BEFORE THE NATIONAL GREEN TRIBUNAL
EASTERN ZONE BENCH,
KOLKATA

.....

ORIGINAL APPLICATION No.34/2023/EZ

IN THE MATTER OF:

In Re-News Item published in the Times of India Newspaper, Calcutta edition dated 23.03.2023 titled Kolkata Water Table Dips 2m in 5 years, Experts flag rise in arsenic, salinity

....Applicant(s)

Versus

1. **Central Ground Water Authority**
   Through Member Secretary,
   Jam Nagar House, Man Singh Road,
   Delhi-110011

2. **Ministry of Environment, Forests and Climate Change,**
   Through Secretary,
   Indira Paryavaran Bhawan, Jor Bagh Road,
   Aliganj, New Delhi-110003

3. **State Water Investigation Directorate (SWID), West Bengal**
   Through Director,
   State Water Investigation Directorate, Nirman Bhaban,
   3rd Floor, Salt Lake City, Kolkata-700091

4. **Kolkata Municipal Corporation**
   Through Municipal Commissioner,
   5, S.N. Banerjee Road, Kolkata-700013

5. **Central Pollution Control Board**
   Through Senior Scientist,
   Parivesh Bhawan, East Arjun Nagar,
   Delhi-110032

6. West Bengal Pollution Control Board
Through Member Secretary,
Paribesh Bhawan, 10A, Block-LA,
Sector-III, Salt Lake, Kolkata

7. Public Health Engineering Directorate
Janaswasthya Karigari Bhawan (NIJALAYA),
CN8, Street Number 18, CN Block,
Sector-V, Bidhannagar, Pin-700091

....Respondent(s)

COUNSEL FOR APPLICANT:

Suo Motu

COUNSEL FOR RESPONDENTS :

Mr. Ashok Prasad, Advocate for R-1,
Mr. Apurba Ghosh, Advocate for R-2),
Mr. Sudip Kumar Dutta, Advocate for R-3 & 7,
Mr. Sibojyoti Chakraborty, Advocate a/w
Mr. Prithwish Basu, Advocate for R-4,
Mr. Surendra Kumar, Advocate for R-5,
Mr. Dipanjan Ghosh, Advocate for R-6

JUDGMENT

PRESENT:
HON'BLE MR. JUSTICE B. AMIT STHALEKAR (JUDICIAL MEMBER)
HON'BLE DR. ARUN KUMAR VERMA (EXPERT MEMBER)

Reserved On:- 24th November, 2023
Pronounce On:- 1st December, 2023

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1. Whether the Judgment is allowed to be published on the net? **Yes**

2. Whether the Judgment is allowed to be published in the NGT Reporter? **Yes**

Heard the learned Counsel for the parties and perused the documents on record.

2. This matter has been taken up by this Tribunal on the basis of news report published in the 'Times of India' Newspaper, Calcutta edition dated 23.03.2023 which reads as under:-

> *"An analysis of the Central Ground Water Board's data on groundwater for 2017-21 has revealed a 2.1m drop in Kolkata's groundwater level, a decline of 18.6% over the level recorded five years ago. For South 24 Parganas, the drop is 2.5m, or 27.8% from what it was five years ago. If left unchecked, the depletion for Kolkata could be 44% by 2025, say researchers. This is particularly worrisome since depletion in water level raises the possibility of arsenic contamination and increases salinity. Higher arsenic contamination has already been reported in Kolkata and South 24 Parganas.*
>
> *"The groundwater forecast based on the current rate of rainfall, flooding and drought-like situations coupled with indiscriminate withdrawal indicates a 44% reduction in Kolkata's water table by 2025. This will almost certainly trigger a water crisis in the city," said Dr. Nirmala K, a senior researcher at Switch on Foundation, who has analyzed the CGWB data to arrive at the ominous forecast. Groundwater levels in Kolkata and South 24 Parganas are dipping at an alarming rate, scientists have warned. In Kolkata, homes are primarily responsible for groundwater depletion while in the districts, it is the agriculture sector that withdraws the maximum quantity of ground water. "The withdrawal is much higher than replenishment. This is why critical areas are increasing. This also accentuates the arsenic and salinity level of water," said S P Sinha Roy, former director of CGWB and member of the Central Groundwater Authority. Groundwater depletion will also hasten the death of the rivers, said river expert and Pollution Control Board chairman Kalyan Rudra. "During*

the lean months, the groundwater maintains the base flow of the rivers and keeps them alive. If the groundwater gets depleted to a dangerous level, many rivers will die permanently," he said. "As per the initial findings, groundwater usage across Bengal should be carefully monitored using multi-source data to assess actual groundwater use and recharge across the region. It is of utmost importance given the fact that groundwater use across Bengal is rising, especially post 2011 when regulations were relaxed," said Prof. Pennan Chinnasamy, faculty at Indian Institute of Technology, Bombay, and founder director of Rural Data Research and Analysis (RuDRA) Labs. Vinay Jaju of Switch on Foundation said, "We have technology solutions and with awareness and change in habits, we can work on conserving water on a war footing mode."

3. The article states that the data submitted by the Central Ground Water Board shows that between 2017-21 the ground water level in Kolkata has dropped by 2.1m which is a decline of 18.6% over the level recorded five years ago. For South 24 Parganas, the drop-in ground water level is 2.5m, or 27.8% from what it was five years ago. If the depletion in ground water in Kolkata is not checked, the fall in ground water level would reach 44% by 2025 as per the research data. It is also reported that higher arsenic contamination has already been reported in Kolkata and South 24 Parganas which is likely to increase due to depletion of ground water.

4. Notices were issued to the Respondents for filing their responses.

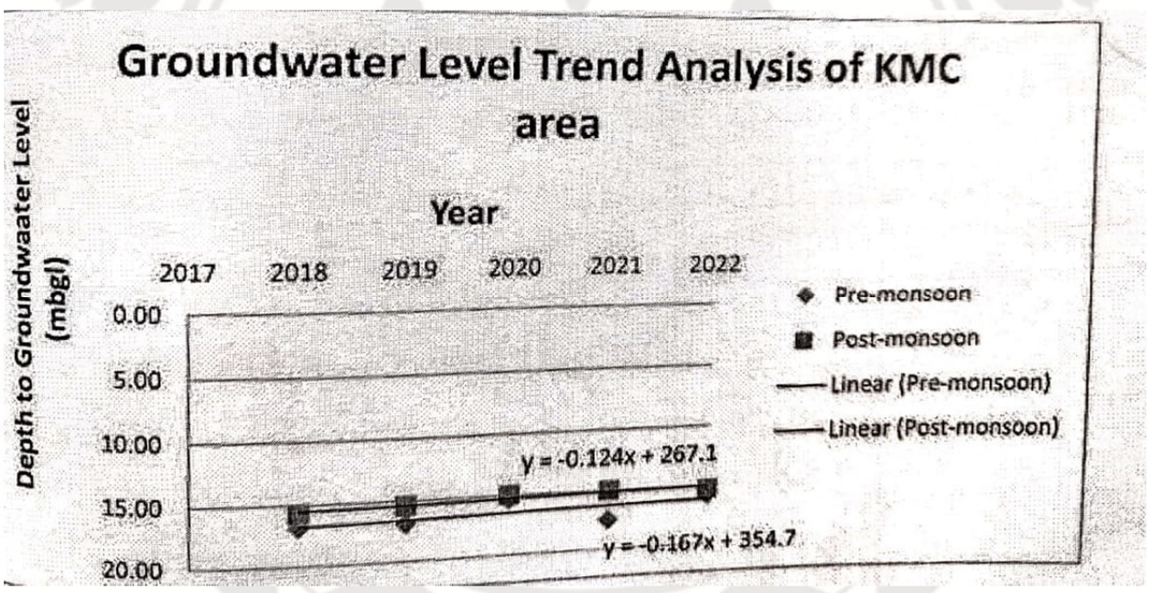
5. The Respondent No.3, State Water Investigation Directorate (SWID), West Bengal, has filed affidavit dated 26.04.2023 stating that effective involvement in ground water assessment work with the acquired Depth to Water Level (DTWL) Data and Ground Water Samples collected on periodical basis i.e. four times in a year (January-April-August-November) from the different Permanent Hydrograph Stations (PHS) situated within the Kolkata Municipal Corporation area, which leads to the Estimation Work of Ground Water Resources which is performed jointly with the Central Ground Water Board, Eastern Region. It is also stated that monitoring of water quality by chemical analysis of the samples is carried out twice in a year i.e. Pre-Monsoon in April and Post-Monsoon in November.

