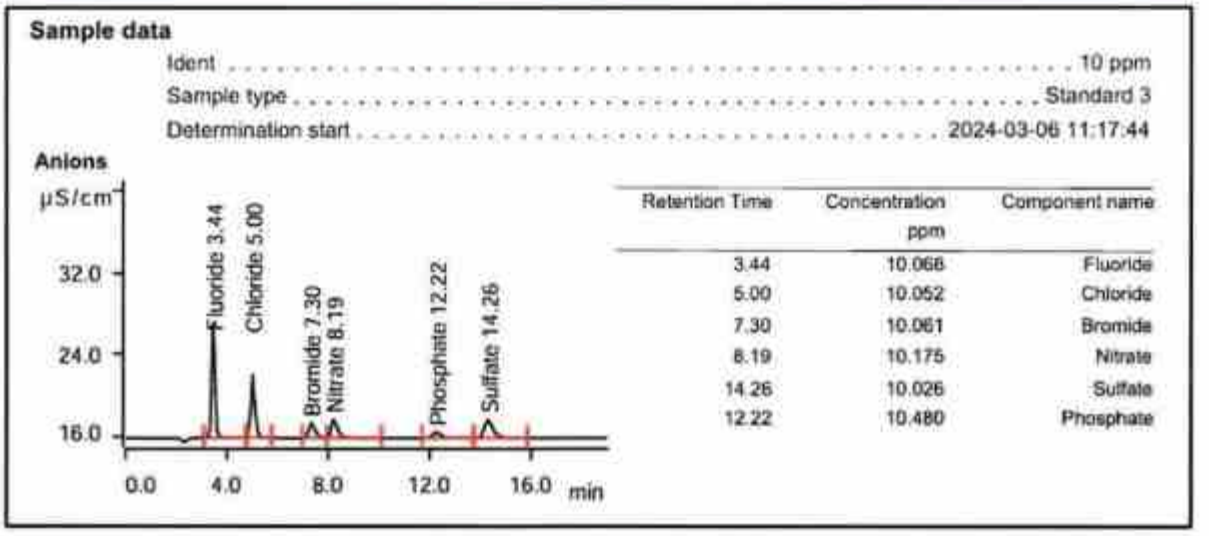

Fig. 1 Chromatogram for anion analysis in Ion Chromatography

b. Calibration: Inject standards containing a single anion or a mixture and determine approximate retention times. Observed times vary with conditions. If the analytical column and eluent mentioned, are used, retention always is in the order F^-, $C1^-$, $N0_2^-$, Br^-, $N0_3^-$, HPO_4^{2-}, and SO_4^-. Inject at least 3 different concentrations for each anion to be measured. Use concentrations that will bracket the expected analyte concentrations in samples. Construct a calibration curve by plotting the peak height or area versus concentration using appropriate software. Verify calibration curves with a midrange check standard from a source independent of that of the calibration standards. Check the validity of existing calibration curves daily with a midrange calibration standard. Results should be within 10% of the original curve at the midrange. Recalibrate whenever the detector setting, eluent, or regenerant is changed. Water dip occurs because water conductivity in sample is less than eluent conductivity (eluent is diluted by water). To minimize the effect of the water dip on P- analysis, analyse standards that bracket the expected result or eliminate the water dip by diluting the sample with eluent, adding concentrated eluent to the sample to give the same concentration as in the eluent, or using a column that sufficiently resolves the water dip from fluoride. If sample adjustments are made, adjust standards and blanks identically. If linearity is established ($r \sim 0.99$) over the calibration range, the average response factor is acceptable. Record the peak height or area for calculation of the response factor, RF. HPO_4^{2-} is non-linear below 1.0 mg/L.

c. Sample analysis: If the sample is collected with an autosampler that does not automatically filter samples, remove particulates by filtering through a prewashed 0.45-µm (or smaller) pore

membrane. With either manual or automated injection, flush the loop with several volumes of sample. Take care to prevent carryover of analytes from samples of high concentration. After the last peak has appeared and the detector signal has returned to base line, another sample can be injected.

