

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

Original Application No.728/2023

IN THE MATTER OF:

In re: News item appearing in Hindustan dated 30 November 2023 titled "Arsenic found in groundwater in 25 States, Fluoride in 27 States: Government"

**Response by way of Affidavit of Asheem Khanna, Engineer-in-Chief,
Public Health Engineering Department, Haryana on behalf of State of
Haryana, i.e., respondent No.7.**

INDEX

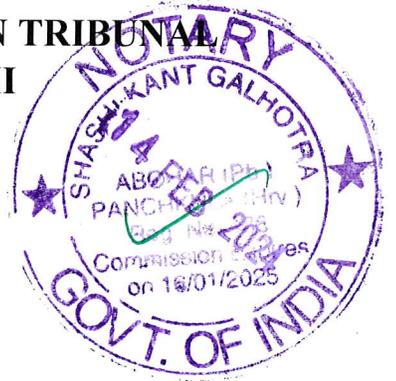
Sr. No.	Particulars	Dated	Page
1.	Response by way of Affidavit of Asheem Khanna, Engineer-in-Chief, Public Health Engineering Department, Haryana on behalf of State of Haryana i.e. respondent No.7.	14.02.2024	1-6
2.	A copy of relevant paras of this concept note 6.1.3.2-6.1.3.3 Annexure-R7/A	-	8-12
3.	A copy of Arsenic Testing Reports Annexure-R7/B	-	13-21
4.	A copy of Fluoride Testing Report Annexure-R7/C.	-	22-26
5.	A copy of action plan to tackle this contamination received from field offices Annexure-R7/D.	-	27-28
6.			

Place:
Dated 14.02.2024


Deponent
Asheem Khanna
Engineer-in-Chief
Public Health Department

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

Original Application No.728/2023



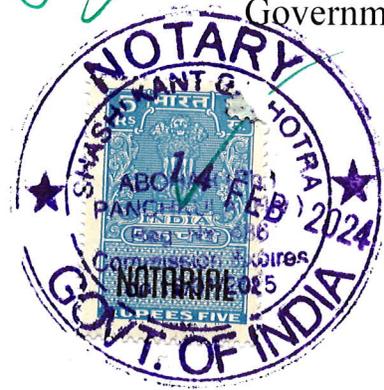
IN THE MATTER OF:

In re: News item appearing in Hindustan dated 30 November 2023 titled
"Arsenic found in groundwater in 25 States, Fluoride in 27 States:
Government"

Response by way of Affidavit of Asheem Khanna, Engineer-
in-Chief, Public Health Engineering Department, Haryana
on behalf of State of Haryana, i.e., respondent No.7.

I the above name deponent do hereby solemnly affirm and declare as
under: -

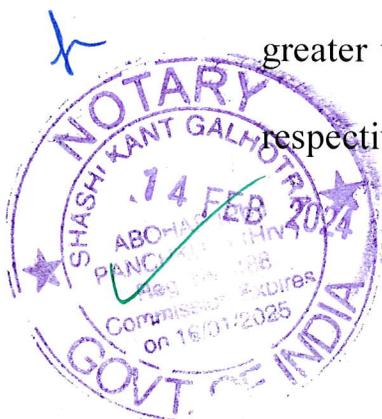
1. That the deponent is working as Engineer-in-Chief, Public Health Engineering Department and authorised to file reply on behalf of State of Haryana, i.e., respondent No.7. Hence, the deponent is filling this reply by way of affidavit.
2. That a news article entitled "Arsenic found in ground water in 25 States, Flouride in 27 States: Govt." was published in 'Hindustan dated 30 November 2023'. The detailed news mentioned about detection of Arsenic found in ground water in part of 230 Districts in 25 States and fluoride in parts of 465 Districts in 27 States Government in the country



14 FEB 2024

as per the information provided by the Union Minister of State for Jal Shakti in Rajya Sabha. In a written reply, the Minister said that the ground water contamination reported by the Central Ground Water Board (CGWB) is mostly geogenic in nature and does not show significant change over the years.

3. That this Hon'ble Tribunal took Suo moto cognizance of the issue and issued notice to the Central Ground Water Authority. CGWA and report dated 18 December 2023 was submitted CGWA before this Hon'ble Tribunal wherein presence of arsenic in various Districts and 25 States and fluoride in various Districts and 27 States has been mentioned. It has been further mentioned in the report that both the chemicals/metals have very serious toxic effects on human body and health and cause health hazards.
4. That while taking suo moto cognizance, this Hon'ble Tribunal vide order dated 20 December 2023 registered the said news item as O.A. No. 728 of 2023 and after considering the report of CGWA, issued notice to 28 States. The notice is issued on basis of results of water samples analysed by Central Ground Water Board during last 20 years, i.e., 2003-2022.
5. That as per the report submitted by CGWA, before this Hon'ble Tribunal it has been mentioned that Arsenic is greater than 0.01mg/l and Fluoride greater than 1.5 mg/l has been detected in 18 & 21 districts of Haryana respectively. The data of CGWB is based on the results of water samples

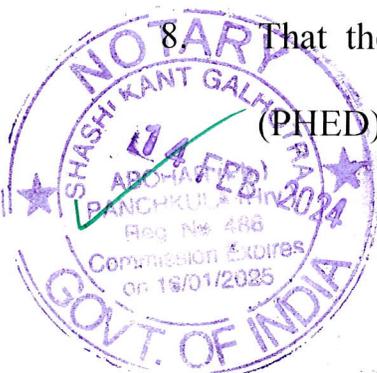


collected from Shallow Aquifers like Shallow Tubewells, Hand Pumps, Dug Wells.

Arsenic Contamination:

6. That as per CGWB report, the data for Arsenic has been sent w.e.f.2003-2022 in which it has been intimated that Parts of 18 districts of Haryana are affected by Arsenic in quantities greater than .01 mg/l (or 10 ppb). It is pertinent to mention here that as per Bureau of Indian Standards, drinking water standard IS10500:2012, the permissible limit of **Arsenic was .05 mg/l (50ppb) and after revision it was reduced to .01 mg/l (10ppb) in the year 2015**, therefore, the sources which were not declared affected earlier, were relabelled under affected category due to revised lower permissible limits.
7. That vide E-mail dated 15 January 2024, Regional Director, CGWB, Chandigarh shared a list with the Public Health Engineering Department and Haryana Water Resources Authority (PHED and HWRA) of 51 sources where Arsenic has been found more than 10ppb during testing conducted between year 2003 to 2022. Out of these 51 sources, only 5 sources of PHED have been marked by CGWB and other sources are related to hand pumps, dug well, exploratory wells, shallow Tubewells, agriculture Tubewells etc.

8. That the water sources of the Public Health Engineering Department (PHED) Drinking water supply are deep and the Physico-Chemical

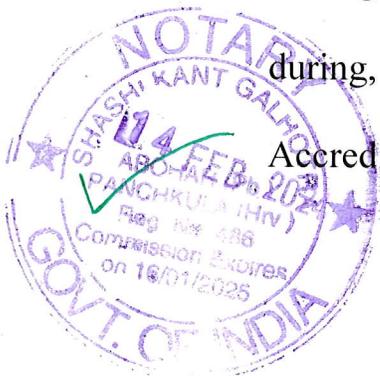


analysis of all sources is being carried out twice in a Year by departmental NABL accredited laboratories. As per studies of CGWB, they have released a document namely "Concept Note on Geo-Genic Contamination of Ground Water in India", as per this document they have found that deep aquifers are safe from Arsenic contamination. A copy of relevant paras of this concept note 6.1.3.2-6.1.3.3 (Page No. 24-27) is annexed herewith as **Annexure- R7/A**.

9. That 121 Samples were collected from the private sources and all PHED sources in the affected villages/areas. The water samples of these locations were sent to third party laboratory at Shri Ram Institute for Industrial Research, Delhi and the State Public Health Engineering Department Lab at Karnal. The test report of the samples has been received and it has been found that none of the source was found affected by Arsenic Contamination higher than the Acceptable limit of 0.01 mg/l (10 ppb). A copy of reports is annexed at **Annexure-R7/B**.

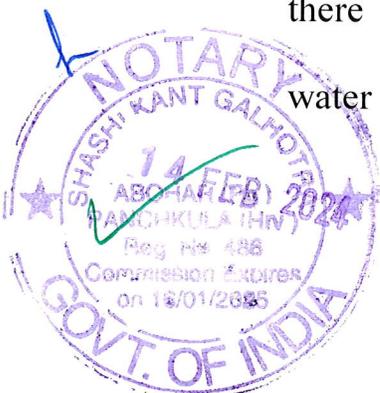
Fluoride Contamination

10. That as per CGWB report, the data for Fluoride testing during the years 2015-2022 has been given, vide which it has been noticed that Parts of 21 districts are affected by Fluoride higher than 1.5 mg/l. **Fluoride-testings** are being carried out regularly by PHED twice in each year during, i.e., pre-monsoon and post-monsoon period in the NABL Accredited PHE District Laboratories.



