

**BEFORE THE NATIONAL GREEN TRIBUNAL,
PRINCIPLE BENCH, NEW DELHI**

O.A. No. 414/2022

IN THE MATTER OF:

CHANDER MOHAN BHAGAT

...APPLICANT

VERSUS

GOVT. OF NCT OF DELHI & ORS.

...RESPONDENT(S)

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PLACE: NEW DELHI

DATED: 3-10-2022

S.K. M.
3/10/22

SYED KHAJA MOHIDDIN

HEAD OF THE OFFICE

CGWB, STATE UNIT OFFICE

कार्यालय प्रमुख
Head of Office
राज्य एकक कार्यालय
State Unit Office
केन्द्रीय मृत्ति जल बोर्ड
Central Ground Water Board
नई दिल्ली-110066
New Delhi-110066

RESPONSE TO THE APPLICATION WITH STATUS OF THE GROUND WATER AROUND THE AREA OF BHAGAT HOPITAL, D-BLOCK, JANAKPURI, NEW DELHI IN PURSUANCE TO HON'BLE NATIONAL GREEN TRIBUNAL, PRINCIPAL BENCH, ORDER DATED 1.09.2022 IN THE MATTER OF CHANDER MOHAN BHAGAT VS. GOVT. OF NCT, DELHI & ORS. (O.A. NO. 414/2022)

1. This is in reference to the complaint made to NGT by Shri Chander Mohan Bhagat, Medical Director, Bhagat Hospital. The applicant has submitted that as per direction of this tribunal, borewell at Bhagat Hospital Janak Puri, D Block, which was dug with NOC/permission from Central Ground Water Authority in the year 1997, has been sealed and at present the hospital is dependent only on water supply from the Delhi Jal Board without any alternate plan which is causing great difficulties in summer season when there are frequent shortages/ restrictions of water supply. The applicant has further submitted that hospital and nursing homes come under essential service and require high water consumption i.e. 450 ltr approximately per admitted patient.

Vide Order dated 01.09.2022 Hon'ble tribunal inter-alia passed the following order:

"In view of the averments made in the application, we consider it appropriate that notice of the application be issued to the Central Ground Water Authority, DPCC and Delhi Jal Board requiring them to file their reply/response to the application with status of the ground water in the area in question."

2. That in compliance of the above direction, the status of the ground water in the area around Bhagat Hospital, D-Block, Janakpuri is as follows:

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GROUND WATER SITUATION AROUND BHAGAT HOSPITAL AREA, JANAKPURI, NEW DELHI

The area is underlain by older alluvium mainly consist of unconsolidated inter-bedded sand, clay and silt mixed with Varying proportions of gravel and kankar. Lithological formation of exploration tubewells sites located at Pankha Road, Janakpuri and Kirbi Place, Delhi Cantt. which are nearest to the D-Block, Janakpuri has been studied for interpretation of lothology in the area. Clay zone predominates in the alluvial formation. In Pankha Road clay is present upto 53.00 m bgl. Kankar, gravel with clay is present upto a depth of 84.00 m bgl. In Kirbi place, clay and silty clay mixed with kankar extends down to a depth of 24 m. Thin granular zones fine sand zone is present from 24.00 m below ground level (bgl) to 35.00 m bgl. Granular aquifer zones are present at depth of 42.16 m bgl to 53.11 m bgl, 59.96 m bgl to 66.80 m bgl and 69.80 m bgl to 73.65 m bgl. Below 73.65 m bgl, the formation is predominantly clay in nature.

Ground water occurs in sandy silt and sandy gravel zones mixed with kankar zones which are potential aquifer zones in the area. Depth to ground water ranges from 20.00 m bgl to 24.00 m bgl. Depth to ground water levels are being monitored by CGWB four times in a year i.e. during January, May/June, August and November. The depth to water levels monitored from the National Hydrograph Monitoring Stations located around the Janakpuri D-Block area are given in Table-3.

Ground water quality of ground water shows that the water is fresh at shallow depths with Electrical Conductivity of 993 ms/cm to 1807 micro-siemens/cm (Table-4). The ground water is brackish to saline at deeper levels. Fresh/saline water interface is at a depth of about 50-60 m bgl. At few places, Fluoride and Nitrate concentrations are beyond the permissible limits rendering the ground

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water unfit for drinking purposes without treatment (In Janakpuri area Nitrate is beyond the permissible limits of 45 mg/l as per the drinking water standards of BIS, 2012. In Vikas puri and Shekawati lines area, Fluoride is more than the permissible limits of 1.5 mg/l as per BIS standards of 2012.

TABLE-1: LITHOLOG OF PANKHA ROAD, JANAKPURI

1	Site	Pankha Road	
2	Block	City	
3	Coordinate	Latitude : 28°37'05" Longitude : 77°05'15"	
4	Rig deployed	Rotary	
5	Geology	Alluvium	
	From mbgl	To Mbgl	Lithology
	00.00	00.60	Top soil and sub soil
	00.60	02.43	Clay yellowish, plastic with sand grains
	02.43	10.36	Kankar with clay
	10.36	31.40	Clay with kankar
	31.40	53.64	Clay with few grains of kankar
	53.64	84.12	Kankar, gravel with clay
	84.12	92.96	Clay with little kankar
	92.96	94.18	Kankar with little clay
	94.18	155.14	Clay with little kankar

S.S. D.

Table-2: Lithology of Exploratory tubewell located in Kirbi Place Area.