5. Calculations

Determine the concentration of each anion, in milligrams per liter, by referring to the appropriate calibration curve. Alliteratively, when the response is shown to be linear, use the following equation:

$$C = H \; X \; RF \; X \; D$$

where:
C = mg/L anion,
H = peak height or area,
RF = response factor = concentration of standard/height (or area) of standard,
D = dilution factor.

4.3 Quality Control and Assurance

- Appropriate Standard reference materials (SRMs) to be used to calibrate the Instrument.
- Milli-Q water served as a blank (1 blank per 10 samples).
- Precision (reproducibility) to be ascertained using within-day replicate analysis of SRMs and samples. Replicates of SRMs each day provided an indication of within-day precision.
- Retest in every 20 samples.

5. Data Analysis and Reporting

5.1 Data Validation

- Validate data by comparing it with quality control samples.
- Flag any outliers or suspicious results for further investigation.

5.2 Reporting

- Report Fluoride concentrations in milligram per liter (mg/L).
- Include information on the sampling location, date and analytical method used.
- Provide interpretation of results with respect to regulatory standards [e.g., BIS/WHO guideline of 1.5 mg/L (maximum permissible limit) for drinking water].

Table 4. Health risk effects associated with Fluoride ingestion in individuals [Dissanayake (1991)]

Classes	F- (mg L^{-1})	Effect on human health
Class - 1	< 0.5	Conducive to dental caries
Class – 2	0.5-1.5	Promotes development of strong bones and teeth
Class – 3	1.5-2.5	Promotes dental fluorosis in children
Class – 4	2.5-4	Promotes dental fluorosis in children
Class – 5	4-5	Promotes dental and skeletal fluorosis
Class – 6	5-10	Promotes crippling skeletal fluorosis
Class - 7	>10	Crippling skeletal fluorosis, possibly cancer

6. Mitigation Measures

Central Ground Water Board (CGWB) is not directly involved in the mitigation or remediation of contaminated groundwater sources. However, states adopt technical guidance based on field application measures formulated by various organizations to address the contaminants.

6.1 Short-Term Mitigation

- Adoption of household treatment plants which are effective, efficient and low cost
- Conjunctive use of piped surface and GW
- Construction of hand pumps with removal plants
- Installing community water supply systems

6.2 Long-Term Mitigation

- Tapping alternate safe aquifer for drinking purposes
- Adoption of rain water harvesting
- Adoption of Mini water supply scheme attached with treatment plants
- Public awareness and education
- Research and Development: To explore new and more efficient treatment technologies and strategies

6.3 Fluoride Remediation Mechanism

- Adsorption technique of defluorination
- Ion-Exchange technique
- Coagulation- Precipitation technique eg. Nalgonda technique
- Electro-dialysis
- Reverse osmosis
- Nano-filtration

6.3.1 Limitations and challenges in removing Fluoride from drinking water

1. Choice of Defluridation techniques

There are several methods for removing fluoride from drinking water, each with its own limitations such as high operational costs, High initial setup cost, maintenance of membranes, and proper disposal of the concentrated brine etc.

2. Technical Challenges

- **Water Quality:** The presence of other contaminants can affect the efficiency of fluoride removal processes. For example, high levels of sulfates, nitrates, and phosphates can interfere with adsorption processes.
- **Scale of Operation:** Different methods are more suitable for different scales (household vs. community level). Scaling up a method that works well for household use can be challenging and costly.
- **Monitoring and Maintenance:** Continuous monitoring of fluoride levels is necessary to ensure compliance with safety standards. Regular maintenance of equipment and replacement of media or membranes is also required.

3. Economic Challenges

Many effective fluoride removal technologies are expensive to implement and operate. This includes costs for installation, energy, maintenance, and media replacement.

4. Environmental Challenges

- **Waste Disposal:** Disposal of spent media, brine, and other waste products from fluoride removal processes can pose environmental risks. Safe and environmentally friendly disposal methods need to be in place.
- **Sustainability:** Ensuring that the fluoride removal process to be sustainable without any additional environmental harm.