6. Another affidavit dated 04.07.2023 has been filed by Respondent No.3 stating therein that on receipt of the order of the Tribunal dated 24.03.2023, a letter was sent to the Regional Director, Central Ground Water Board, Eastern Region, Kolkata, requesting them to provide Detailed Ground Water Level data of Kolkata (KMC) and South 24 Parganas Districts with reference to the report published in the "Times of India" which is subject matter of the present Original Application. It is also stated that as per analysis of the data collected from different monitoring stations, by SWID in the last five years i.e. 2018-2022, the average depth to water level of Kolkata shows a rising trend in both Pre-Monsoon (16 cm) & Post-Monsoon (12 cm) season. It is also stated that the fluctuating nature of the depth to water level in both Pre-Monsoon

and Post-Monsoon seasons depends on the amount of rainfall for that particular year. Average Depth to Water Level (DTWL) data of last five years of Kolkata has been given in a box as quoted in paragraph-8 of the affidavit which reads as under:-

Year	***2018 (mbgl)***	***2019 (mbgl)***	***2020 (mbgl)***	***2021 (mbgl)***	***2022 (mbgl)***
Pre-monsoon	*16.81*	*16.84*	*15.26*	*17.41*	*15.69*
Post-monsoon	*15.66*	*15.37*	*14.92*	*14.98*	*15.23*

7. The Groundwater Level Trend Analysis of KMC area has also been given which is as under: -



8. It is stated that as per chemical analysis data within the KMC area only in 4 locations i.e. Ward No.96, 122, 55 & 113, a higher arsenic concentration (< 0.01 p.p.m. as per W.H.O. Guidelines) the highest being 0.0299 p.p.m. in Ward No.55 in the ground water samples has been encountered which information has also been provided to the KMC for proper mitigation

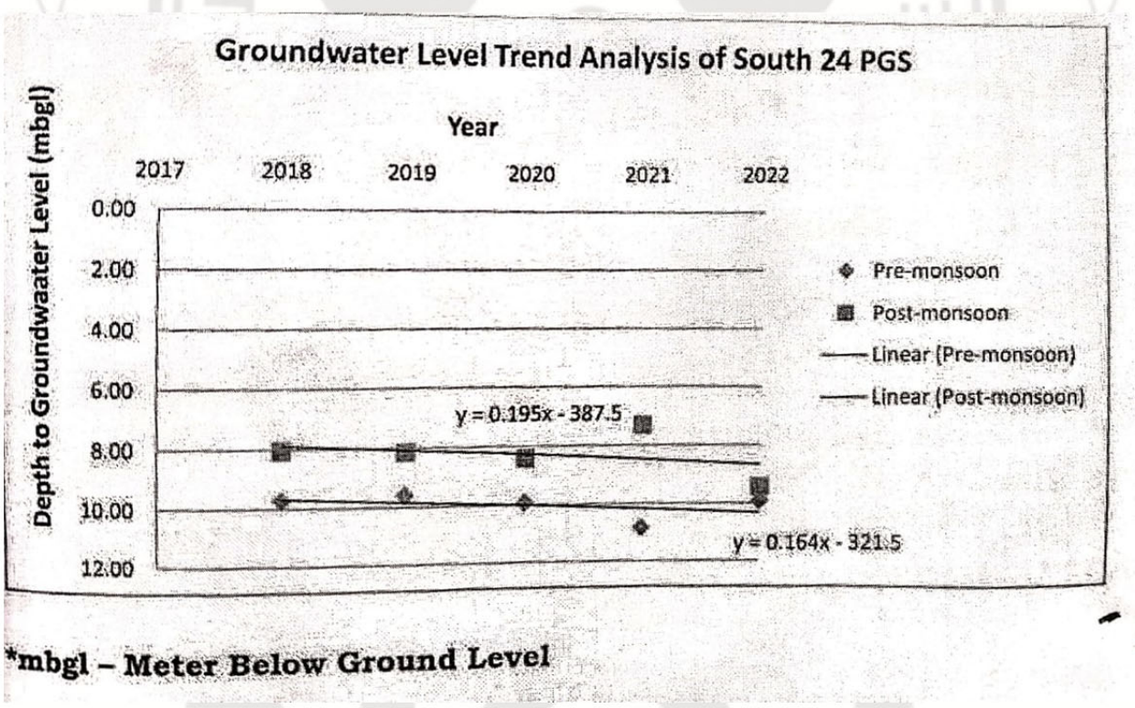
9. It is also stated that in the South 24 Parganas, the trend analysis of the average depth to water level shows a declining

nature in both Pre Monsoon (16 cm) & Post Monsoon (19 cm) seasons. It is further stated that the average data shows fluctuation in nature which on the other hand depends on the amount of rainfall for that particular year. The relevant data and graph with trend analysis is given as under: -

South 24 Parganas

Year	***2018 (mbgl)***	***2019 (mbgl)***	***2020 (mbgl)***	***2021 (mbgl)***	***2022 (mbgl)***
Pre-monsoon	*9.72*	*9.59*	*9.92*	*10.83*	*9.92*
Post-monsoon	*8.04*	*8.13*	*8.40*	*7.30*	*9.43*