11. That vide E-mail dated 15 January 2024, Regional Director, CGWB Chandigarh shared a list with PHED and HWRA of the 136 sources where Fluoride has been found more than 1.5 mg/L during testing conducted between year 2015 to 2022. The name of the owner/department/person etc. of the sources has not been indicated in the said report and sources may be related to hand pumps, dug well, exploratory wells, shallow Tubewells, agriculture Tubewells, PHE Tubewell etc.
12. That 264 Samples were collected from the private sources and all PHED sources (**160 Nos**) in the same affected villages/areas. The water samples of these locations were tested in NABL Accredited District Labs. of PHED. The test reports of all the samples has been received and it have been found that **24** samples collected from PHED sources and **24** samples collected from the private sources have been found to be contaminated with Fluoride greater than 1.5 mg/l, the maximum permissible limit as per IS 10500-2012. A copy of report is annexed herewith as **Annexure-R7/C**.
13. That the action plan to tackle this contamination received from field offices is attached herewith as **Annexure-R7/D**.

Thus, from the above explained position in the State of Haryana there is no issue of Arsenic beyond permissible limit in the drinking water sources and there is issue of Fluoride in 24 samples, and supply



6

from these sources have been stopped and drinking water arrangement has been made from alternate source, i.e., from canal based water works in 20 villages & in balance 4 villages from other tubewells.

14. That the above response on behalf of the State of Haryana may kindly be taken on record in compliance of order dated 23 December 2023 passed by this Hon'ble Tribunal.

Place: Contents of the affidavit GPA/SPA/ Agreement
 Dated 14.02.2024 as affidavit read over explained to Deponent
Declarant Executant in his/ her language who
seemed perfectly to understand the same


Deponent
 Asheim Khanna
 Engineer-in-Chief
 Public Health Department

VERIFICATION:

It is verified that the content para No.1 to 14 of the above response by way of affidavit are true and correct to my knowledge based on the information derived from official record. No part of it is false and nothing material has been concealed therein.

Place: 
 Dated 14.02.2024




Deponent
 Asheim Khanna
 Engineer-in-Chief
 Public Health Department

Concept Note

On GEOGENIC CONTAMINATION OF GROUND WATER IN INDIA

With a special note on Nitrate



Central Ground Water Board
Ministry of Water Resources
Govt. of India

Faridabad, February 2014

removal efficiencies than with classical coagulation. Organic arsenic, fluoride and dissolved metals are also removed by this method. An additional advantage of enhanced coagulation is the reported removal of natural organic matter (NOM).

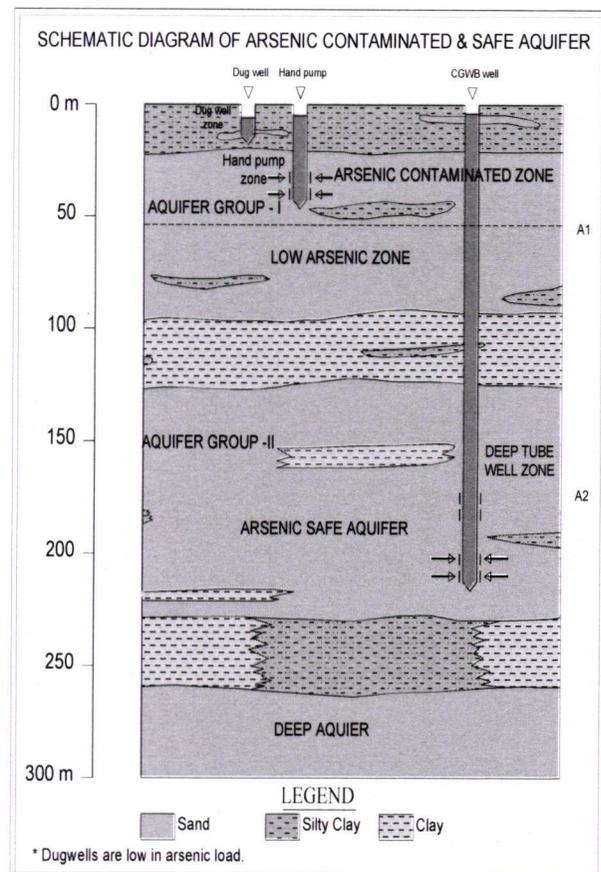
- (iv) **Solar Oxidation and Removal of Arsenic(SORAS)** is a simple method that uses irradiation of water with sunlight in PET or other UV transparent bottles to reduce arsenic level from drinking water (Wegelin et al., 2001). The method is based on photochemical oxidation of As (III) followed by precipitation 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%.
- (v) **Iron oxide coated sand (IOCS)** UNESCO-IHE developed an arsenic removal method based on adsorption on iron oxide coated sand (IOCS). IOCS is a by-product from groundwater treatment plants and consequently very cheap. This technique is efficient for both As(III) and As(V). Different family scale removal filters were tested in Bangladesh (2004) and also a large scale centralized application was tested in Greece and Hungary (Petrusevski et al., 2007).

Majority of low cost methods rely on precipitation or adsorption. They are frequently capable of successfully treating a wide range of arsenic-contaminated influent concentrations to achieve or surpass drinking water standards

6.1.3.2 Arsenic safe alternate aquifers

This technique advocates to tap safe alternate aquifers right within the affected areas. In India except at Rajnandgaon in Chhatisgarh state, the vast affected areas in the Gangetic Plains covering Bihar and Uttar Pradesh as well as Deltaic Plains in West Bengal is marked by multi-aquifer system (CGWB 1999, Acharyya 2005, Saha2009, Shah 2007). The sedimentary sequence is made up Quaternary deposits, where the aquifers made up of unconsolidated sands which are separated by clay/sandy clay, making the deeper aquifer/aquifers semi-confined to confined. The contamination is confined in the upper slice of the sediments, within 80 m and affecting the shallow aquifer system(CGWB, 1999, Saha et al 2009). At places, like Maldah district of West Bengal single aquifer exists till the bed rock is encountered at 70-120 m bgl.

Detailed CGWB exploration, isotope and hydrochemical modeling carried out by CGWB along with other agencies like BARC has indicated that the deep aquifers (>100 m bgl) underneath the contaminated shallow aquifer, have been normally found as arsenic free. Long duration pumping tests and isotopic studies in West Bengal and Bihar have indicated that there is limited hydraulic connection between the contaminated shallow and contamination free deep aquifers and the ground water belong to different age groups having different recharge mechanisms (CGWB 1999, Saha et al 2010, 2011, CGWB and BARC 2009). The deep aquifers in West Bengal, Bihar and Uttar Pradesh have the potential to be used for community-based water supply. However if a single aquifer system exists, as found in Malda district of West Bengal, this technique may not be useful. The generalized schematic diagram showing the distribution of arsenic in multi-layered alluvial aquifers and design of a deep-tube well tapping the deeper aquifer system (Talukdar and Ghosh 2009) is shown in Fig 4a and 4b respectively.



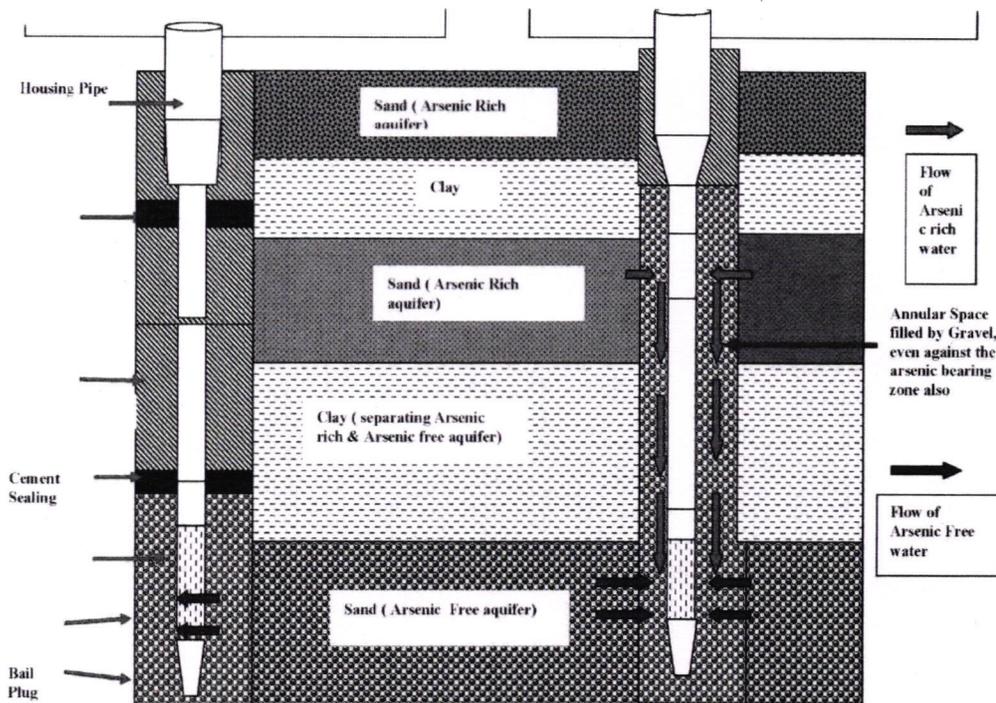


Fig 4b: Tube-well design of a deep tube well tapping arsenic safe deeper aquifer (the well on the left shows a properly designed tube well tapping deeper aquifer while the one on the right shows an improperly designed well)



Fig 5 Arsenic-free potential aquifer under development by pump in Middle Gangetic Plain



Fig 6 Rotary drilling in arsenic affected village in Bhojpur district, Bihar

6.1.3.3 Will the deep aquifers remain arsenic free?

While advocating for supply from the deeper aquifers in the arsenic affected areas, the most pertinent question that needs answer is whether the deep aquifers will remain arsenic free or it may also get contaminated over time. Burgess et al (2010) through the results of a Basin-scale groundwater flow modelling in Bengal Basin have suggested that, over large regions, deep hand-pumped wells for domestic supply may be secure against As invasion for hundreds of years. However, deep irrigation pumping might effectively eliminate deep groundwater as an As-free resource within decades. The mechanism act as defence to As invasion is (i) flow pattern defence and (ii) geochemical defence. Groundwater flow paths to deep pumping wells provide an element of protection if As concentrations in recharge areas are low, or travel times to deep wells are long. The potential for sediments along induced flow paths to adsorb or otherwise trap As provides a 'geochemical defence'.