5. Social and Regulatory Challenges

- **Public Awareness and Acceptance:** Public understanding of the need for fluoride removal and acceptance of the methods used can influence the success of water treatment programs.
- **Regulatory Compliance:** Meeting regulatory standards for fluoride levels in drinking water requires ongoing monitoring and adherence to guidelines, which can vary by region.

6.4 Detailed methodologies for removal of Fluoride from drinking water developed by different organization

(Source: *Handbook on Drinking Water Treatment Technologies; Government of India, Ministry of Jal Shakti Department of Drinking Water & Sanitation, National Jal Jeevan Mission*)

To provide the Fluoride-free water to the community, first choice should be provision of safe source with acceptable Fluoride levels, transporting water from a distant safe source, blending high-Fluoride with low- Fluoride water to bring down Fluoride level below 1 mg/l, dual water sources and rainwater harvesting. In the absence of these options the treatment of water can be planned and implemented.

During the years following identification of Fluoride as the cause of fluorosis, extensive research has been carried out on various techniques for removal of Fluoride from water. While several techniques, based on adsorption, ion exchange, coagulation and precipitation, and ionic filtration processes have been developed and implemented but sustainable implementation of these technologies has rarely been achieved in rural communities. This failure is due to a combination of factors including lack of technical support, insufficient material supply, inadequate O&M, and irregular monitoring.

Based on treatment capacity, following de-fluoridation configurations are provided in India:

1. Household de-fluoridation units: for single family to cater their daily treated water requirement for cooking and drinking purpose, these units are provided at places where community-based water treatment units are not feasible
2. Handpump attachable water treatment units; and
3. Community-based water treatment plants; to cater requirement of small, moderate and big community, these units can be engineered according to the need.

Numerous defluoridation techniques have been implemented globally (**Fig. 2**), which can be broadly classified into the following categories.

- **Adsorption and Ion-Exchange**
- **Coagulation and Precipitation**
- **Membrane filtration process**