10. The Groundwater Level Trend Analysis of South 24 Parganas is shows as under: -



***mbgl – Meter Below Ground Level**

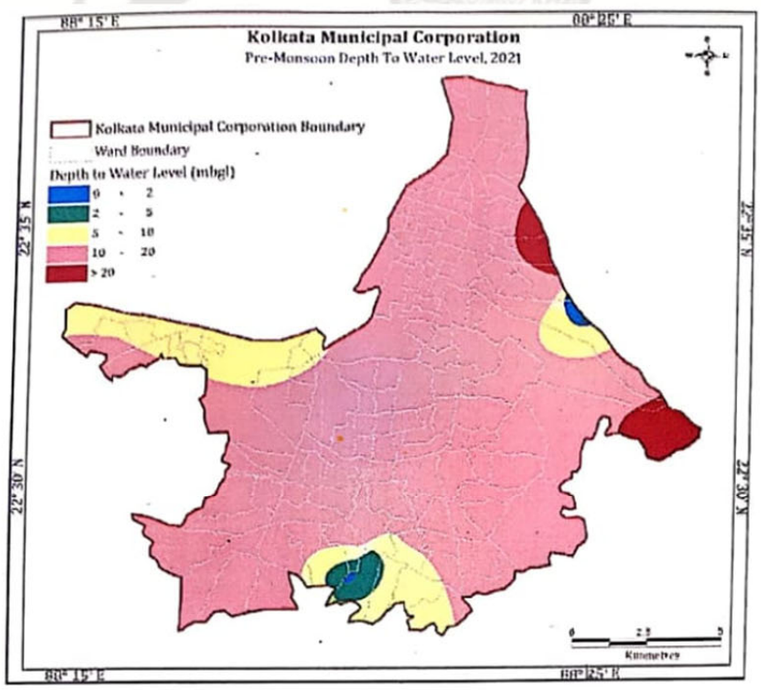
11. As regards presence of arsenic in South 24 Parganas District, it is stated that sporadic occurrence of arsenic has been observed in ten blocks namely Jaynagar-I, Baruipur, Bhangore-I, Bhangore-II, Sonarpur, Bishnupur-I, Bishnupur-II, Budgebudge-II, Morahat-II & Basanti where higher concentration of arsenic has been reported

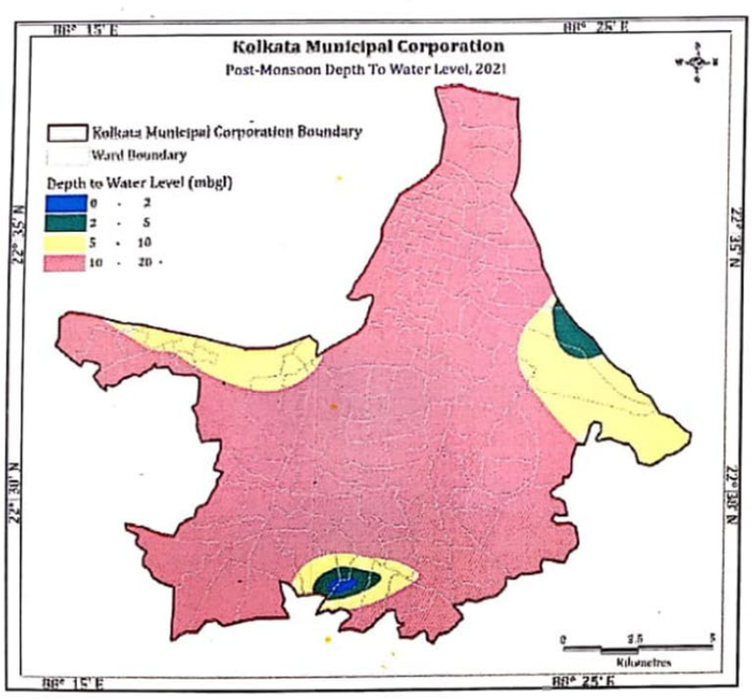
with the highest amount being 0.5 p.p.m. in Bhangore-I Block. This information has been given to the District Level Authority /District Level Ground Water Resources Development Authority of South 24 Parganas as well as Public Health Engineering Directorate (P.H.E.) which is a member of the District Level Authority.

12. The Department of Environment has filed a Report along with its affidavit dated 28.06.2023 giving the information which is already provided in the affidavit of the SWID, West Bengal.

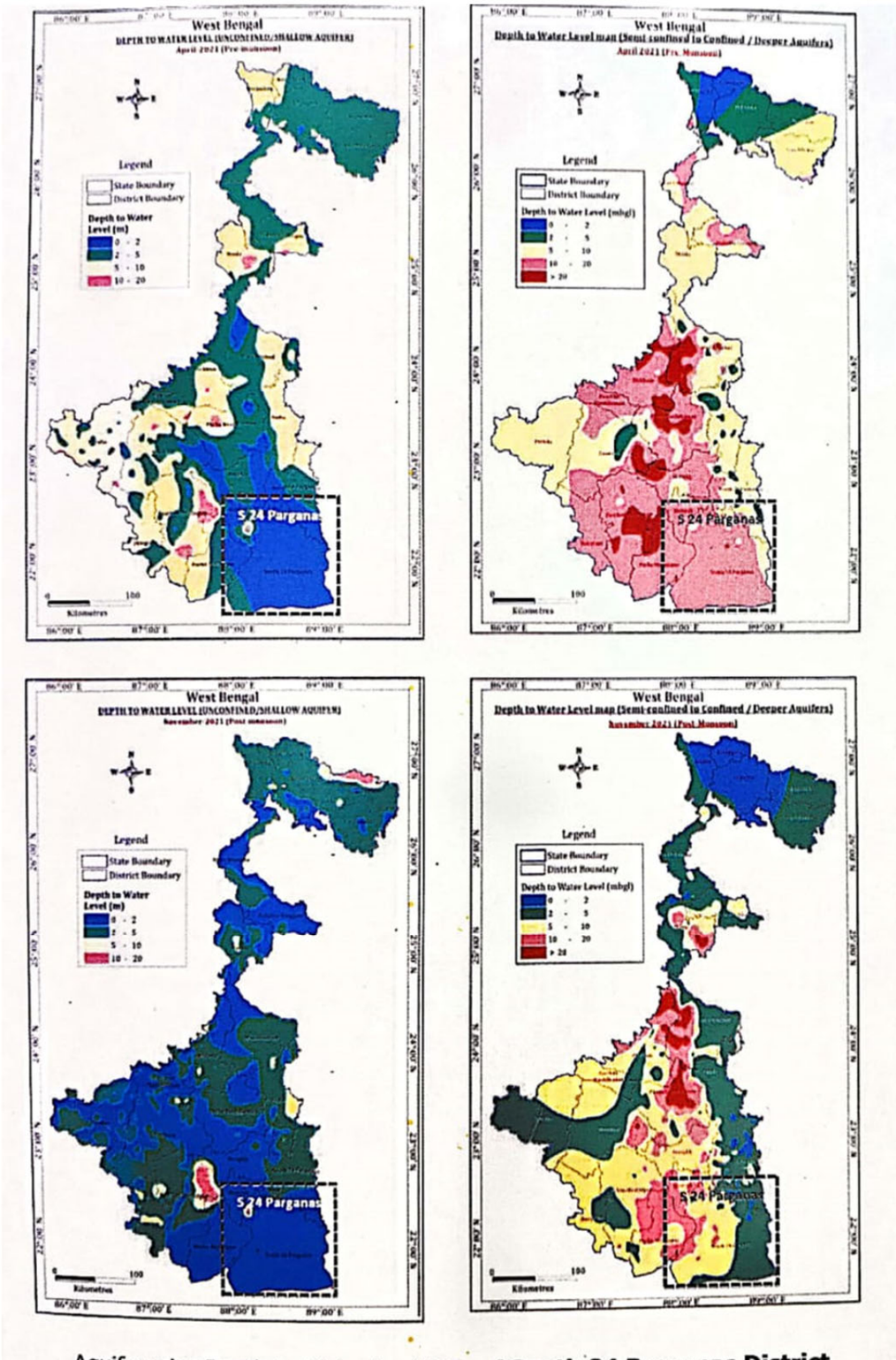
13. The Respondent No.1, Central Ground Water Board in its affidavit dated 27.06.2023 has stated that in Kolkata city and South 24 Parganas district, in sub-surface, multiple water bearing zones (aquifers) exist which are mostly composed of sand separated by layers of clay. It is stated that top clay zone is 10-60m thick. Within this top clay zone, there are some pockets of sand which hold water in the area. These small sand zones are called Perched Aquifers and deeper zones are called Confined Aquifers. It is stated that the Perched Aquifer Zones support Dug-wells whereas the deeper Confined Aquifer horizons are exploited through tube-wells. It is also stated that the Central Ground Water Board ('CGWB' for short) conducts monitoring for Kolkata city on a monthly basis and four times in a year for South 24 Parganas district. Depth to water levels are collected from both dug wells and tube wells. Dug well data represents the water table of Perched Aquifers of the area, while tube wells represents the data of Confined Aquifers depending on the depth of groundwater measuring station.