The *flow-pattern defence* would protect groundwater at depths greater than 150 m across more than 90% of the As-affected area indefinitely (modelled as more than 1,000 years) if deep groundwater abstraction was limited to domestic supply and distributed among hand-pumped wells. However, if there is large scale switch over to irrigation pumping from deep aquifers which is about ten times that of domestic pumping, simulations have shown that deep irrigation pumping would amplify downward flow, considerably shortening travel times to deep wells, to as little as 30 years. In contrast, shallow irrigation pumping does not compromise the flow-pattern defense of deep groundwater but rather provides extra protection by creating a hydraulic barrier against downward As migration.

Geochemical defence of the deeper aquifers is based on the reactivity of the sediments. The grey (shallow aquifer) and yellowish-brown sediments (deeper aquifers) have distinct chemical characteristics. The oxidised Pleistocene sediments of the deeper aquifers containing ferric oxyhydroxides have a large capacity for adsorbing dissolved As. Oxidized sediments proximal to the Pleistocene inliers and boundary hills are likely to have high adsorption capacity because of sustained oxic recharge which has also been confirmed through laboratory experiments. The adsorption capacity is also enhanced by the oxidizing potential of in-situ manganese oxides. To maximize the security of deep As-free groundwater- domestic wells should



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STATE WATER TESTING LABORATORY, KARNAL-132001
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S. No.	District	Location	Name of Source	Arsenic, mg/l Acceptable limit 0.01 mg/l
1	Ambala	Balana	T/W Balana Mech (Tanki)	BDL
2			T/W Balana Mech (Shamshan Ghat)	BDL
3			PVT Source Balana	0.0004
4	Bhiwani	Bohal	T/W at Bohal	BDL
5		Sui	T/W at W/W Sui	0.0004
6			T/W Nr Canal Sui(PVT)	BDL
7		Tosham	T/W Tosham	BDL
8		Laxmanpura	T/W Laxmanpura (Kharkhari Makhwan)	BDL
9			T/W of Sh Jai Kumar (PVT)	BDL
10		Dadri	Hand Pump Dadri	BDL
11		Chiriya	Chiriya Village PHE T/W	0.0088
12	Faridabad	Sikri	T/W Nr Galaxy PHED/HP	BDL
13			T/W Trivender Pal Sikri (PVT)	BDL
14			T/W Rohit S/O Naresh Kumar Sikri(PVT)	0.0002
15	Fatehabad	Samain	T/W at W/W Samain	BDL
16			T/W Baljeet S/O Baru Ram Samain(PVT)	BDL
17	Hisar	KothKalan	T/W Kothkalan(PVT)	BDL
18	Jhajjar	Subana	T/W at Subana	BDL
19		Kulasi	Hand Pump at Kulasi	BDL
20		Chhara	Hand Pump at Chhara	BDL
21	Jind	Kalwan	T/W no.1 Kalwan	BDL
22			T/W no.2 Kalwan	BDL
23			T/W no.3 Kalwan	BDL
24			T/W no.4 Kalwan	BDL
25			T/W Kalwan (PVT)	BDL
26		Shahpur	T/W Shahpur 3	BDL
27			T/W Shahpur Mech	BDL
28			T/W Sh Shubhash S/O Baru Shahpur	BDL
29		Safidon	T/W Nagar Palika Mech-1	BDL
30			T/W No.2 Boy School	BDL
31			T/W No.3 Treasury	BDL
32			T/W Adarsh Colony	BDL
33			T/W Anand Colony	BDL
34			T/W Govt P G College	BDL
35			T/W Civil Hospital	BDL
36			T/W Hagian Wala Kuwa	BDL
37			T/W Police Chowki	BDL
38			T/W Mini Sect SDM Complex	BDL
39			T/W Modern Colony	BDL





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STATE WATER TESTING LABORATORY, KARNAL-132001
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40			T/W Nr PH Office	BDL
41			T/W Nuasar Talab	BDL
42			T/W Ram Saran Park	BDL
43			T/W Shiv Colony	BDL
44			T/W Rest House	BDL
45			T/W B.E Office	BDL
46			T/W Geeta Colony	BDL
47			T/W Rama Colony	BDL
48			T/W Kurar	BDL
49			T/W Sh.Ved Pal Shiv Colony(PVT)	BDL
50	Kaithal	Peoda	T/W No 1 Peoda	BDL
51			T/W No 2 Peoda	BDL
52			T/W Peoda (PVT)	BDL
53	Karnal	Salwan	T/W No. 1 Salwan	BDL
54			T/W No.2 Salwan	BDL
55			T/W No.3 Salwan	BDL
56			T/W No.4 Salwan	BDL
57			T/W No.5 Salwan	BDL
58			T/W No.6 Salwan	BDL
59			T/W No.7 Salwan	BDL
60			T/W No.8 Salwan	BDL
61			T/W Salwan (PVT)	BDL
62		Nanhera	T/W Nanhera PHE	BDL
63			T/W Nanhera(PVT)	BDL
64		Kalra Jagir	T/W Kalra Jagir PHE	BDL
65			T/W Kalra Jagir(PVT)	BDL
66		Garhi Khjoor	T/W Garhi Khajoor	BDL
67			T/W Garhi Khajoor(PVT)	BDL
68		Navli Khurd	T/W Nalvi Khurd PHE	BDL
69		Nalvi Kalan	T/W Nalvi Kalan PHE	BDL
70		Ramba	T/W No. 1 Ramba	BDL
71			T/W No.2 Ramba	BDL
72			T/W No.3 Ramba	BDL
73			T/W Ramba (PVT)	BDL
74		ChorKarsa	T/W No.4 Chor Karsa	BDL
75		Kurlan	T/W No.1 Kurlan	BDL
76			T/W No.2 Kurlan	BDL
77			T/W Kurlan(PVT)	BDL
78	Mahendergarh	Kheri Talwana	Shallow T/W W/W Kheri Talwana	BDL
79	Palwal	Lakhnachs	T/W Mohin S/O Rajak Lakhnachs (PVT)	BDL
80	Panchkula	Batour	T/W Batour 20-21 Mech	BDL
81			T/W Batour New	BDL
82			T/W Batour Mech-2	BDL
83			T/W Batour Mech	BDL
84			T/W Batour -2(PVT)	BDL





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85	Panipat	Khandra	T/W No.1 Khandra Nr Animal Hospital	BDL	
86			T/W No.2 Khandra Nr Pond	BDL	
87			T/W Nr Govt School (PVT)	BDL	
88		Israna		T/W No.1 Israna Nr OM Shanti	BDL
89				T/W No.2 Israna Nr Harizan Basti	BDL
90				T/W No.3 Israna Nr Railway Phatak	0.0009
91				T/W Israna Nr Govt School (PVT)	BDL
92		Rewari	Chimnawas	T/W Khori Road Chimnawas(PVT)	BDL
93			Rohliwas	T/W Rohliwas PHE	0.0002
94				T/W Rohliwas (PVT)	BDL
95	Rohtak	Kharawar	T/W W/W Kharawar	0.0004	
96				T/W Kharawar (PVT)	0.0006
97		Hassangarh	T/W W/W Hassangarh	0.0009	
98				T/W Hassangarh (PVT)	0.0009
99		Nidana	T/W W/W Nidana	0.0008	
100				T/W Nidana (PVT)	0.001
101		Madina	T/W W/W Madina	0.001	
102				T/W Madina (PVT)	0.001
103		LakhanMajra	T/W W/W Lakhan Mjara	0.001	
104				T/W Lakhan Majra (PVT)	0.001
105	Sirsa	Rupana	T/W Rupana Urf Darba Khurd(PVT)	0.0006	
106		Ali Mohammad	T/W Bahadur Ali Mohammad(PVT)	0.001	
107		Kalawali Mandi	T/W Kalawali Mandi (PVT)	0.0002	
108		Bhuratwala	T/W Bhuratwala (PVT)	0.0006	
109		Dabwali	T/W Old W/W Dabwali	BDL	
110	Sonipat	Ahulana	T/W Ahulana PHE	BDL	
111				T/W Ahulana (PVT)	0.001
112		Nizampur	T/W Nizampur PHE	0.001	
113				Hand Pump Nizampur (PVT)	0.001
114		Bhanderi	T/W NO.1 Bhanderi PHE	0.0004	
115				T/W Bhanderi (PVT)	0.001
116		Kathura	T/W Kathura PHE	0.0005	
117			T/W Kathura PVT	0.0006	
118	Yamunanagr	Shadipur	T/w No.1 On Road Shadipur	0.0008	
119				T/w No.2 Nr School Shadipur	0.001
120				T/w No.3 Nr Disposal Shadipur	0.0005
121		Bamboli	T/W at Bamboli	0.0005	

Remarks: All samples were found in acceptable limits as prescribed in IS:10500-2012 for Arsenic.