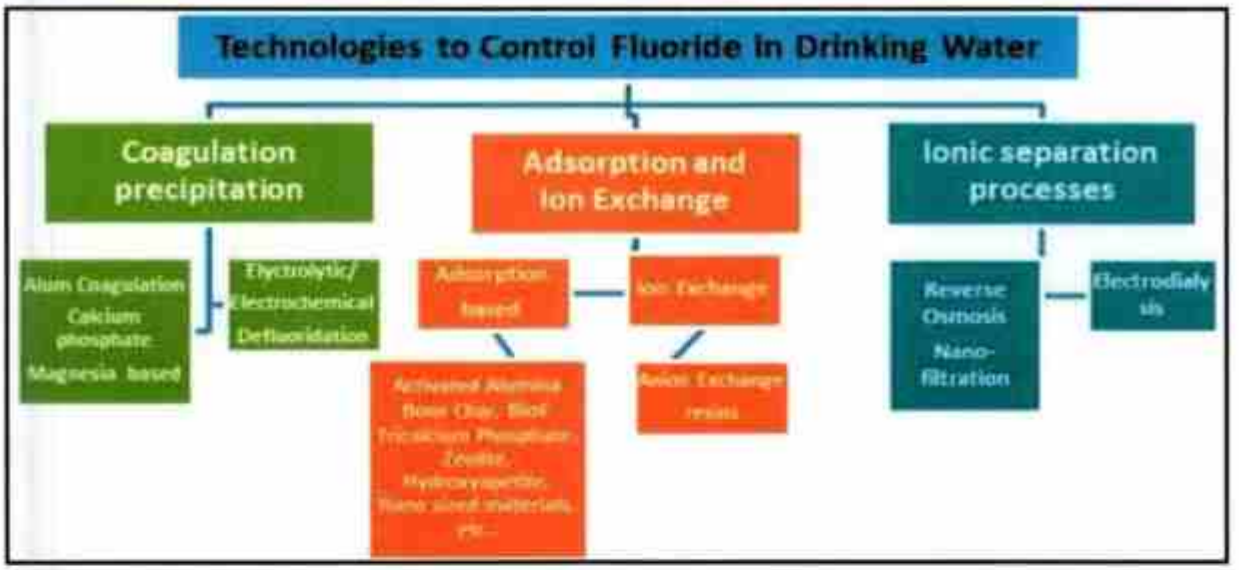

Fig. 2 Widely used Defluoridation techniques

6.4.1 Coagulation and Precipitation Method

Coagulation-precipitation is the earliest and most established technique of Fluoride removal which involves stirring or mixing of metal salt in Fluoride- containing water, allowing the precipitate to settle and decanting. The scale of implementation of this process ranges from household to large scale community operations and the chemicals such as Al, Ca, Mg salts are commonly used.

Coagulation-precipitation based techniques work on the principle of formation of Metal-F complex ions which further react with Metal-$(OH)_n$ to form hetero-geneous phase which separates from the water as a precipitate:

$$M\text{-}(OH) + F^- \rightarrow M\text{-}F\downarrow + nOH^{-n}$$

One of the advantages of coagulation precipitation- based techniques is the adsorbent gets generated in- situ, which makes the mass transfer of soluble Fluoride from surrounding to adsorbent surface quite faster. Some of the limitations of precipitation technologies include management of quantity of sludge produced, uncontrolled finish water pH, difficulty in establishing dose requirement, and high dose requirements for higher Fluoride concentrations. Coagulation-precipitation technique is applied in household de-fluoridation units and community- based de-fluoridation plants. Details of various existing technologies are given below.

6.4.1.1 Nalgonda Technique

The Aluminum salt and lime based low-cost de- fluoridation technology developed by CSIR-NEERI is used at household and community levels. This technology involves rapid mixing of

aluminum salts (Aluminum Sulfate or Aluminum Chloride) and lime followed by flocculation, sedimentation, filtration, and disinfection. Aluminum salt is responsible for Fluoride removal as its co-precipitates as Al $(OH)_3$ and AlF_6. Dose of Aluminum salt increases with increase in Fluoride and alkalinity levels of the raw water. Selection of either Aluminum Sulphate or Aluminum Chloride also depends on Sulphate and Chloride contents of the raw water to avoid exceeding their permissible limits in treated water. Addition of lime is to ensure neutral pH of treated water and to facilitate forming dense flocculent for rapid settling.

Chemical reaction involves formation of Polyhydroxy Aluminum species (flocs) which adsorb Fluoride from water. Besides Fluoride, turbidity, colour, odor and organics are also removed. Nalgonda technology is combination of several unit operations and process incorporating rapid mixing, chemical interactions, flocculation, sedimentations, filtration, disinfection, and sludge concentration for recovery of water and Aluminum salt. The technology is applicable for the removal of wide range of Fluoride concentration and was seen to be effective in producing water with Fluoride within the permissible limit.

Types of Nalgonda De-fluoridation System

1. Domestic Unit;
2. Fill-and-Draw Plant for Small Community (upto 200 population);
3. Fill-and-Draw Plant for Rural Water Supply (up to 5000 population); and
4. Continuous DF for Large Scale Community Water supply (>5000 population).