14. It is stated that in district within Kolkata Municipal Corporation, there are 35 observation wells and in South 24 Parganas, there are 131 observation wells. It is also stated that water level is also season specific and which decline in summer time (pre monsoon season) and rises after rainy period (post monsoon season). The data which has been filed with the affidavit is as under:-





Depth to Water level Map of **Kolkata city**

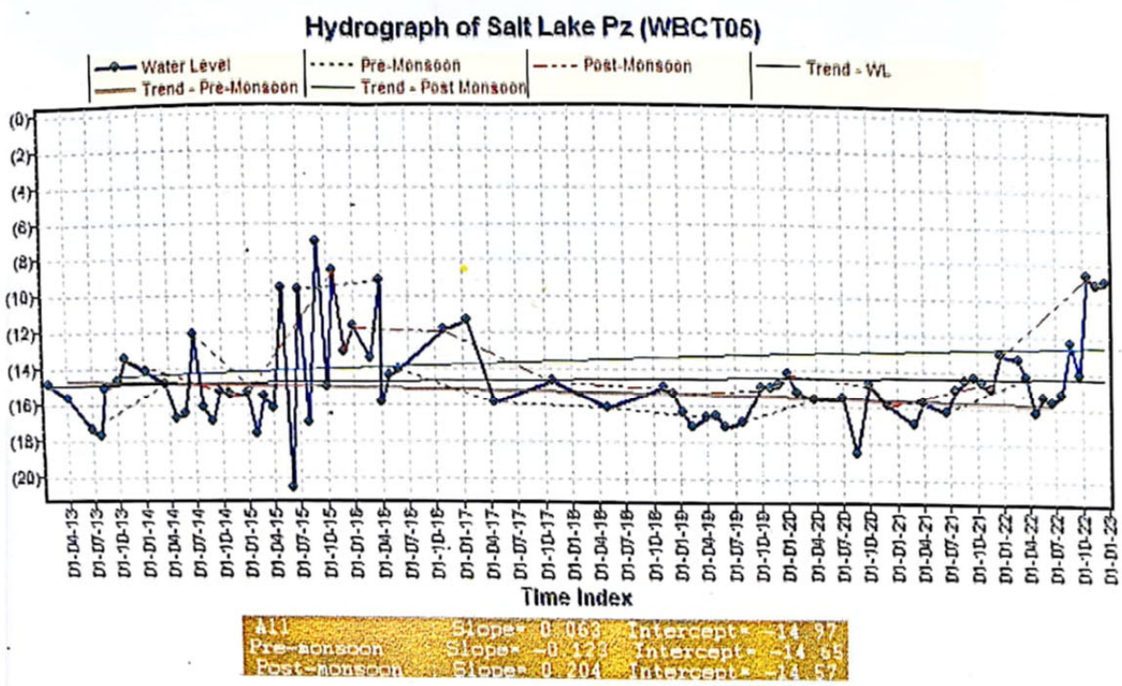


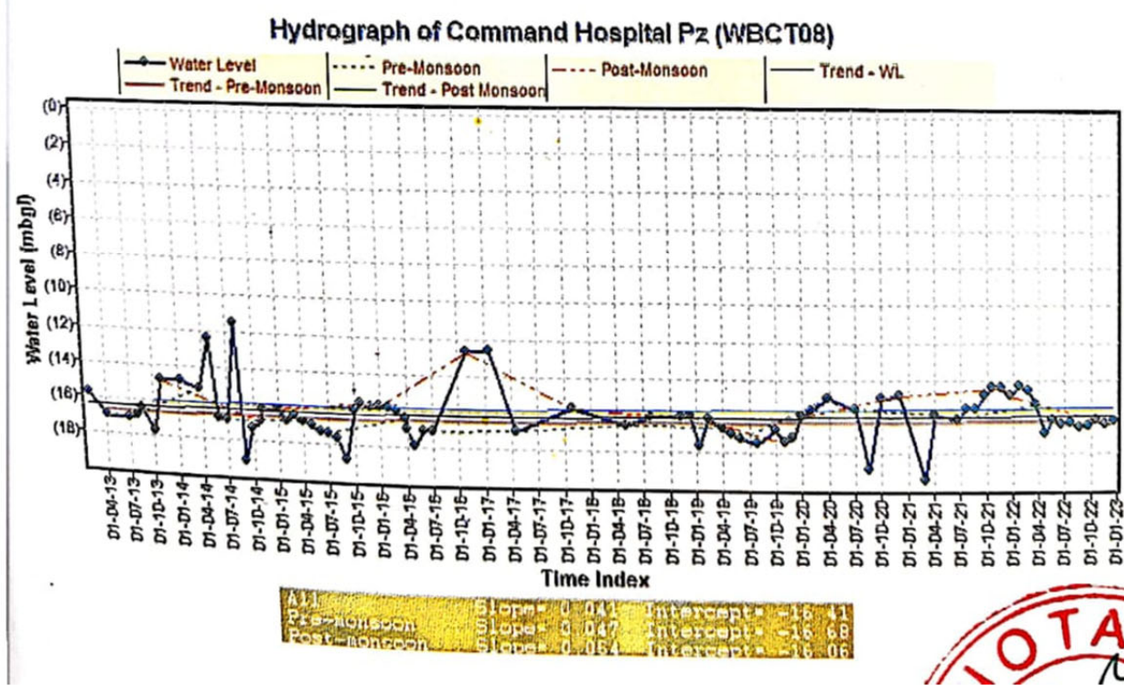
Aquifer-wise Depth to Water level Map of **South 24 Parganas District**