SHRIRAM INSTITUTE FOR INDUSTRIAL RESEARCH

(A unit of Shriram Scientific and Industrial Research Foundation)

19, University Road, Delhi – 110007 (India)
An ISO - 9001, 14001 & 45001 Certified Institute

Website : www.shriraminstitute.org
E-mail id : customercare@shriraminstitute.org
qad@shriraminstitute.org

ULR NO. : TC54442400000924F

TEST REPORT

NO : C1/0000348757

Issued To :

Client Code : (KARL01P2455)
PUBLIC HEALTH ENGINEERING
DEPARTMENT,
OFFICE OF THE CHIEF CHEMIST,
STATE WATER TESTING LABORATORY
KARNAL
HARYANA-132001
Kind Attn: MR. AMIT KUMAR SINGH, CHIEF
CHEMIST

Date of issue : 27-01-2024
Job No : 2401-1-401-1631
Booking No : PJ2324/1/143
Booking Date : 20-01-2024
Customer Ref No. : MEMO NO 368
Customer Ref Dt. : 20-01-2024
Location : Laboratory



Sample Description: 2401-1-401-1631

Received 121 number of samples of water from different districts of Haryana on 20.01.2024.

Note: Sampling was not carried out by Shriram Institute for Industrial Research. Sample details provided in the test certificate are based on the declaration by party.

Discipline : Chemical

Group : Water

As per (IS:10500:2012 RA 2018)

Parameter: Arsenic (as As), mg/l

Protocol: IS: 3025 Pt-2-2019

S.No.	District	Location	Name of Source	Results	Requirements/ Acceptable Limit	Conformity
1	Ambala	Balana	T/W Balana Mech (Tanki)	BDL	0.01 Max	Yes
2	Ambala	Balana	T/W Balana Mech (Shamshan Ghat)	BDL	0.01 Max	Yes
3	Ambala	Balana	PVT Source Balana (Paramjeet)	BDL	0.01 Max	Yes
4	Bhiwani	Bohal	T/W at Bohal	BDL	0.01 Max	Yes
5	Bhiwani	Sui	T/w at W/W Sui	BDL	0.01 Max	Yes
6	Bhiwani	Sui	T/w Nr Canal Sui (PVT)	0.008	0.01 Max	Yes
7	Bhiwani	Tosham	T/W Tosham	BDL	0.01 Max	Yes

Reviewed By

EMPLOYEE CODE: (6591)

GC-01(Rev-05)

1/6

AUTHORISED SIGNATORY

EMPLOYEE CODE: (4105)

Note: The results relate only to the items tested / calibrated above.

Scanned copies/photocopies or any other copies should be authenticated by reference to the original report.

SRI-C1 (Rev. 05)

Phone : 91-11-35200445, 35200499

Fax : 91-11-35200455

See overleaf for terms & conditions



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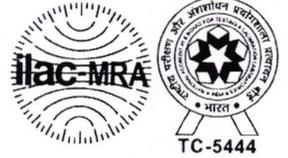
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NO : C1/0000348757



8	Bhiwani	Laxmanpura	T/W Laxmanpura (Kharkhari Makhwan)	BDL	0.01 Max	
9	Bhiwani	Laxmanpura	T/W of Sh Jai Kumar (PVT)	BDL	0.01 Max	Yes
10	Bhiwani	Dadri	Hand Pump Dadri	BDL	0.01 Max	Yes
11	Bhiwani	Chiriya	Chiriya Village PHE T/W	0.01	0.01 Max	Yes
12	Faridabad	Sikri	T/W Nr Galaxy PHED	BDL	0.01 Max	Yes
13	Faridabad	Sikri	T/W Trivender Pal Sikri (PVT)	BDL	0.01 Max	Yes
14	Faridabad	Sikri	T/W Rohit S/O Naresh Kumar Sikri (PVT)	0.006	0.01 Max	Yes
15	Fatehabad	Samain	T/W at W/W Samain T/W 1	BDL	0.01 Max	Yes
16	Fatehabad	Samain	T/W Baljeet S/O Baru Ram Samain (PVT)	BDL	0.01 Max	Yes
17	Hisar	KothKalan	T/W KothKalan (PVT)	BDL	0.01 Max	Yes
18	Jhajjar	Subana	T/W at Subana	BDL	0.01 Max	Yes
19	Jhajjar	Kulasi	Hand Pump at Kulasi	BDL	0.01 Max	Yes
20	Jhajjar	Chhara	Hand Pump at Chhara	BDL	0.01 Max	Yes
21	Jind	Kalwan	T/W no.1 Kalwan	BDL	0.01 Max	Yes
22	Jind	Kalwan	T/W no.2 Kalwan	BDL	0.01 Max	Yes
23	Jind	Kalwan	T/W no.3 Kalwan	BDL	0.01 Max	Yes
24	Jind	Kalwan	T/W no.4 Kalwan	BDL	0.01 Max	Yes
25	Jind	Kalwan	T/W Kalwan (PVT)	BDL	0.01 Max	Yes
26	Jind	Shahpur	T/W Shahpur 3	BDL	0.01 Max	Yes
27	Jind	Shahpur	T/W Shahpur Mech	BDL	0.01 Max	Yes
28	Jind	Shahpur	T/W Sh Shubash S/O Baru Shahpur	BDL	0.01 Max	Yes
29	Jind	Safidon	T/W Nagar Palika Mech-1	BDL	0.01 Max	Yes
30	Jind	Safidon	T/W No. 2 Boy School	BDL	0.01 Max	Yes

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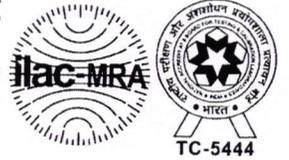
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31	Jind	Safidon	T/W No. 3 Treasury	BDL	0.01 Max	Yes
32	Jind	Safidon	T/W Adarsh Colony	BDL	0.01 Max	Yes
33	Jind	Safidon	T/W Anand Colony	BDL	0.01 Max	Yes
34	Jind	Safidon	T/W Govt P.G. College	BDL	0.01 Max	Yes
35	Jind	Safidon	T/W Civil Hospital	BDL	0.01 Max	Yes
36	Jind	Safidon	T/W Hagian Wala Kuwa	BDL	0.01 Max	Yes
37	Jind	Safidon	T/W Police Chowki	BDL	0.01 Max	Yes
38	Jind	Safidon	T/W Mini Sect SDM Complex	BDL	0.01 Max	Yes
39	Jind	Safidon	T/W Modern Colony	BDL	0.01 Max	Yes
40	Jind	Safidon	T/W Nr PH Office	BDL	0.01 Max	Yes
41	Jind	Safidon	T/W Nuasar Talab	BDL	0.01 Max	Yes
42	Jind	Safidon	T/W Ram Saran Park	BDL	0.01 Max	Yes
43	Jind	Safidon	T/W Shiv Colony	BDL	0.01 Max	Yes
44	Jind	Safidon	T/W Rest House	BDL	0.01 Max	Yes
45	Jind	Safidon	T/W B.E. Office	BDL	0.01 Max	Yes
46	Jind	Safidon	T/W Geeta Colony	BDL	0.01 Max	Yes
47	Jind	Safidon	T/W Rama Colony	BDL	0.01 Max	Yes
48	Jind	Safidon	T/W Kurar	BDL	0.01 Max	Yes
49	Jind	Safidon	T/W Sh. Ved Pal Shiv Colony (PVT)	BDL	0.01 Max	Yes
50	Kaithal	Peoda	T/W No. 1 Peoda	BDL	0.01 Max	Yes
51	Kaithal	Peoda	T/W No. 2 Peoda	BDL	0.01 Max	Yes
52	Kaithal	Peoda	T/W Peoda (PVT)	BDL	0.01 Max	Yes
53	Karnal	Salwan	T/W No. 1 Salwan	BDL	0.01 Max	Yes
54	Karnal	Salwan	T/W No. 2 Salwan	BDL	0.01 Max	Yes
55	Karnal	Salwan	T/W No. 3 Salwan	BDL	0.01 Max	Yes
56	Karnal	Salwan	T/W No. 4 Salwan	BDL	0.01 Max	Yes
57	Karnal	Salwan	T/W No. 5 Salwan	BDL	0.01 Max	Yes
58	Karnal	Salwan	T/W No. 6 Salwan	0.005	0.01 Max	Yes
59	Karnal	Salwan	T/W No. 7 Salwan	BDL	0.01 Max	Yes
60	Karnal	Salwan	T/W No. 8 Salwan	BDL	0.01 Max	Yes
61	Karnal	Salwan	T/W Salwan (PVT)	BDL	0.01 Max	Yes
62	Karnal	Nanhera	T/W Nanhera PHE Tubewell	BDL	0.01 Max	Yes