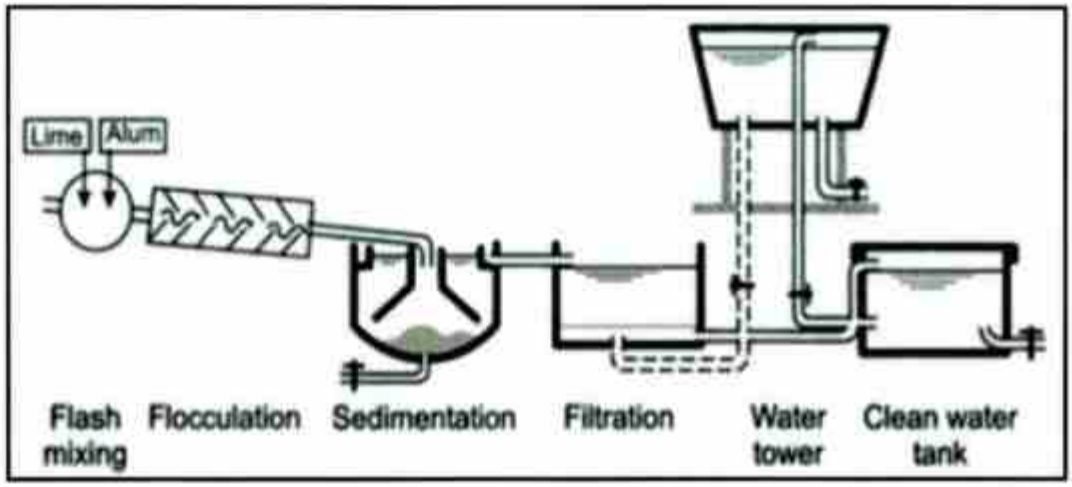

Fig. 2 Household de-fluoridation unit based on Nalgonda technology

Fig. 3 Fill and draw de-fluoridation plant based on Nalgonda technology

Salient Features

- No regeneration of media;
- No handling of acids and alkalis;
- Readily available chemicals used in water treatment;
- Simultaneous removal of colour, odour, turbidity and organic contaminants;
- Adaptable to domestic or any community level;
- Applicable in batch or continuous operation to suit the needs;
- Simplicity of design, construction and O&M;
- Local Skills can be easily employed; and
- Needs minimum of mechanical and electrical equipment.

6.4.2 Electrolytic De-fluoridation Technology (CSIR-NEERI)

De-fluoridation technique based on the principle of electrolysis has been developed in NEERI. The process is found effective in removing excess Fluoride and bringing down the bacterial load of the raw water. The de-fluoridation process is based on the principle of electrolysis, using Aluminium plate electrodes placed in the raw water containing excess Fluoride. During the electrolysis, anode gets ionized, and Fluoride is removed by complex formation, adsorption, precipitation, coagulation and settling.

An electrolytic de-fluoridation technique consists of an electrolytic reactor having Aluminium anode and cathode. When a DC source is applied across the electrodes, the anode dissolves and Hydrogen gas is released at the cathode. During the dissolution of anode, various aqueous metallic species are produced, which depend on the solution chemistry. These metallic species act as a coagulant by combining with the Fluoride ions present in the water to form large size flocs which can be removed by sedimentation or filtration.Direct Current required for the electrolytic process is generated either by, conversion of AC electric supply by DC conversion unit of required capacity or by a solar photovoltaic system consisting of solar panel, charge controller and tubular battery. The solar panels as per required power (Watt) and time are mounted in south-east direction at a place where direct sunlight is received. The direct current received through the solar panel is stored in the tubular battery through the charge controller and supplied to the Aluminium electrodes through a direct current regulator.

Salient Features

- Simple to fabricate, easy to operate with mini- mum maintenance;
- Suitable for treatment of raw water with Fluoride concentration up to 10mg/L;
- Produces potable water with palatable taste as against the other available chemical treatment methods;
- Quantity of sludge produced is much less (60-70%) than conventional treatment methods;
- The simultaneous reduction in hardness, Nitrate and bacterial contamination in treated water; and
- Treatment cost up to Rs. 12 per 1000 L.

Based on the technology, solar power based electro- lytic de-fluoridation demonstration plant (Figure 45) was installed at Dongargaon in Chandrapur district, Maharashtra in 2002 and Usarwara village in Durg district in Chhattisgarh State in 2010. The capacity of these units is 600L and 2000L per batch respectively.

Fig. 4 Electrolytic Defluoridation (EDF) Technique by NEERI

6.4.3 Chemo-defluoridation technology (CSIR-NEERI)

In chemo-defluoridation technology developed by CSIR-NEERI, Calcium and Phosphate salts are added for the formation of Hydroxyapatite complex to adsorb Fluoride from water. This complex precipitate and settles down. After about 1-2 months of operation, when the flow rate of treated water gets reduced by the formation of a thick layer of sludge, the whole unit needs to be washed by water and reassembled again. Various process steps of chemo-de-fluoridation technology are shown in the Figure below. The technique is free from interferences of anion concentration in raw water and does not affect the taste of treated water.