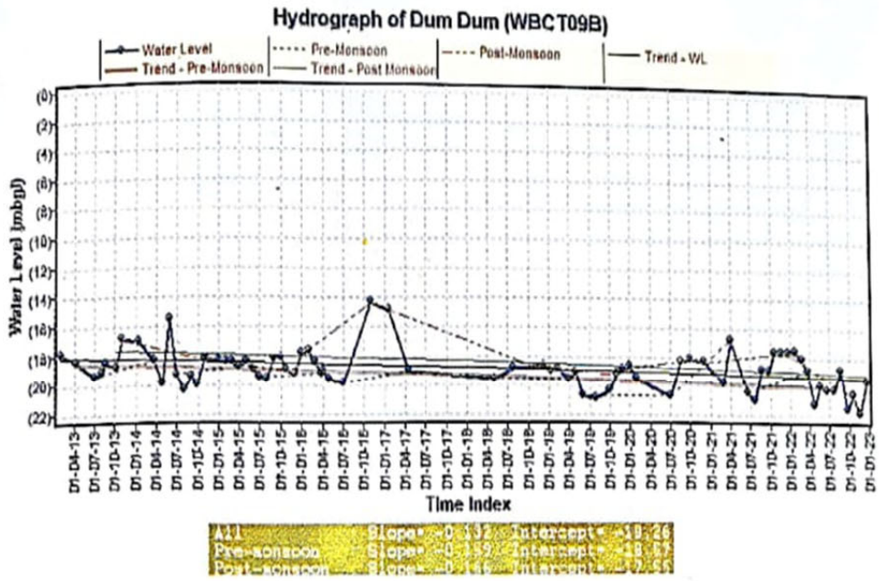
Frequency Table for Water levels in KMC and S 24 Parganas for the year 2017 and 2021 (Pre- and Post-monsoon seasons)

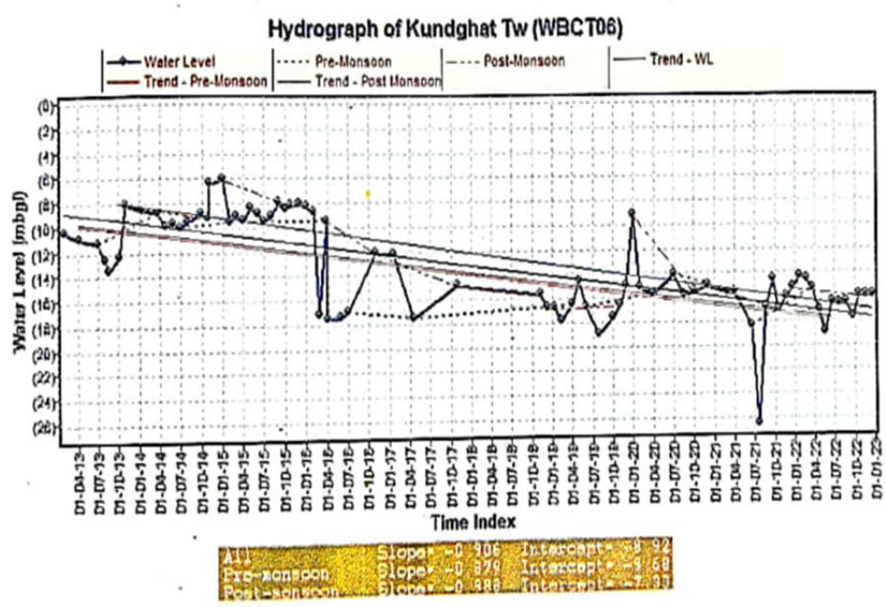
District	Period	No.	0-2 m		2-5 m		5-10 m		10-20 m		> 20 m	
			No	%	No	%	No	%	No	%	No	%
KMC	Apr -17	33	0	0	3	9.1	0	0	27	81.8	3	9.1
KMC	Nov-17	33	2	6.1	1	3.0	1	3.0	29	87.9	0	0
KMC	Mar -21	26	2	7.7	1	3.8	1	3.8	19	73.1	3	11.5
KMC	Nov-21	28	3	10.7	0	0	2	7.1	23	82.1	0	0
S24 Parganas	Apr -17	100	6	6	10	10	56	56	28	28	0	0
S24 Parganas	Nov-17	96	12	12.5	29	30.2	36	37.5	19	19.8	0	0
S24 Parganas	Apr -21	113	3	2.7	6	5.3	10	8.8	92	81.4	2	1.8
S24 Parganas	Nov-21	110	15	13.6	23	20.9	53	48.2	19	17.3	0	0

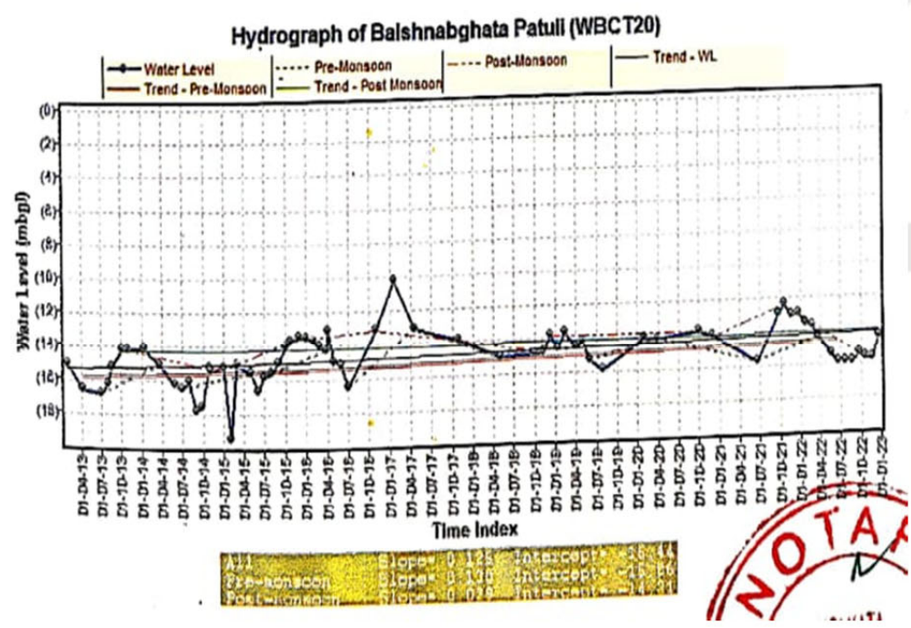
15. It is stated that during the last five years the Central Ground Water Board collected data for 2017-2021 of Groundwater Level wherein more number of stations have shown rise than fall in depth to water level in the Kolkata Municipal Corporation area in both Pre and Post-monsoon season. It is also stated that on the other hand South 24 Paraganas district during Pre-monsoon season has shown a fall. The statistical information given in paragraph-11 of the affidavit reads as under:-