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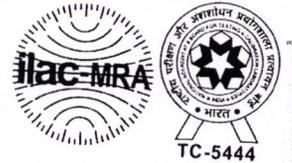
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NC 01/0000240757



63	Karnal	Nanhera	T/W Nanhera (PVT) Vinod	BDL	0.01 Max	Yes
64	Karnal	Kalra Jagir	T/W Kalra Jagir PHED TW 1	BDL	0.01 Max	Yes
65	Karnal	Kalra Jagir	T/W Kalra Jagir (PVT) TW No 2	BDL	0.01 Max	Yes
66	Karnal	Garhi Khajoor	T/W Garhi Khajoor TW No 1	BDL	0.01 Max	Yes
67	Karnal	Garhi Khajoor	T/W Garhi Khajoor (PVT)	BDL	0.01 Max	Yes
68	Karnal	Nalvi Khurd	T/W Nalvi Khurd PHE Near Rehar Singh House	BDL	0.01 Max	Yes
69	Karnal	Nalvi Kalan	T/W Nalvi Khurd PHE Near School	BDL	0.01 Max	Yes
70	Karnal	Ramba	T/W No. 1 Ramba	BDL	0.01 Max	Yes
71	Karnal	Ramba	T/W No. 2 Ramba	BDL	0.01 Max	Yes
72	Karnal	Ramba	T/W No. 3 Ramba	BDL	0.01 Max	Yes
73	Karnal	Ramba	T/W Ramba (PVT)	BDL	0.01 Max	Yes
74	Karnal	Chorkarsa	T/W No. 4 Chorkarsa	0.006	0.01 Max	Yes
75	Karnal	Kurlan	T/W No. 1 Kurlan	BDL	0.01 Max	Yes
76	Karnal	Kurlan	T/W No. 2 Kurlan	BDL	0.01 Max	Yes
77	Karnal	Kurlan	T/W Kurlan (PVT)	BDL	0.01 Max	Yes
78	Mahendergarh	Kheri Talwana	Shallow T/W W/W Kheri Talwana	BDL	0.01 Max	Yes
79	Palwal	Lakhnachs	T/W Mohin S/O Rajak Lakhnachs (PVT)	BDL	0.01 Max	Yes
80	Panchkula	Batour	T/W Batour 20-21 Mech	BDL	0.01 Max	Yes
81	Panchkula	Batour	T/W Batour New	BDL	0.01 Max	Yes
82	Panchkula	Batour	T/W Batour Mech-2	BDL	0.01 Max	Yes
83	Panchkula	Batour	T/W Batour Mech	BDL	0.01 Max	Yes
84	Panchkula	Batour	T/W Batour-2 (PVT)	BDL	0.01 Max	Yes
85	Panipat	Khandra	T/W No. 1 Khandra Nr Animal Hospital	BDL	0.01 Max	Yes

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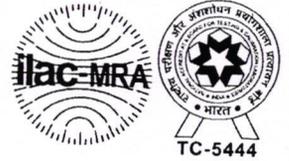
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NO. GC/0000348757



86	Panipat	Khandra	T/W No. 2 Khandra Nr Pond	BDL	0.01 Max	Yes
87	Panipat	Khandra	T/W Nr Govt School (PVT)	BDL	0.01 Max	Yes
88	Panipat	Israna	T/W No. 1 Israna Nr OM Shanti	BDL	0.01 Max	Yes
89	Panipat	Israna	T/W No. 2 Israna Nr Harizan Basti	BDL	0.01 Max	Yes
90	Panipat	Israna	T/W No. 3 Israna Nr Railway Phatak	0.005	0.01 Max	Yes
91	Panipat	Israna	T/W Israna Nr Govt School (PVT)	BDL	0.01 Max	Yes
92	Rewari	Chimnawas	T/W Khori Road Chimnawas (PVT)	BDL	0.01 Max	Yes
93	Rewari	Rohliwas	T/W Rohliwas PHE	BDL	0.01 Max	Yes
94	Rewari	Rohliwas	T/W Rohliwas (PVT)	BDL	0.01 Max	Yes
95	Rohtak	Kharawar	T/W W/W Kharawar	BDL	0.01 Max	Yes
96	Rohtak	Kharawar	T/W Kharawar (PVT)	BDL	0.01 Max	Yes
97	Rohtak	Hassangarh	T/W W/W Hassangarh	BDL	0.01 Max	Yes
98	Rohtak	Hassangarh	T/W Hassangarh (PVT)	BDL	0.01 Max	Yes
99	Rohtak	Nidana	T/W W/W Nidana	BDL	0.01 Max	Yes
100	Rohtak	Nidana	T/W Nidana (PVT)	BDL	0.01 Max	Yes
101	Rohtak	Madina	T/W W/W Madina	BDL	0.01 Max	Yes
102	Rohtak	Madina	T/W Madina (PVT)	BDL	0.01 Max	Yes
103	Rohtak	LakhanMajra	T/W W/W LakhanMajra	BDL	0.01 Max	Yes
104	Rohtak	LakhanMajra	T/W LakhanMajra (PVT)	BDL	0.01 Max	Yes
105	Sirsa	Rupana	T/W Rupana Urf Darba Khurd (PVT)	BDL	0.01 Max	Yes
106	Sirsa	Ali Mohammad	T/W Bahadur Ali Mohammad (PVT)	0.006	0.01 Max	Yes
107	Sirsa	Kalawali Mandi	T/W Kalawali Mandi (PVT)	BDL	0.01 Max	Yes

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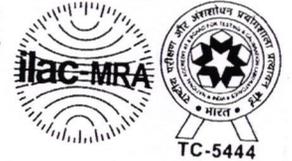
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TEST REPORT

NO - 04/0000348757



108	Sirsa	Bhuratwala	T/W Bhuratwala (PVT)	BDL	0.01 Max	Yes
109	Sirsa	Dabwali	T/W Old W/W Dabwali	BDL	0.01 Max	Yes
110	Sonipat	Ahulana	T/W Ahulana PHE	BDL	0.01 Max	Yes
111	Sonipat	Ahulana	T/W Ahulana (PVT)	BDL	0.01 Max	Yes
112	Sonipat	Nizampur	T/W Nizampur PHE Gohana	BDL	0.01 Max	Yes
113	Sonipat	Nizampur	Hand Pump Nizampur (PVT)	BDL	0.01 Max	Yes
114	Sonipat	Bhanderi	T/W No. 1 Bhanderi PHE	BDL	0.01 Max	Yes
115	Sonipat	Bhanderi	T/W Bhanderi (PVT) T/W 2	BDL	0.01 Max	Yes
116	Sonipat	Kathura	T/W Kathura PHE	BDL	0.01 Max	Yes
117	Sonipat	Kathura	T/W Kathura PVT	BDL	0.01 Max	Yes
118	Yamunanagar	Shadipur	T/W NO. 1 On Road Shadipur	BDL	0.01 Max	Yes
119	Yamunanagar	Shadipur	T/W NO. 2 Nr School Shadipur	BDL	0.01 Max	Yes
120	Yamunanagar	Shadipur	T/W NO. 3 Nr Dispensary Shadipur	BDL	0.01 Max	Yes
121	Yamunanagar	Bamboli	T/W at Bamboli	BDL	0.01 Max	Yes