Salient Features

- Simple to fabricate and easy to operate, gravity- operated;
- Palatable taste of treated water;
- The process involves the formation of insoluble Fluoride complex with salts of Calcium and Phosphorous and filtration through a sand filter;
- Most reliable for small Fluoride affected villages where community water treatment plant is not economically feasible;
- Reduces the Fluoride conc. In water to <1 mg/l;
- Suitable for treating the water up to Fluoride concentration of 10 mg/l;
- Taste of the treated water is palatable; and
- Operating cost Rs. 0.20 per litre.

Fig. 5 Chemo-defluoridation technology

6.4.4 Domestic de-fluoridation unit using Activated alumina

The membrane assisted sorption process for removal of Fluoride from ground/ surface water to provide safe drinking water and solves the serious problem of Aluminium contamination in the product water coming after de-fluoridation unit, which is more harmful than Fluoride. Therefore, by this process, it is providing water not only free from Fluoride but also free from secondary contaminants like Aluminium and microorganisms which will be removed by the ultrafiltration membrane. It is a simple, cost-effective, adaptable at both domestic and community level and having capability of high decontamination.

It requires minimum contact time for maximum de- fluoridation. De-fluoridation capacity is appreciable at neutral pH and independent of temperature. It can be operated with/without the use of electricity.

The technology of UF membrane assisted sorption process/ device for the removal of Fluoride from ground/ surface water used for drinking purposes consists of two steps:

- Sorption of Fluoride on AA sorbent;
- Separation of leached out secondary contaminant like Aluminium using indigenously developed UF membrane device;
- The cost of this unit is per unit Rs.3000/- and above for 50-5000 litres per day;

Fig. 6 BARC De-fluoridation Unit

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6.4.5 EMRION-Nano Technology for Fluoride, Arsenic and Heavy metal reduction

Summary of the Product

Electro Magnetic Resonance and Ion Trap System (EMRION) technology is a patented and indigenously developed technology for the reduction and elimination of Arsenic, Fluoride, Nitrates, heavy metals including Iron and lead, Total Dissolved Solids (TDS), Biological Oxygen Demand (BOD) and Chemical Oxygen Demand (COD) in ground or surface raw water and in wastewater. The EMRION raw and wastewater treatment system challenges the existing highly expensive methods of wastewater treatment such as Reverse Osmosis (RO), Ion Exchange or Multi-effect evaporator (MEE) by delivering the following benefits:

1. The rejected water from EMRION technology is based on the extent of contamination and can be less than 5% compared to the rejection ratio of about 50% in RO based technologies;
2. Unlike RO and Ion Exchange systems, EMRION does not require membranes and is a chemical free process;
3. The maintenance cost of raw or wastewater treatment in the system is less than

75% the cost of wastewater treated by RO and MEE based systems;

4. The patented ozone technology included in the treatment system is highly effective in treatment of biologically contaminated water; and
5. The rejected contaminants from the wastewater can be collected as solid waste for proper disposal and therefore EMRION is environmentally friendly.

For a typical raw water treatment system, the key components of the custom designed EMRION based system are as follows:

1. Pre-treatment filtration includes

a. pressurized sand or disc filtration to eliminate particles over 150 microns in size
b. Granulated activated Carbon (GAC) filtration to reduce odor
c. EMRION treatment to reduce inorganic pollutants form raw water since patented technology does not utilize membranes, resins or chemicals the long-term maintenance costs are lesser

2. **Post-treatment filtration includes**

a. micro - filtration to eliminate particles over 10 microns in size;
b. Ozone based disinfection with pulsed UV to reduce BOD and COD levels to permissible limits; and
c. Solid waste collection system to store the contaminants from the input effluent and to safely dispose the waste.

