Item No.09 Court No. 2

BEFORE THE NATIONAL GREEN TRIBUNAL
PRINCIPAL BENCH, NEW DELHI

Original Application No. 621/2023

Dr Sanjay Kulshreshtha Applicant

Versus

State of Uttar Pradesh & Ors. Respondent(s)

Date of hearing: 27.08.2024

CORAM: HON'BLE MR. JUSTICE SUDHIR AGARWAL JUDICIAL MEMBER
HON'BLE DR. AFROZ AHMAD, EXPERT MEMBER

Applicant: Applicant in Person (through VC)

Respondent: Mr. Bhanwar Pal Singh Jadon and Mr. Devesh Pratap Singh, Advocates for State of U.P. Mr. Neeraj Kumar and Ms. Meenakshi Jha, Advocates for Agra Nagar Nigam.
Mr. Arvind Kumar Advocate for UPPCB (through VC)

ORDER

1. This Original Application (hereinafter referred to as '**O.A'**) under Section 14 & 15 of National Green Tribunal Act, 2010 (hereinafter referred to as '**NGT Act, 2010'**) was registered in exercise of *suo-moto* jurisdiction in view of law laid down in ***(2022) 13 SCC 401 in Municipal Corporation of Greater Mumbai v. Ankita Singha & Ors***. on a letter petition dated 11.07.2023 sent by Dr. Sanjay Kulsheshtra, a Senior Consultant, Pediatric Surgeon, R/o 1/171 Delhi Gate, Agra, stating that water from submersible pump is coming, mixed with sewage, causing serious threat to wide spread sewage/fecal borne diseases in large area of city of Agra. Sewage contaminated water is not only coming through borewell of submersible pump, but also in taps of municipal water

supply. Cause of mixing of sewage with groundwater is considered to be the fault in the Sewage Treatment Plant (hereinafter referred to as '**STP'**) of concerned area at Agra. This STP is 36 MLD capacity having 65 feet deep sump well that collects sewage and probably this sewage has leaked to soil. Mixing of sewage with tap water pipes has been reported in past also. However mixing of sewage with groundwater is a serious threat to fecal contamination of a large water table risking a large population. Fecal contamination is worst kind of infection where spores of some anaerobic organisms can stay in ground for decades. Silt of sewage is not being properly disposed as most of it is being dumped to river Yamana.

2. Tribunal took cognizance of complaint on 02.01.2024. On being *prima facie* satisfied that a substantial question relating to environment has arisen out of the implementation of the enactments is specified in Schedule I of NGT Act, 2010, it impleaded following as respondents:-

(1) State of Uttar Pradesh, through Chief Secretary, Government of Uttar Pradesh

(2) U.P. Jal Nigam, through its Chairman,

(3) Principal Secretary, Ground Water Department, Government of Uttar Pradesh

(4) Commissioner, Municipal Corporation, Agra,

(5) District Magistrate, Agra, and

(6) UPPCB, through its Member Secretary

3. Tribunal issued notices to above respondents requiring them to file their responses.

4. Further Tribunal found it appropriate to obtain a factual report and for the purpose constituted a Joint Committee comprising representatives of Central Ground Water Authority, UP State Groundwater Authority,

District Magistrate, Agra, Commissioner Municipal Corporation, Agra and UP Pollution Control Board (hereinafter referred to as **'UPPCB'**).

5. The said Committee was directed to meet within two weeks, undertake visits to the site, look into grievance of the applicant, associate him and representatives of the concerned project proponent, verify factual position and suggest remedial action.

6. The committee was required to submit its report within one month.

7. Pursuant to order dated 02.01.2024, Joint Committee submitted report dated 19.02.2024 vide email dated 21.02.2024. The report shows that members of the Committee visited the site on 19.01.2024 to verify factual position. Applicant was informed to remain present during course of inspection but on account of his preoccupation he communicated that he will not be able to remain present during the course of inspection. Committee has recorded its observations stating that 36 MLD Main Pumping Station and STP is operated and maintained by Construction and Design Services, U.P Jal Nigam, Agra. It has been constructed by said body on behalf of Agra Development Authority through M/s Awadh Developers Private Limited New Delhi. Construction work of STP and Main Pumping Station commenced in 2011 and STP was commissioned in 2016 which caters domestic sewage of Shastripuram, Awas Vikas Colony and Jagdishpura area. Domestic sewage is collected at 36 MLD Main Pumping Station through gravity by sewer line and pumped with the help of 180 HP motors to 36 MLD STP for treatment.