BDL: Below Detection Limit

Detection Limit: 0.005 mg/l

Date of Receipt :20.01.2024

Date of Start :20.01.2024

Date of Completion :27.01.2024

END OF REPORT

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-21-

Detail of Fluoride Affected Sources by CGWB & counter test by PHED															
Central Ground Water Board						Public Health Engineering Department									
S.No	District	Block	Location	Latitude	Longitude	Fluoride(mg/l)	Fluoride (mg/l)	Source	Source Type	Remarks					
1	Ambala	Ambala	Nagga	30 2400	76 7100	2.80	2.8	Sagat Dabri (CWS-1000-0)	PHED	Nil					
2							0.3	Bravo power house T/w No 20 A -MES	Private						
3		Ambala	Ambala II Line	30 3610	76 8485	5.87	0.4	MES. Near by circuit House T/w No-20	Private						
4							0.4	Commissioner House	PHED						
5							0.3	Babyl Booster Pump	PHED						
6							0.4	Babyl near OHSR T/w No 4	PHED						
7							0.6	Dalipgarh Paras Nagar	PHED						
8							0.6	Balana Mech. (Tank)	PHED						
9							0.7	Balana Mech (Shamshah Ghaat)	PHED						
10							0.7	Hasanpur Ambala-Ives	PHED						
11	Bhiwani	DARI- II	Chirva	28 4583	76 2583	1.70	1.02	Tubewell	PHED (Dist Charkhi Dadri)	Dadri ii(Chirva)/Dadri-1(Loharwala)/Dadri-ii(sarangpur) are located in District Charkhi Dadri					
12		Bhawani	Halawas	28 7333	76 1667	5.71	0.45	Handpump	Private						
13		Bhawani	Hetampura	28 6990	75 9884	3.30	0.26	Tubewell	PHED						
14		Siwani	Bhumpa Kalan	28 7667	75 5292	2.28	0.17	Tubewell	PHED						
15		Dadri - I	Loharwala	28 6290	76 3600	22.00	2.50	Tubewell	PHED (Dist Charkhi Dadri)						
16		Bhawani	Badala	28 7569	76 2542	0.22	0.22	Handpump	Private						
17		Bhawani Khara	Dhanana	28 9375	76 1681	0.16	0.16	Handpump	Private						
18		Siwani	Chirva	28 9194	75 5157	0.16	0.16	Tubewell	Private						
19		Siwani	Mohala	28 8483	75 6222	1.61	0.38	Tubewell	Private						
20		Tohana	Pataudi	28 7972	75 8083	2.42	16.6	Tubewell	PHED						
21		Dadri - II	Sarangpur	28 6400	76 0942	1.93	1	Tubewell	PHED (Dist Charkhi Dadri)						
22		Bhawani	Tigra	28 8420	76 1500	1.60	0.16	Handpump	Private						
23		Tohana	Tohana	28 8730	75 9167	2.35	16.7	Tubewell	PHED						
24	Fatehabad	Ballaigarh	Faropur Kalan	28 3030	77 2380	2.76	1.4	T/w Firozpur Kalan	PHED	Nil					
25	Fatehabad	Fatehabad	Badopal	29 4458	75 5500	2.19	0.72	Private Tubewell	Private	Nil					
26							0.95	Private Tubewell	Private						
27							2.72	Private Tubewell	Private						
28							1.60	Private Tubewell	Private						
29		Fatehabad	Daryapur	29 5204	75 3539	4.9	0.26	Private Tubewell	Private						
30							2.10	Private Tubewell	Private						
31							Tohana	Tohana	29 7042		75 8958	2.23	1.40	Tubewell at W/works	PHED
32							Tohana	Nangla	29 6139		75 8875	1.67	0.33	Tubewell at W/works	PHED
33	Tohana	Samam	29 6194	75 9375	1.78	1.79	Private Tubewell	Private							
34	Gurgaon	Pataudi	Halley mandi	28 3130	76 7710	2.49	0.77	TW-GRG-Jatauh I Halley Mandi	PHED	Nil					
35							1.14	Halleymandi	Private Tube well						
36		Pataudi	Meoka	28 409	76 919	2.29	1.61	Meoka	Private Tube well						
37							0.49	Meoka (Private T.W)House of Mahabir	Private Tube well						
38		Gurugram	Wazirpur	28 421	76 9165	1.6	1.11	Wazirpur	Private Tube well						
39							2.4	Wazirpur Binsy Metals India Pvt.Ltd.	Private Tube well						
40		Pataudi	Noorgarh	28 3561	76 6808	1.8	0.95	Noorgarh Uw-1	PHED						
41							1.10	Noorgarh Uw-2	PHED						
42							1.20	Noorgarh Uw-3	PHED						
43							1.30	Noorgarh Uw-4	PHED						
44							0.90	Noorgarh Uw-5	PHED						
45	1.23						Noorgarh	Private Tube well							
46	Adampur	Adampur	29 2783	75 4919	2.16	4.36	Tubewell	PHED	Nil						
47	Agroha	Agroha	29 3250	75 6228	1.61	0.51	Tubewell	PHED							
48	Barwala	Barbhauri	29 4000	76 0500	2.34	0.71	Tubewell	PHED							
49	Barwala	Barwala	29 3867	75 9167	2.09	0.37	Tubewell	PHED							
50	Adampur	Basia	29 2167	75 5250	1.96	4.6	Tubewell	PHED							
51	Hansa	Chanaut	29 2083	75 9208	1.61	0.47	Tubewell	PHED							
52	Adampur	Chursat	29 1708	75 4228	2.16	4.45	Tubewell	PHED							

53		Agroha	Kanoh	29 3728	75 7569	1.87	0.58	Tubewell	PHED		
54	Hissar	Narnand	Kapro	29 3790	76 1130	7.20	0.78	Tubewell	PHED		
55		Agroha	Kanoh	29 3730	75 7570	5.20	same as Kanoh				
56		Hissar I	Kharar	29 1217	75 8989	2.80	0.19	Tubewell	PHED		
57		Agroha	Kuleri	29 3610	75 6690	2.20	0.57	Tubewell	PHED		
58		Hissar - I	Mangali	29 0417	75 7222	1.71	0.37	Handpump	Private		
59		Narnand	Mothi Magra	29 2083	76 0958	13.90	2.18				
60		Hansi	Rampur Damundi	29 0750	76 0417	1.91	Not in Hissar District				
61		Uklana	Sohni	29 4986	75 8333	2.53	1.43	Tubewell	PHED		
62		Uklana	Uklana Mandi	29 5083	75 8583	3.80	0.53	Tubewell	PHED		
63		Hansi	Umra	29 0530	75 9130	1.60	0.15	Tubewell	PHED		
64	Jind	Uchana	Baroda	29 4389	76 1861	3.30	0.13	Water Works -Canal Supply	PHED	Nil	
65			khatkaran				0.43	Submersible(Amarjeet S/o Ramkumar)	Private		
66							0.121	Water Works -Canal Supply	PHED		
67			Uchana	Khatkar	29.4056	76.2458	4.200	0.690	Submersible(Dalbir/S/o Sukhpal suwan patt)	Private	Village Name is khatkar instead of Khaikaran
68							1.74	Submersible(Amop S/o Balwan)	Private		
69			Uchana	Uchana	29 4694	76 1861	12.0	0.19	Water Works -Canal Supply	PHED	
70			Safidon	Luchap	29 3583	76 4222	4.40	0.43	Submersible(Amarjeet S/o Ramkumar)	Private	
71			Jind	Lohchab				3.76	Tubewell (Rohit S/o Bhyender)	Private	Location lochhab is located in Jind block instead of Safidon block
72								0.91	Tubewell-Mech	PHED	
73								0.69	Tubewell	PHED	
74			Safidon	Bhuslana	29 4533	76 7494	3.51	0.64	Tubewell	PHED	Nil
75								1.13	Tubewell (Rohtash/Ramda)	Private	
76			Julana	Rohjala	29 3644	29 3644	3.70	0.97	Tubewell (Salib S/o Sh Chandroop)	Private	Latitude is wrong,location Rohjala is located in Block Safidon instead of Julana
77			Safidon					1.00	Tubewell	PHED	
78			Narwana	Kurar	29.7292	76.0417	2.10	3.27	Submersible (Thandiam S/o Sh Prabha)	Private	
79								3.15	Submersible (Shyam S/o Sh Dalhar)	Private	
80			Safidon	Kurar				0.5	Tubewell-Kurar -Safidon	PHED	Location kurar is in safidon block instead of Narwana Block
81								0.24	Submersible (Savat S/o Sh Mehar Singh)	Private	
82								0.5	Submersible (Rahman S/o Sh Satta)	Private	
83			Pilukhera	Pilukhera	29 3361	76 4875	4.00	0.71	Tubewell-Pilukhera MANDI	PHED	
84							1.27	Tubewell Village 2-Pilukhera	PHED		
85							1.28	Tubewell-Pilukhera	PHED		
86							1.05	Submersible (Shwar -Pilukhera)	Private		
87		Julana	Jhamala	29 1389	76 3389	3.10	1.13	Submersible (Satyawan)-Pilukhera	Private		
88							0.17	Shallow Tubewell	PHED		
89							0.17	Water Works-Canal Supply	PHED		
90							0.68	Tubewell (Parveen)	Private		
91							0.16	Submersible(Ajmer)	Private	Nil	
92							1.1	Tubewell No 5	PHED		
93							0.11	Tubewell No 6	PHED		
94		Julana	Julana	29 4769	76 2719	6.00	0.17	Water Works-Canal Supply	PHED		
95							0.38	Handpump	Private		
96							0.21	Sandeep Ward No.6 Submersible	Private		
97		Narwana	Mohal khera	29 6262	76 1256	1.68	0.18	Water Works-Canal Supply	PHED		
98							0.19	Shallow Tubewell	Private		
99							0.17	Shallow tubewell Near dadakhera	Private		
100							0.58	Deep Tubewell-Nagar palika Mech-1	PHED		
101							0.15	Deep Tubewell No 2.Boys School	PHED		
102							0.18	Shallow Tubewell No 3 Treasury	PHED		
103							0.77	Deep tubewell Adarsh colony	PHED		
104							0.59	Deep tubewell Anand Colony	PHED		
105							0.66	Shallow tubewell Govt Pg College	PHED		
106							0.59	Deep tubewell civil hospital	PHED		
107							0.94	Deep tubewell Hazikua Main bazar	PHED		
108							0.63	Deep tubewell Police chowki	PHED		
109		Safidon	Safidon	29 4042	76 6556	2.80	0.84	Tubewell Mini Secti SDM Complex	PHED	Water sample of private source was not submitted	
110							1.18	Tubewell Modern colony	PHED		
111							0.23	Tubewell Near PH Office	PHED		
112							0.13	Tubewell Nursar Talab	PHED		
							0.68	Tubewell Ramsar Park	PHED		
							0.38	Tubewell Shiv colony	PHED		