Contaminants that can be removed through this Technology

- Fluoride
- Arsenic
- Iron
- Hardness
- Heavy metals like Lead, Silver, Cadmium
- TDS reduction
- Complete microbial disinfection

Estimated Capital Cost (In Rs): 12 Lakh

Cost of Water Per Liter (Paise per liter): 6.00

Design Capacity

Starting from 10 KLD (10 hours) to maximum of 10 MLD is possible. Water will pass through EMRION and 3-stage filtration including Carbon, micron and pre-filtration to make water totally free of Turbidity. System will also contain state- of-the-art ultra-disinfection system with pulsed UV and Ozonation.

Pre-Treatment Protocol

Groundwater will pass through multi-grade filtration consisting of sand, pebbles and multi-port valve with backwash system.

Post-Treatment Protocol

Two stage filtration followed with double ultra-disinfection systems:

1. Carbon Filtration with GAC;
2. Micron Filtration with 5-micron non-woven fabric;
3. Pulsed UV with UV intensity meter along with lamp life indicator;
4. Ozone treatment with dissolved ozone meter with display; and
5. Complete automation of the plant with pre- treatment and post-treatment quality parameters communication as optional at additional cost.

Operations and Maintenance Cost and Protocol: 1.5 lakh to 2.5 lakh per annum depending on the size of the plant. Periodical replacement of Carbon media and micron filters and nano material releasing patented plates.

Reject Management Cost and Protocol: The EMRION system generates 5% sludge reject water which will be recycled back passing through filter press/ decanter/ bag filter to separate out solid waste which can be safely disposed to the landfill making the entire system zero liquid discharge (ZLD).

Ease of Operations and Management:

- Can be operated at remote place with solar panels;
- Zero liquid discharge without spoiling surrounding environment;
- Pre and post treated quality parameters communication with SIM card to multiple users and regulatory stakeholders;
- Double disinfected with world class pulsed UV and ozonation system which is non-recurring and chemical free disinfection system.

Interference by other Contaminants: No other contaminants will be generated in the process.

Test Trailed: Input water parameters: pH up to 8.5 to 9, TDS below 1200 PPM, Fluoride 18.5 PPM, Arsenic 1.2 PPM, Hardness 450 with abnormal E. Coli and other bacterial contamination. EMRION Treated Output water: pH 6.8 to 7.2, TDS below 300 PPM, Fluoride below 1.5 PPM, Arsenic 0.01 PPM, Hardness around 100 with zero microbial traces.

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Based on available information, a matrix is composed to give an idea about the applicability of the methods for some given situations (IGRAC, 2007). The colours in the matrix correspond with the appropriateness of the method for the given situation (**Fig. 7**):

- **Green color** means that the method is very suitable
- **Orange color** means average suitability
- **Red color** means that the method is unattractive or not applicable for the given situation.

Methods	Domestic + Low Costs	Community + Low Costs	Domestic + High F Removal	Community + High F Removal	Domestic + Brackish Water	Community + Brackish Water
Activated Alumina						
Ion exchange						
Reverse osmosis						
Electrodialysis						
Nalgonda process						
Contact precipitation						
Bone Charcoal						
Calcined Clay						
Water Pyramid/Solar Dew						

Fig. 7 Colour matrix correspond with the appropriateness of different mitigation methods for Fluoride

The comparative details of different mitigation techniques for Fluoride is given in **Table 5**

Table 5. Various fluoride removal techniques and their advantages and disadvantages