8. Project Manager of STP informed that there were two sump wells of 45 feet and 65 feet at 36 MLD Main Pumping Station where domestic sewage is collected and pumped to STP for treatment. However, no

episode regarding leakage of sewage from the sump well was reported. At the time of inspection, 36 MLD main pumping station was operational.

9. Committee collected 02 groundwater samples from submersible located at Main Pumping Station and nearby area. At the time of inspection, 36 MLD STP was also operational. One groundwater sample was collected from submersible located at STP and another groundwater sample was collected from hand pump located near 36 MLD STP. Details of analysis report of groundwater samples collected have been given in the form of a chart. Recommendations and observations are summarized in the report as under.:-

> *"36MLD Main Pumping Station (MPS) and Sewage Treatment Plant (STP) is being operated and maintained by Construction and Design Services, U.P Jal Nigam, Agra. At the time of inspection Shri Bhupendra Kumar, Project Manager, Shri Wasif Kirmani, Resident Engineer, Construction and Design Services, U.P Jal Nigam, Agra were also present.*
>
> *Project Manager informed that 36MLD Main Pumping Station (MPS) and Sewage Treatment Plant (STP) has been made by Construction and Design Services, U.P Jal Nigam, Agra on behalf of Agra Development Authority and constructed by M/s Awadh Developers (P) Ltd., New Delhi. The construction work has been started in the year 2011 and was commissioned in the year 2016 which caters the domestic sewage of Shastripuram, Awas Vikas Colony and Jagdishpura area. The domestic sewage is collected at 36MLD Main Pumping Station (MPS) through gravity by the sewer line which is further pumped with the help of 180HP motors (05 Nos.) to 36MLD STP for treatment.*
>
> *Shri Bhupendra Kumar, Project Manager informed that there are two sump wells of 45 Feet & 65 Feet depth at 36MLD Main Pumping Station (MPS) where the domestic sewage is collected and pumped to 36MLD STP for treatment. No episode regarding leakage of sewage from the sump wells have been reported.*
>
> *At the time of inspection 36MLD MPS was found operational. Two ground water samples have been collected from the submersible located at MPS and near by area (1) Ground water of submersible 36MLD MPS Premises (2) Ground water of sample from Khatter Cold near 36MLD MPS. Joint Committee also visited 36MLD STP at the*

time of inspection STP was operational and one ground water sample was collected from the submersible located at STP and one ground water sample was collected from the handpump located near 36MLD STP. Relevant Photographs taken during sampling is annexed as (Annexure-7).

Analytical results of ground water are depicted in table-1

S.No	Location of Ground water Sample	pH	Colour (Haze n)	TDS	$CaCO_3$	Mg (mg/l)	NO_3	Cr (mg/l)	Cu (mg/l)	Cd (mg/l)	Pb (mg/l)	Zn (mg/l)	Total Coliform
1	Ground water of submersible 36 MLD (MPS Premises)	7.5	Coliourless	1962	380	160	79	ND	0.0013	ND	ND	ND	ND
2	Ground water of sample from Khatter Cold near 36 MLD MPS	7.6	Coliourless	1726	450	170	95.3	ND	0.0013	ND	ND	0.0797	ND
3	36 MLD STP Premises	7.2	Coliourless	682	380	174	49.5	ND	0.0013	ND	ND	0.1221	ND
4	Hand Pump near 36 MLD STP	7.6	Coliourless	286	290	124	22.3	ND	0.0121	ND	ND	0.3214	ND
	Standard: As per ISI0500 Acceptable Limit Permissible Limit in the Absence of Alternate Source	6.5-8.5 No Relaxation	5 15	500 2000	200 600	30 100	45 No Relaxation	0.05 No Relaxation	0.05 1.5	0.003 No Relaxation	0.01 No Relaxation	5 15	Not Detectable

***TDS-Total Dissolved Solids, CaCO-Total Hardness, Ca-Calcium, Mg-Magnesium, Cl-Chloride, NO-Nitrate, Cr-Chromium, Cu- Copped-Cadmium, Pb-Lead, Zn-Zinc, TC-Total Coliform*