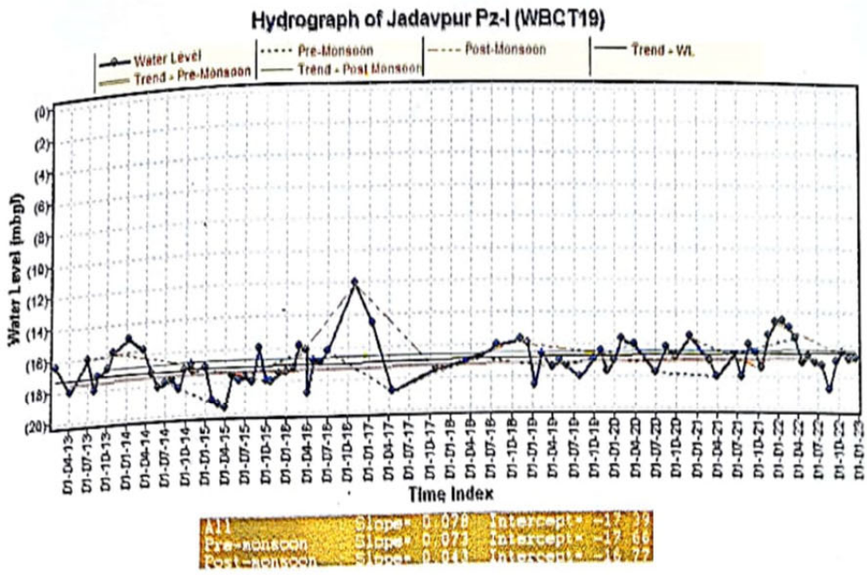


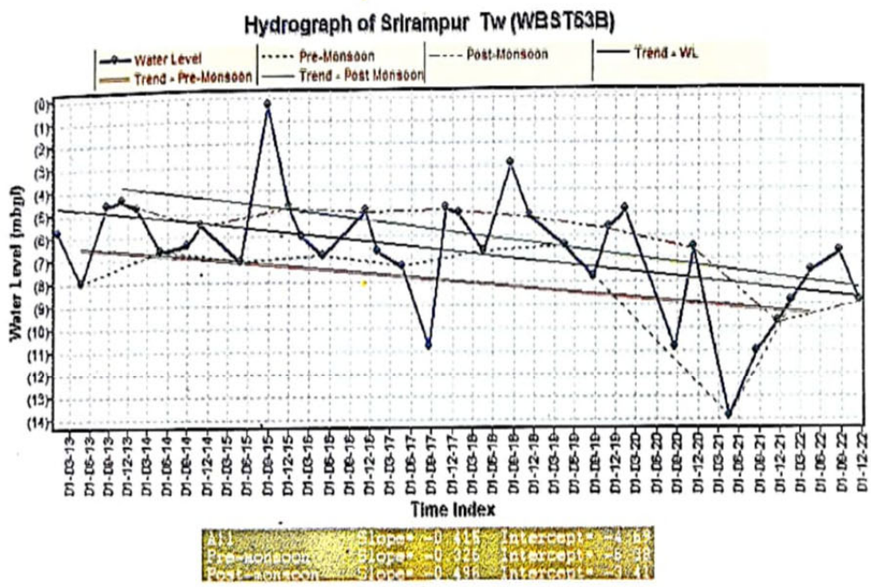


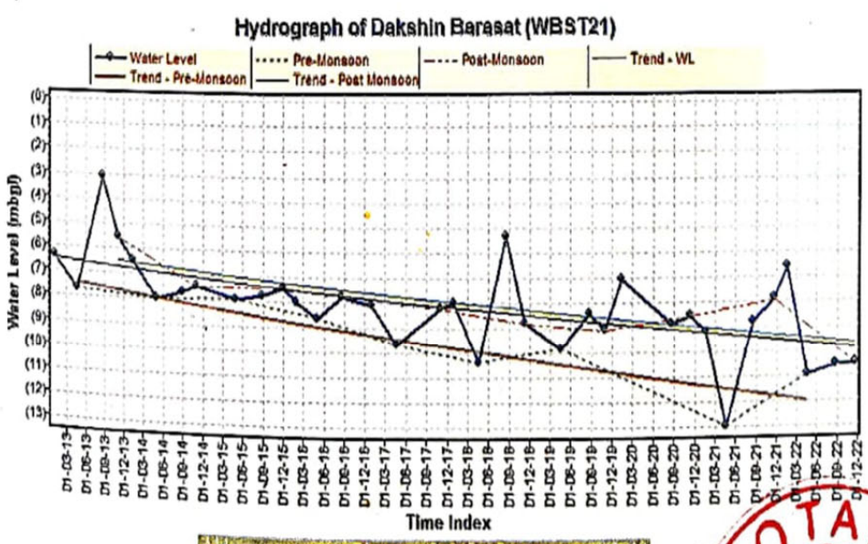

Hydrograph of Dum Dum (WBCT09B)
Water Level
Trend - Pre-Monsoon
Pre-Monsoon
Trend - Post Monsoon
Post-Monsoon
Trend - WL
Water Level (mbgl)
Time Index
All
Pre-monsoon
Post-monsoon


Hydrograph of Kundghat Tw (WBCT06)
Water Level
Trend - Pre-Monsoon
Pre-Monsoon
Trend - Post Monsoon
Post-Monsoon
Trend - WL
Water Level (mbgl)
Time Index
All
Pre-monsoon
Post-monsoon

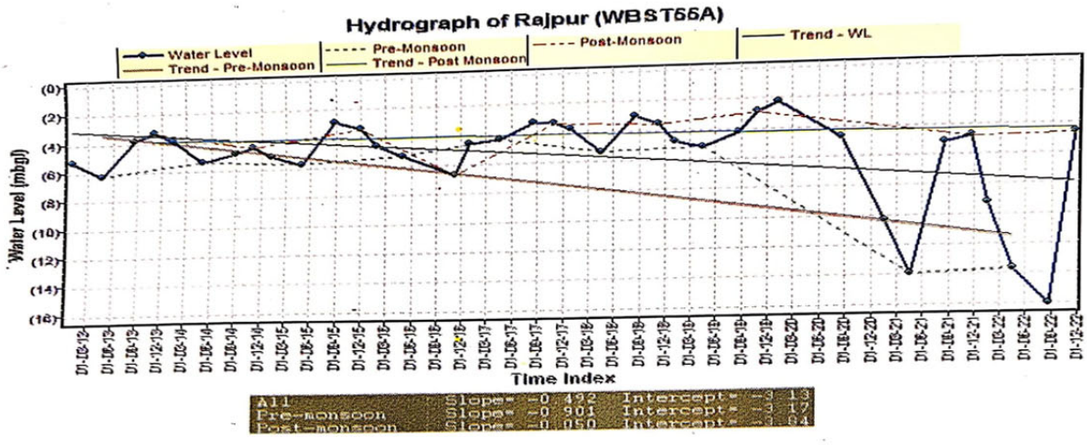

Hydrograph of Balshnabghata Patuli (WBCT20)
Water Level
Trend - Pre-Monsoon
Pre-Monsoon
Trend - Post Monsoon
Post-Monsoon
Trend - WL
Water Level (mbgl)
Time Index
All
Pre-monsoon
Post-monsoon