Remedial Measure	Removal Efficiency	Advantage	Disadvantage	Uses
Adsorption technique of defluorination	60-80%	This technique functions on the adsorption of fluoride ions onto the surface of an active agent. Highly tested adsorbing agents are (i) Activated Alumina, (ii) Bone char, (iii) Brick pieces column, (iv) Natural adsorbents. Ease of operation, Cost-effective treatment.	pH value is highly dependent. Treated water contains high TDS. Requires pre-treatment.	Large scale removal plant/house hold
Ion-Exchange technique	90-95%	Anion and cation exchange resins have been used for fluoride removal.	The waste produced is very large. The resins are very complex, contamination prone and expensive.	House hold
Coagulation-Precipitation technique eg. Nalgonda technique	Upto 60%	Nalgonda Technique involves addition of Aluminium salts, lime and bleaching powder followed by rapid mixing, flocculation, sedimentation, filtration and disinfection. Cost effective and simple design and maintenance.	Requirements of high dosage of chemicals. Concentration of sulphate and aluminium is high in treated water. By the temperature variation can be changed the defluoridation capacity. Cost of maintenance is very high. The automation process is not easy. Presence of silicates in water creates negative effects on defluoridation.	House hold and community level
Electro-dialysis	70-80%	Highly effective and inexpensive, Flexible in terms of seasonal operations, Requirement of fewer chemicals, High amount of water recovery	High power consumption It removes ionic components only	Community level
Reverse osmosis	> 95%	Suitable under a wide pH range, Treatment and purification are very easy in a single stage. Automated technique with minimum manpower, It can be used for a variety of water types	The process can be expensive. Lots of water is wasted. Disposal of waste water is the major issue. It removes essential minerals for growth.	House hold and community level

Nano-filtration	90-95%	Productivity is very high. No requirements for chemicals, Removes other toxic pollutants such as organic and inorganic. Removes microorganisms. Environmentally friendly Reused several times.	Expensive, removes ions that are essential for effective growth. Limited availability of nanomaterials, Energy consumption, there may be a regulatory concern regarding their safety.	House hold and community level

Based on the above-mentioned mechanisms, various technological options are being evaluated for either lab scale or field/pilot scale and compared in Table 6.

Table 6. Centralized or Community-Type and Household Systems for Fluoride Removal (Used in India in Field Scale/Household level)

Technology option	Removal Efficiency/ Capacity	Working Principle/Advantage	Uses/State adopted
IISc method (Developed by IISc, Bengaluru, India)	70-80%	The IISc method of defluoridation relies on a magnesium oxide-based precipitation–sedimentation–filtration method that removes fluoride ions from contaminated drinking-water samples through chemical reactions. (dose varies with Presence of F and Bi-carbonate concentration in the pumped water). Non-toxic magnesium oxide is used, and no corrosive and toxic wastes are generated the sludge produced can be consumed in the production of building blocks. Cost effective	House hold Karnataka
Nalgonda Technique (developed in 1961 by the National Environment Engineering Research Institute, Nagpur)	50-60%	It is a precipitation-coagulation based technique. It involves the addition of lime, alum and bleaching powder followed by brisk mixing, flocculation, sedimentation, and filtration.	Community and household levels nationally as well as internationally
Electrolytic Defluoridation (EDF) Technique by National Environmental Engineering Research Institute (NEERI)	60-70%	Electrolytic defluoridation process is a water purification system suitable for fluoride affected area with water containing excess fluoride. The defluoridation process is based on the principle of electrolysis, using aluminium plate electrodes placed in the raw water containing excess fluoride. During the	Community and household levels

		electrolysis, anode gets ionized and fluoride is removed by complex formation, adsorption, precipitation, coagulation and settling.	
KRASS Technique (established by PHE (Public Health Engineering) of Rajasthan and CSIR (Council of Scientific & Industrial Research)	-	Contaminated water is passed through specially designed filter media to remove fluoride from water. It is an adsorption-based process and 10% alum solution is used for recharging the column. One kilogram of alum is found to remove about 4 grams of fluoride using this technique. Besides, the technique is found to work best at the fluoride concentration of 11-12 mg/L and 7-8 pH range	Community Level
Prasanti Technique (Activated Alumina) developed by Satya Sai University (Bioscience Department) at Prasanti Nilayam, Andhra Pradesh.	-	In Udaipur (Rajasthan), activated alumina [$(Al_2O)_3$; a porous and solid form of aluminium oxide] has been used by Sarita Sansthan supported by UNICEF, which are providing buckets with micro-filters and activated aluminium for fluoride removal. However, it has also some limitations like need to have trained people for reactivation of micro-filters, generation of aluminium by products as residue and costly operational and maintenance cost.	Community Level

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