113						0.28	Tubewell Rest House	PHED			
114						0.14	Tubewell BE office	PHED			
115						1.03	Tubewell Geeta Colony	PHED			
116						0.57	Tubewell Rama Colony	PHED			
117	Jhajjar	Bart	Bigwa	28 6722	76 4366	1.80	1.32	Handpump	Private(Charkhi Dadri District)	Location Bigwa is in Distt Charkhi Dadri instead of Jhajjar	
118		Mataniati	Chinohakwas	28 6000	76 5083	9.90	1.52	Handpump	Private		
119		Bahadragah	Gabhana	28 5708	76 8417	6.80	1.34	Handpump	Private		
120		Mataniati	Mandha	28 5458	76 4792	1.60	0.33	Deep tubewell	PHED		
121		Salawas	Salawas	28 4580	76 4693	5.50	0.21	Tubewell	PHED		
122	Salawas	Subnah	28 4820	76 5710	3.61	0.83	Tubewell	PHED			
123	Karnal	Assandi	Khuada Khen	29 5637	76 6442	2.41	0.90	TW 1. Khunda Khen	PHED	Nil	
124							1.06	Pvt T well	Private		
125	Kaithal	Pundri	Bhana	29 6700	76 5180	2.21	1.05	T/w Kaithal Bhana Mech	PHED	Nil	
126							3.1				
127			Kalayat	Kalayat	29 6792	76 2528	2.29	1.49	T-w-Kaithal-Kalayat No 1		PHED
128								1.47	Kithana Mech		PHED
129			Rayound	Kathana	29 5458	76 3931	2.75	1.38	Kithana Parjapati mohalla Tubewell		PHED
130								1.38	Tubewell-Kaithal Kithana Ashram		PHED
131								1.80	Kithana B1 Distt Mech Tubewell		PHED
132								0.69	Tubewell-Kaithal Mundri Mech		PHED
133			Kaithal	Mundri	29 7750	76 5060	2.69	1.24	Tubewell Kaithal Mundri-2		PHED
134								3.02	Tubewell Kaithal Mundri-3		PHED
135							0.6	Mundri Private	Private		
136							2.38	Tubewell Kaithal Mundri Rest House	PHED		
137		kalayat	Simla	29 6348	76 2149	2.17	2.6	Tubewell Kaithal Simla Tubewell	PHED		
138							1.22	Simla Private	Private		
139	Kurukshetra	Pchowra	Ishaque	30 0167	76 4917	1.60	0.76	T/w-KRK-Ishaq2,T/w No 2	PHED	Nil	
140							0.89	T/W-KRK-ISHAQ T/w No 1	PHED		
141								0.92	T/W-KRK-Ishaq -Balwinder-Personal		Private
142	Mahendragarh	Mahendergarh	Deroli Ahir	76 1564	28 1733	1.96	0.32	Deep Tubewell	PHED	Nil	
143			Mahendra garh	Jassawas	28 2480	76 1410	2.30	2.1	Tubewell		PHED
144			Mahendergarh	Khen Talwana	28 3765	76 2336	4.68	0.61	Tubewell		PHED
145	Mewat	Nagina	nagina	27 9167	76 9833	2.07	0.39	T w No 1 Fakarpur Khori	PHED	Block Hathin is located in District Palwal but Location Akbarpur is in District Mewat,Block Pinangwan	
146								0.29	T w No 2 Fakarpur Khori		PHED
147								0.41	Submersible		Private
148								0.43	Submersible		Private
149								0.84	Tubewell Atikuri, Vill Firozpur jhrka		PHED
150			Firozpur Jhrka	Firozpur Jhrka	27 7793	77 9458	1.54	0.31	Tubewell Jhr Road		PHED
151								0.44	Submersible ,Poonam arya,ward No.7		Private
152								0.62	Submersible, Ganshyam, ward No 9		Private
153			Punhana	Gulata	27 9193	77 1724	2.60	0.12	Tubewell		Private
154			Punhana	Sikarwa	27 9508	77 1415	1.65	0.63	Tubewell No 1 sakrawa		PHED
155								0.43	Handpump Near SBS		Private
156			Nuh	Malab	28 0417	77 0111	3.10	0.13	R well		PHED
157							0.67	Submersible, Haji sammi	Private		
158							0.74	Submersible, Alizan	Private		
159							0.86	Tubewell	PHED		
160		Hathin	Akbarpur	28 1121	77 1492	1.7	0.64	Submersible Dam	Private		
161							0.71	Submersible, Mazad	Private		
162	Samalkha						1.3	T w No 1 (On Stand) Village Naraina	PHED		
163								0.99	T w No 2 (Near Girl School) Village Naraina		PHED
164								1.1	T w No 3 (On Gwalia Road) Village Naraina		PHED
165								1.2	T w No 4 (Gram Sahayya) Village Naraina		PHED
166								1	Hand Pump Near Peer Baba Village Naraina		Private
167								0.71	Shallow Tubewell Vansh S/o Sandip Village		Private
168								1.2	T w No 5 (Primary School) Village Naraina		PHED
169								0.56	T w No 1 (OISR) Village Pattikalayana		PHED
170								1.1	T w No 2 (Mahawati Road) Village		PHED
171								1.3	T w No 3 (at Man Chowk) Village		PHED
172							1.1	T w No 4 (Near Masjid) Village Pattikalayana	PHED		

173	Panchpat	Samalkha	Patti kalyana	28 8450	76 6772	1.57	1.1	T/w No 5 (Near Harizon Chopal) Village	PHED	Nil	
174							1	T/w No 6 (Near Hospital) Village Pankalyana	PHED		
175							1.1	T/w No 7 (Shamshan Ghari) Village	PHED		
176							0.46	Shallow Tubwell Mohan Lal S/o Puran Chand	Private		
177							1.2	Shallow Tubwell Bajander S/o Pala Village	Private		
178		1.2									
179		0.9	T/w No 1 (Near Anmol Hospital) Village	PHED							
180		1.3	T/w No 2 (Beholi Road) Village Tappur	PHED							
181		1.76	T/w No 1 (Near Hospital) Village Israna	PHED							
182		1.0	Hand Pump Mohan S/o Kishanji Village	Private							
183		2.30	T/w No 1 (Near Hospital) Village Israna	PHED							
184		0.91	Water Sample Hand Pump Village Khalila	Private							
185		0.92	T/w (Private) Near Sun Rise School at Scenk	Private							
186		7.6	T/w (Private) Near Govt. School Village Israna	Private							
187		1.8	T/w (Private) Near Govt. College Village Israna	PHED							
188		1.2	Water Works (Near Govt. College) Village	PHED							
189		1.3	T/w No 2 (Near Harijan Basti) Village Israna	PHED							
190		1.1	T/w No 1 (Near Govt. School) Village Israna	PHED							
191		1.4	T/well Near Shiv Mandir Village Untla	PHED							
192		2.2	Water Sample Hand Pump Village Untla	Private							
193	0.62	T/well No 1 Near Power House at Uurlana	PHED								
194	1.4	T/well No 2 Near Govt School at Uurlana Kalan	PHED								
195	1.2	Water Sample Hand Pump Near Govt. School	Private								
196	0.21	T/well No 1 Near Main Road village Atavla	Private								
197	1.6	T/well Near Main Road Village Atavla	Private								
198	0.22	Water Works Near Main Road Village Atavla	PHED								
199	2.3	T/well Near Main Road Village Atavla	PHED								
200	1.5	T/well No 2 Near Goga Mandir Village Lohari	PHED								
201	0.92	T/well Near Shiv Mandir Village Lohari	Private								
202	1.5	Handpump	Private								
203	Pahwal	Hodal	Aduja	28 0460	77 4670	1.98	1.5	Handpump	Private	Nil	
204							1.23	Tubwell	PHED		
205							1.66	Handpump	Private		
206							2.21	Tubwell	PHED		
207	Panchkula	Pinjore	Fatchpur	30 6933	76 8806	1.99	0.43	Handpump	Private	Nil	
208							1.11	Tubwell-Fatchpur Diwanwala	PHED		
209							0.1	Near Fatchpur Diwanwala	Private		
210							0.14	Near Fatchpur Diwanwala	Private		
211	less than 0.1	Near Fatchpur Diwanwala	Private	Nil							
212	0.14	HISVPN (fatchpur village near sec 20 panchkula	Others (HISVPN)								
213	Rohtak	Baland	Balianandpur		28 8000	76 5833	5.40	0.25	water works-canal supply	PHED	Location Rukhi is in Gohana(sonipat) instead of Rohtak
214								1.70	water works-canal supply	PHED	
215				8.60				water works-canal supply	PHED		
216				10.0				water works-canal supply	PHED		
217				2.09				water works-canal supply (T/well No 1)	PHED		
218				5.00				water works-canal supply	PHED		
219				4.22				water works-canal supply	PHED		
220	Rewari	Nahar	Bahu	28 4361	76 3167	2.61	Location wrong	Location is in Jhajjar District	Location Bahu is in Jhajjar District Instead of Rewari		
221							1.69	Tubwell Near by pond balawas		PHED	
222		0.54	Tubwell Ajs S/o Sh Randhr	Private							
223		0.67	Tubwell Hanman mandir	Private							
224		0.59	Tubwell at khon road	Private							
225		1.04	Tubwell Lalit S/o Suresnder	Private							
226		0.62	Tubwell Mahavir S/o Tarachand	Private							
227		0.85	Tubwell near J.N Canal	Private							
228		3.75									
229		0.39	Tubwell Rajpal Near Govt School	Private							
230		1.97	Tubwell at Masam store	PHED							
231		1.16	Tubwell Near Govt School Masam	Private							
232		0.88	Tubwell Barhera road rohlwas	Private							
233		2.01	Tubwell Barhera road rohlwas	Private							
234	1.80	Tubwell Barhera road rohlwas	PHED								
235	1.06	Tubwell KK Sharma S/o Hanah	Private								