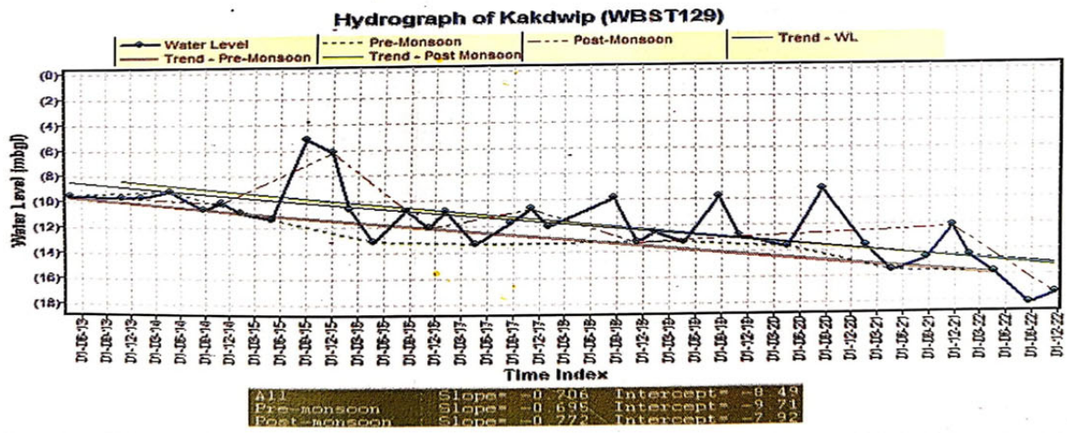






NOTARY KOLKATA





16. It is stated that the Hydrographs shown above show that during last ten years the decline in water level is more prominent in South 24 Parganas district than within the Kolkata Municipal Corporation. The Kolkata Municipal Corporation Hydrographs mostly does not show any decline in water level except Kudghat area. On the other hand, it is stated that in South 24 Parganas district of falling trend in water levels is observed with maximum fall at Kakdeep area. It is also stated that the news reports which is the subject matter of present Original Application is mostly generalized in nature as in the case of the Kolkata city and South 24 Parganas district, the Top Confined layer is generally tapped for water supply not directly connected with River System of the area. It is further stated that the water level within 20m considering top clay layer maximum thickness of 60m indicates pressurized state of

Top Confined Aquifer System. It is stated that the Central Ground Water Board studies have not so far shown any significant correlation within the depletion of groundwater level and water quality in these two districts.

17. With regard to the presence of Salinity and Arsenic the contents of paragraph-12 of the affidavit read as under:-

> *"A. **Salinity***
> ***Electrical Conductivity (EC)** and **Total Dissolved Solids (TDS)** are two parameters which are universally accepted as indicator of salinity. In **Kolkata city and South 24 Parganas district** saline zones are already present which were formed in geological past during marine regressing and formation of Bengal Delta. Sub-surface zone map given earlier depicts identified brackish water zones under KMC area.*
>
> *Below given year-wise frequency table of observed EC values does not show any significant change over the period 2017-2021.*
>
> *i. Year-wise variation of EC in Kolkata City and South 24 parganas District*
> *(EC values are in μ/cm at 25⁰ C)*

District	Year	Total Number of samples analysed	0-250		250-500		500-1000		1000-1500		1500-2000		>2000	
			μs		μs		μs		μs		μs		μs	
			N	%	N	%	N	%	N	%	N	%	N	%
Kolkata	2017	16	0	0	0	0	4	25.0	5	31.3	5	31.3	2	12.5
Kolkata	2018	18	0	0	0	0	4	22.2	5	27.8	8	44.4	1	5.6
Kolkata	2019	14	0	0	0	0	3	21.4	2	14.3	7	50.0	2	14.3
Kolkata	2020	13	0	0	0	0	5	38.5	4	30.8	2	15.4	1	7.7
Kolkata	2021	16	0	0	0	0	4	25.0	4	25.0	6	37.5	2	12.5

District	Year	Total Number of samples analysed	0-250		250-500		500-1000		1000-1500		1500-2000		>2000 μs	
			μs		μs		μs		μs		μs		μs	
			N	%	N	%	N	%	N	%	N	%	N	%
S24P	2017	79	0	0	4	5.1	27	34.2	23	29.1	14	17.7	11	13.9
S24P	2018	51	0	0	1	2.0	22	43.1	19	37.3	3	5.9	6	11.8
S24P	2019	56	0	0	1	1.8	25	44.6	15	26.8	4	7.1	11	19.6
S24P	2020	61	0	0	2	3.3	28	45.9	17	27.9	7	11.5	7	11.5
S24P	2021	84	0	0	0	0.0	36	42.9	26	31.0	14	16.7	8	9.5

> *Below given year-wise frequency table of observed TDS values also does not show any significant change over the period 2017-2021.*

ii. *Year-wise variation of TDS in Kolkata City and South 24 Parganas District*

(TDS values are in mg/L)

District	Year	Total Number of samples analysed	Fresh 0-1000 mg/L		Backish >1000 mg/L	
			N	%	N	%
Kolkata	2017	16	13	81.3	3	18.8
Kolkata	2018	18	11	61.3	7	38.9
Kolkata	2019	14	5	35.7	9	64.3
Kolkata	2020	13	11	84.6	2	15.4
Kolkata	2021	16	12	75.0	4	25.0

District	Year	Total Number of samples analysed	Fresh 0-1000 mg/L		Backish >1000 mg/L	
			N	%	N	%
South 24 Pgs	2017	79	61	77.2	18	22.8
South 24 Pgs	2018	51	43	84.3	8	15.7
South 24 Pgs	2019	56	42	75.0	14	25.0
South 24 Pgs	2020	61	50	82.0	11	18.0
South 24 Pgs	2021	84	68	81.0	16	19.0

B. ***Arsenic***

Arsenic is an extensively discussed issue in recent media. It is known that West Bengal as a state is suffering from ***Arsenic (As)*** *problem. A long patch along the Bhagirathi River is affected by the problem. The same has reported by some researchers in Kolkata City. West Bengal Government has already created* ***Arsenic Task Force*** *in 2005 to tackle the problem.*

CGWB does not monitor for Arsenic in groundwater on annual basis. However, depending on emerging situations, Arsenic analyses from groundwater monitoring stations of CGWB were carried out in 2015 and 2019. Summary of the results are given below.

District	2015		2019	
	Total Number of samples analysed	Number of samples having Arsenic above permissible limit	Total Number of samples analysed	Number of samples having Arsenic above permissible limit
		(>10 µg)		(>10 µg)
Kolkata	26	0	12	0
S 24 Parganas	51	1	56	3

2015				
District	Block	Location	Well ID	As (ppb)
S 24 Parganas	Baruipur	Ramnagar	WBST141	12.0

2019				
District	***Block***	***Location***	***Well ID***	***As (ppb)***
S 24 Parganas	*Bhangar-I*	*Hariharpur*	*WBST047A*	*11.8*
S 24 Parganas	*Gosaba*	*Jotirampur Ferryghat*	*WBST092A*	*19.6*
S 24 Parganas	*Sonarpur*	*Gobindapur*	*WBST118*	*46.1*

*Results shows that no **As** had been detected in Kolkata City whereas **As** had been detected from South 24 Parganas district. The area where **As** is observed in South 24 Parganas district, entire blocks of Bhangar-I and Sonarpur was already declared as **As affected area** by Arsenic Task Force, GoWB.*

18. So far as presence of Arsenic is concerned, it is stated that the results extracted hereinabove show that no arsenic has been detected in Kolkata city whereas arsenic has been detected from South 24 Parganas district. It is also stated that the area where arsenic is observed in South 24 Parganas district, entire blocks of Bhangar-I and Sonarpur have been declared as arsenic affected area by the Arsenic Task Force, Government of West Bengal.

19. The Respondent No.7, Public Health Engineering Directorate has filed affidavit dated 05.07.2023 stating therein that in South 24 Parganas district several piped water supply projects have been taken up under the Jal Jeevan Mission (JJM) for uncovered areas where no piped water supply exists, and also for augmentation of water supply of already covered areas. It is also stated that new piped water supply schemes based on ground water sources are being implemented taking utmost care to tap the deepest layer of water which is generally devoid of arsenic contamination.