Site	Kirbi Place, COD Delhi Cantt.	
District	South-West	
Coordinate	Latitude : 28 ⁰ 36'45" Longitude : 77 ⁰ 07'36"	
Rig deployed	Rotary	
Geology	Alluvium	
From (mbgl)	To (mbgl)	Lithology
00.00	14.42	Clay, grayish yellowish semi-plastic Clay admixed with medium to coarse grained heterogenous kankar.
14.42	24.00	Clay, Silty Clay (yellowish) with minor coarse grained heterogeneous kankar.
24.00	35.00	Fine Sand, Clay silt (yellowish) with coarse grained heterogenous kankar.
35.00	42.16	Clay, Yellowish semi-plastic Clay occasionally heterogenous kankar of medium Grained.
42.16	53.11	Gravel size Kankars with minor Clay and Sily.
53.11	59.96	Clay, Yellowish semi-plastic silty clay admixed with medium to coarse grained angular kankar.
59.96	66.80	Gravel size sub-angular heterogeneous Kankars with minor yellowish Clay and Silt.
66.80	69.80	Clay, Yellowish silty clay admixed with medium to coarse grained heterogeneous kankar.
69.80	73.65	Medium Grained heterogeneous sub-angular Kankars with minor yellowish Clay and Silt.
73.65	94.52	Clay, Yellowish semi-plastic silty clay admixed with medium grained sub-angular kankar.
94.52	116.00	Clay, Yellowish plastic clay with occasional medium kankar.

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Table-3**Depth to Water Level of National Hydrograph Monitoring Stations (CGWB) around the Bhagat Hospital, Block-D, Janakpuri, New Delhi**

Name of the National Hydrograph Monitoring Station	Distance from Bhagat Hospital, Janakpuri (KMS)	Depth to Water Levels (m below Ground Level)					
		June, 2021	August, 2021	November, 2021	Jan, 2022	June, 2022	August, 2022
CVD Depot Cant (Deep)	0.8	NA	NA	24.98	24.80	25.94	26.44
Mayapuri	1.24	38.26	36.95	36.66	35.95	35.43	35.38
Janakpuri	2.8	10.05	8.99	7.35	6.86	6.99	6.46
Kabul Line	2.85	32.63	33.05	32.54	32.06	31.79	32.37
Shekhawati Lines	3.39	46.70	44.86	44.37	43.79	51.52	NA
Vikas puri	4.06	10.77	9.58	7.73	7.11	8.79	7.72
Tagore Garden	4.06	17.89		14.43	13.43	14	14.61

Table-4**Ground Water Quality Analysis (Basic Elements) monitored during June, 2021**

Location	Source	pH	ECin $\mu\text{S}/\text{cm}$ at 25 ^o C	CO ₃	HCO ₃	Cl	SO ₄	NO ₃	F	PO ₄	Ca	Mg	Na	K	SiO ₂	TH as CaCO ₃
				mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
Permissible limit			2000	--	--	1000	400	45	1.5	--	200	100	--	--	--	600
Janakpuri	TW	8.88	1807	42	440	364	17	54	1.30	<0.01	24	83	268	1	29	400
Vikaspuri	TW	8.57	1135	28	341	118	70	25	1.60	<0.01	12	100	205	3.5	21	140
Shekhawati Line	TW	8.32	993	21	298	111	60	16	1.70	<0.01	20	68	84	5.3	23	330

Ground Water Quality Analysis (Heavy Metal Analysis), 2021

Location	Source	Cr	Mn	Fe	Ni	Cu	Zn	As	Se	Ag	Cd	Pb	U
		(ppm)						(ppb)					
Permissible limit		0.05	0.03	0.3	0.02	1.5	15	10	10	100	3	10	30
Janakpuri	TW	BDL	BDL	BDL	BDL	BDL	BDL	0.528	0.023	BDL	0.144	BDL	14.906
Vikaspuri	TW	BDL	BDL	BDL	BDL	BDL	BDL	0.407	0.043	BDL	0.184	BDL	20.735
Shekhawati Line	TW	BDL	0.018	0.025	BDL	BDL	0.606	0.185	0.055	BDL	0.112	1.762	9.881

3. The complainant claimed that the tubewell located in the hospital complex is sealed despite having a valid registration certificate from CGWA. It is to clarify that the registration of tubewell is not valid NOC which is required for withdrawal of the ground water.

4. That it is submitted that as per the notification of Govt. of NCT, Delhi, Vide order No F8 (348)/EA/Env/09/ 1041-1061 dated 18.05.2010, the Lt. Governor of NCT Delhi has directed for regulation of ground water through bore well/ tube well in the whole NCT Delhi. No one can extract ground water for domestic, commercial, agricultural and or industrial uses without prior permission of the “**Competent Authority**” i.e DJB/ NDMC. District Magistrate of each district, appointed as “**Authorized Officer**” for the purpose of regulation of ground water development and management in the respective revenue areas under their jurisdiction. De-sealing of the tubewell located in the hospital can be done by the District Magistrate of New Delhi district.

5. That CGWA is not regulating the ground water extraction in NCT, Delhi and DJB/District administration is responsible for taking action against the illegal extraction of ground water.

6. That it is recommended that hospital authorities obtain No Objection Certificate / suitable permission from DJB duly recommended by District Advisory Committee for running the tubewell.

The present submissions / comments with respect to status of ground water in the area may kindly be taken on record. The above is submitted for perusal of Hon'ble NGT and CGWA will abide by any orders passed in the matter by this Hon'ble Tribunal.

Syed Khaja Mohiddin

Head of the Office,

CGWB, State Unit Office

कार्यालय प्रमुख
Head of Office
राज्य एकक कार्यालय
State Unit Office
केंद्रीय भूमि जल बोर्ड
Central Ground Water Board
नई दिल्ली-110066
New Delhi-110066

Place: New Delhi

Dated: 03-10-2022