236	Dabwali	Chaatala	29 7750	74 5167	1.71	0.20	Government	PHED	NIL
237	Odhan	Chornar	29 7833	74 8417	2.30	2.42	Pvt	Private	
238	Dabwali	Dabwali	29 9540	74 7380	8.80	0.332	Government	PHED	
239	Nathusari Cbopta	Darbu Kalan	29 3917	75 0889	1.87	3.01	Government	PHED	
240	Rana	Dariya Wala	29 6160	74 8900	7.00	1.31	Government	PHED	
241	Dabwali	Gorwala	29 7917	74 7083	1.74	0.77	Government	PHED	
242	Nathusari Chopta	Jamal	29 3278	74 9861	1.81	2.68	Pvt	Private	
243	Jodhka	Jodhaka	29 4970	75 2220	1.80	0.85	Government	PHED	
244	Dabwali	Kaluvana	29 7125	74 6347	1.60	0.18	Government	PHED	
245	Ellenabad	Karavana	29 3403	74 6300	3.12	2.17	Pvt	Private	
246	Ellenabad	Kashi ram Bas	29 4222	74 6125	2.51	0.45	Government	PHED	
247	Dabwali	Khuyyan Malkana	29 8583	74 7094	1.81	1.60	Pvt	Private	
248	Nathusari chopta	Kumahria	28 2572	74 1444	1.87	1.86	Pvt	Private	
249	Sirsa	Mangala	29 4778	74 9556	2.95	0.60	Government	PHED	
250	Dabwali	Maotan	29 8860	74 7200	2.50	0.285	Pvt	Private	
251	Odhan	Mithari	29 8500	74 9830	1.70	0.11	Pvt	Private	
252	Odhan	Mithari	29 8500	74 9833	1.95	0.11	Pvt	Private	
253	Odhan	Odhan	29 7667	74 8972	6.50	1.23	Pvt	Private	
254	Ellenabad	Sherwali Dham	29 3933	74 6175	1.61	1.48	Government	PHED	
255	Dabwali	Teja Khera	29 8444	74 5556	1.98	0.34	Government	PHED	
256	kahtura	Garhwal	29 1782	76 5366	1.96	0.43	Tubewell	PHED	
257	Mundiana	Jags	29 2500	76 6611	2.00	0.76	Tubewell	PHED	
258	Gohana	Khanpur kalan	29 1597	76 8278	1.70	0.68	Tubewell-	PHED	
259	Mundiana	Mundiana	29 2125	76 7708	1.70	0.79	Tubewell	PHED	
260	Kharkhoda	Rohat	28 9360	76 9710	2.75	0.57	Tubewell No 1	PHED	
261						0.44	Tubewell No 2	PHED	
262	Israna	Sink	29 3186	76 6403	2.90		Panipat District		
263	Kharkhoda	Sisrahi	28 9023	76 8420	1.82	1.42	Tubewell No 5 sisana	PHED	
264						1.39	Tubewell No 2 sisana	PHED	
						1.46	Tubewell No 6 sisana	PHED	

Location Sink is in Distt.Panipat instead of Distt Sonipat.Water sample is tested in Distt Panipat

ANNEXURE-D**List of Samples found Unfit in Fluoride Testing and the present status of Drinking Water Supply / Remedial measures taken**

Sr. No.	District	Location of Source	Fluoride, mg/l	Division	Source of Drinking water (Canal Based or Tubewell Based)	Whether supply of Tubewell Stopped or Not	Details of Alternate Source if available	Action taken report
1.	Ambala	Naggal No.1	2.0	Ambala City	Tubewell Based	Stopped	From Nearby tubewell at village Hassanpur	Tubewell has been stopped & the new tubewell will be drilled at suitable location in the village. Estimate under preparation.
2.	Bhiwani	Dadri-Loharwala	4.56	Ch. Dadri	Canal Based	Stopped	Canal Based Water Supply	Drinking Water Supply from Tubewell has been stopped
3.		Tosham-Pataudi	16.6	Tosham	Canal Based	Stopped	Canal Based Water supply	Drinking Water Supply from Tubewell has been stopped
4.	Hisar	Adampur	4.36	No.1 Hisar	Canal Based	Stopped	Canal Based Water Supply	Drinking Water Supply from Tubewell has been stopped
5.		Basra	4.60	No.1 Hisar	Canal Based	Stopped	Canal Based Water Supply	Drinking Water Supply from Tubewell has been stopped
6.		Ghursal	4.45	No.1 Hisar	Canal Based	Stopped	Canal Based Water Supply	Drinking Water Supply from Tubewell has been stopped
		Moth Majra	2.14	Hansi	Canal based	Stopped	Canal Based Water Supply	Drinking Water Supply from Tubewell has been stopped
7.	Kaithal	Kithana SC Basti	1.80	No.2 Kaithal	Canal based	Stopped	Canal	Drinking Water Supply from Tubewell has been stopped.
8.		Mundri-3	3.02	No.1 Kaithal	Canal based	Stopped	Tubewell/ Canal	Drinking Water Supply from Tubewell has been stopped and is being given from other tubewells having safe drinking water supply. Augumentation of Canal Based drinking water supply under progress and is likely to be completed within 6 months.
9.		Simla Sirsa Branch	2.58	No.2 Kaithal	Canal based	Stopped	Canal	Drinking Water Supply from Tubewell has been stopped.
10		Simla-1	2.60	No.2 Kaithal	Canal based	Stopped	Canal	Drinking Water Supply from Tubewell has been stopped
11	Mahendgarh	Jassawas	2.43	Mohindergarh	Canal Based	Stopped	Canal	Drinking Water Supply from Tubewell has been stopped
12	Panipat	Patti Kalyana-8	1.60	No.2 Panipat	Tubewell Based	Stopped	Water supply Connected Other Tubewell	Drinking Water Supply from Tubewell has been stopped. Estimate for new tubewell under preparation
13		Tajpur-3	1.70	No.2 Panipat	Tubewell Based	Stopped	Water supply Connected Other Tubewell	Estimate for new tubewell under Preparation

Sr. No.	District	Location of Source	Fluoride, mg/l	Division	Source of Drinking water (Canal Based or Tubewell Based)	Whether supply of Tubewell Stopped or Not	Details of Alternate Source if available	Action taken report
14		Khalila-1	2.30	No.1 Panipat	Canal Based	Stopped	Canal Based	Drinking Water Supply from Tubewell has been stopped. To increase capacity of Canal Based estimate under preparation.
15		Israna-3	1.80	No.1 Panipat	Canal Based	Stopped	Canal Based	Drinking Water Supply from Tubewell has been stopped. To increase capacity of Canal Based estimate under preparation.
16		Israna-Nr Om Shanti	2.10	No.1 Panipat	Canal Based	Stopped	Canal Based	Drinking Water Supply from Tubewell has been stopped. To increase capacity of Canal Based estimate under preparation.
17		Lohari-Brahmanand Mandir	5.80	No.1 Panipat	Canal Based	Stopped	Canal Based	Drinking Water Supply from Tubewell has been stopped. To increase capacity of Canal Based estimate under preparation.
18		Lohari-Nr. Govt. School	2.10	No.1 Panipat	Canal Based	Stopped	Canal Based	Drinking Water Supply from Tubewell has been stopped. To increase capacity of Canal Based estimate under preparation.
19	Palwal	Lakhnaka	1.65	No.2 Palwal	Ranney Well and Tubewell	Stopped	Ranney Well and Water Tanker	Drinking Water Supply from Tubewell has been stopped. An Estimate for installation of 3 No. tubewell has been admin approved for amounting to Rs. 297.11 lacs.
20	Rohtak	Lakhan Majra	1.89	No.1 Rohtak	Canal Based	Stopped	Canal Based	Drinking Water Supply from Tubewell has been stopped. To increase capacity of Canal based water estimate of 2 nd Water works is under preparation
21	Rewari	Kosli- Nr. Water Works	1.73	Kosli		Stopped		Drinking Water Supply from Tubewell has been stopped.
22		Lukhi- Water Works	1.92	Kosli				Drinking Water Supply from Tubewell has been stopped.
23		Sangwari- Nr. Govt School	1.80	Bawal	Canal Based	Stopped	Canal Based water Supply	Drinking Water Supply from Tubewell has been stopped.
24	Sirsa	Darba Kalan	2.01	No.2 Sirsa	Canal based	Stopped	Canal Water	Drinking Water Supply from Tubewell has been stopped.