20. With regard to Salinity in water, it is stated that Chloride value of ground water based drinking water sources are generally within permissible limit except in some areas under coastal block for

which efforts are being made to carry water from source of a faraway source to this area, besides, routine water test is being carried out on a regular basis in the National Accreditation Board for Testing and Calibration Laboratories (NABL) accredited and recognized laboratory. It is also stated that as per water test reports arsenic concentration is within permissible limit. The ground Water Level Fluctuation (WLF) in South 24 Parganas district is given in the table extracted herein below: -

South 24 Parganas																					
Time Period	No. of Wells/Stations analyzed	Fall in m						Rise in m						Total No. of Wells/Stations					
		0-2	%	2-4	%	>4	%	0-2	%	2-4	%	>4	%	Total Fall	% of Total Fall	% Mean Fall	Total Rise	% of Total Rise	% Mean Rise
2017-2018	85	28	32.9	3	3.5	1	1.2	40	47	8	9.4	5	5.9	32	37.65		53	62.35	
2018-2019	83	44	53	10	12	3	3.6	18	22	6	7.2	2	2.4	57	68.67		26	31.33	
2019-2020	82	35	39	4	5.2	1	1.3	32	42	4	5.2	6	7.8	40	48.78	51.76	42	51.22	48.23
2020-2021	94	22	23.4	14	15	26	27.7	26	28	5	5.3	1	1.1	62	65.96		32	34.04	
2021-2022	98	25	25.5	10	10	2	2	23	24	22	22.4	16	16.3	37	37.76		61	62.24	

21. The five year depth to water level data in South 24 Parganas district is as under: -

South 24 Parganas Water Level (in m)				
Years	***Pre-Monsoon***	***Mean***	***Post-Monsoon***	***Mean***
2018	*9.72*	*9.99*	*8.04*	*8.26*
2019	*9.59*		*8.13*	
2020	*9.92*		*8.4*	
2021	*10.83*		*7.3*	
2022	*9.92*		*9.43*	

22. Another affidavit dated 21.07.2023 has been filed by Respondent No.7, Public Health Engineering Directorate, stating that Detailed Project Report (DPR) has been prepared for installing Arsenic & Iron Removal Plants (AIRPs) (above 200 removal plants)

for ground water schemes which is given in the table extracted herein below:-

Selected Blocks of South 24 Parganas	
Blocks	***No. of Arsenic & Iron Removal Plants (AIRPs)***
Bishupur I	*35*
Bhangar I	*29*
Sonarpur	*33*
Baruipur	*70*
Jaynagar I	*33*
Mograhat II	*32*

23. It is stated that two field scale technologies are being developed i.e. Shujapur-Shahidpur & Gobordanga Models of Arsenic & Iron Removal for arsenic mitigation. It is also stated that the basic removal process of the plant is followed by Oxidation, Filtration, Coagulation and finally Adsorption method. The treatment units/chambers are designed and name as Baffled Flocculator, Plain Sedimentation Tank, Partial Gravity System with pressure type filter and Activated Alumina Chamber for final adsorption. The capacity of the removal plants are designed on the basis of population dimension by individual water supply schemes (from 20 to 50 cum/hr.). It is stated that raw water is generally oxidized by suitable chemical agent for effectively removing "Total Arsenic" where the hydraulic operation of the system is partial gravity flow (without any pump) followed by pressure filter device to remove Activated Alumina. A backwash system has been designed to operate to prevent the media from clogging. It is also stated that both raw water and treated water would be regularly tested to ensure arsenic concentration and thereafter supplied as safe water to the people for consumption.

24. One more affidavit dated 22.09.2023 has been filed by Respondent No.7, Public Health Engineering Directorate, stating therein that in South 24 Parganas district, the major water supply scheme "Surface Water Based Supply Scheme for Kulpi and adjoining Blocks" is being implemented for suppling purified drinking water in ten blocks namely Kulpi, Diamond Harbor-I, Diamond Harbor-II, Magrahat-I, Mathurapur-I, Mathurapur-II, Mandirbazar, Jaynagar-II, Kultali, Falta, It is also stated that the scheme utilizes water from Hooghly River and consists of a Water Treatment Plant having capacity of 52 million gallons per day to provide drinking water to a population of 32.89 lakhs free from arsenic contamination. It is further stated that the district has 18 laboratories out of which 17 are accredited with NABL. It is stated that arsenic contamination so far has been observed only in shallower depths in a few blocks i.e. Bishnupur, Baruipur, Sonarpur, Bhangar-I, Joynagar-I and Magrahat-II which is not significantly established to be beyond permissible limit. It is also stated that provision for Arsenic & Iron Removal Plant has been made in the Detailed Project Report (DPR) for the new piped Water Supply Scheme in the area of installation. Other blocks in the district are not found to be contaminated with arsenic. It is stated that 17020 tests have been conducted by 163 active facilitators in the financial year 2023-24 and no adverse result relating to arsenic contamination has been reported so far. It is further stated that 41.36% of villages have been tested using both Laboratory and Field Testing Kits (FTK). A total number of 3506 Asha Workers have been

trained till date for testing water samples using Field Testing Kits. It is stated that considering the rising trend and distressing nature of contamination of this metalloid, 232 Arsenic and Iron Removal Plants for Ground Water Schemes have been considered for implementation in the Detailed Project Report (DPR).

25. It is further stated that 883 number of schemes have been sanctioned in district South 24 Parganas having a total value of Rs.6114.41 Crores. It is also stated that 1144 Big Dia. Tube-wells are projected to be sunk under these sanctioned schemes.

26. The Respondent No.4, Kolkata Municipal Corporation, has filed affidavit dated 23.11.2023 stating that Kolkata Municipal Corporation has provided portable drinking to almost every part of the city free of arsenic. It is also stated that about 5 lakh premises have been provided with piped water which is about 98% of the city's population. It is also stated that the benefit of piped water supply to the remaining population of the city by regular development work for generation as well as distribution segment of water supply system will be completed tentatively in five years. It is further stated that at present directions for rain water harvesting for recharging the water table has been made applicable for buildings having an area of 20,000 Sq. Mt. or more as per State Environment Impact Assessment Authority (SEIAA), West Bengal Notification dated 17.12.2019 and Kolkata Municipal Corporation Office Circular No.8 of 2019-2020.

27. Considering the documents on record and the stand taken by the Respondents, we direct the State Respondents to expedite

implementation of its Detailed Project Report (DPR) within three years with a further direction that the Government shall carry out Water Testing Programmes at regular intervals and ensure that there is no arsenic contamination in the water.

28. A further direction is issued to the Kolkata Municipal Corporation to complete its Project of supplying potable drinking water to the remaining population of the city within a period of three years.

29. With the aforesaid directions, the Original Application No.34/2023/EZ is disposed of.

30. Interlocutory Applications, if any, stand disposed of accordingly.

31. There shall be no order as to costs.

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B. AMIT STHALEKAR, JM

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Dr. ARUN KUMAR VERMA, EM

Kolkata,
December 1, 2023,
Original Application No.34/2023/EZ
MN