Based on the inspection and analytical results major observations and recommendation are summarized as under:

1. *36MLD MPS was operational and sewage collected in the sump wells was being transferred through motors to 36MLD Sewage Treatment Plant. 2.*

2. *36MLD Sewage Treatment Plant based on Sequential Batch Reactor (SBR) Technology was operational and treated effluent is being discharge in irrigation canal.*

3. *Calcium (Ca) at 03 locations is exceeding the permissible limit, Magnesium (Mg) at 04 locations are exceeding the permissible limit, Nitrate (NO_2) at 03 locations are exceeding the Acceptable Limit. No fecal contamination is found in the ground water samples.*

4. *During the inspection, it was observed that there could be several other reasons for the ground water contamination. Detail study is required to find out the geogenic contamination and anthropogenic pollution. Others basic parameter and trace metals analysis are required with proper ground water sampling.*

5. *As per Ground Water Resource Estimation (GWRE) 2023, the Bichpuri block and Agra City are in Over-exploited category and stages of ground water extraction are 170.41% and 113.90% respectively*

6. *As per previous study ground water is not suitable for human consumption due to high contamination of Nitrate and Fluoride and trace elements with highs salinity Limited fresh water pockets available in the city area and blocks.*

7. *In view of over exploitation, limited availability of fresh water pockets and poor quality of ground water, it is recommended that drinking water supply should be supplied through surface water for sustainable development and ground water may be used in other domestic and industrial purpose."*

10. Committee report shows no leakage from sump wells from above, 36 MLD Main Pumping Station STP was found functional and no fecal contamination was found in ground wonder. However, on account of geogenic conditions, presence of heavy metals like Calcium, Magnesium, Nitrate and Copper was found, besides high salinity, and this is because Bichpuri Block and Agra city are in 'over-exploited' category as per Groundwater Resource Estimation of 2023. Committee has said that detailed study is required to find out geogenic contamination and anthropogenic pollution of groundwater.

11. District Magistrate, Agra has also submitted its response/reply vide email dated 05.07.2024 stating that on an average, 381 MLD water is being supplied to approximately 12 lakhs population of Agra city from two water treatment plants established in Agra city. 309 MLD Ganga water is being supplied through rapid Sand Filter Plant and 72 MLD Yamuna water is being supplied through MBBR plant. Drinking water in Agra city is being provided in various areas of Agra city through 30 zonal pumping stations, 30 overhead tanks and underground reservoirs. Whenever any complaint with regard to dirty drinking water or

contaminated drinking water is received, it is immediately attended and resolved. Orthoto Tolidine test is conducted daily at various places in Agra city by collecting water samples by employees of Water Supply Department. Fortnightly water samples are collected from water treatment plant and sent for State Health Institute, Lucknow for analysis of bacterial and chemical test. Under Japan International Corporation Agency assisted Ganga Jal Project tender for Agra Water Supply Scheme, 24/7 water supply project in two pilot project (Sikandra North and Swami Bagh Dayalbagh area) of Rs. 98.82 crore have been finalized and awarded to M/s RGI TAPI, a joint venture. Work is being executed by UP Jal Nigam, (Urban) Agra. Besides, to provide surface water in Agra city, UP Jal Nigam has sent CWAP under Amrit 2.0 program to state government and details as under.

SI.	**U.L.B**	**Description**	**Benefitted Household**	**Amount in Crorc**	**Status**
I	Agra Nagar Nigam	Agra Water Supply (Trans Yamuna Area)	26994	421.98	Tendering is in progress.
2		24x7 Water Supply Scheme for Awas Vikas Colony (Sector-9 & 10), Sikandra	138I	15.28	Tendering is in progress.
		Agra Water supply Scheme (Tajganj and Bundu Katra Zone)	77430	434.00	I)PR under preparation
4		Agra Water Supply Scheme (Sikandra & Shastri Puram Area)	(191 I 7	409.00	Under State Review
5		Agra water Supply Shceme (Shahganj Area)	74885	516.00	Under State Review
6		Agra Water Supply Scheme (Ghatwasan Area)	20742	216.00	_ - Under State Review
8		Agra water Supply Scheme (Core Area)	55687	588.00	Under State Review
9	Agra (Cantonment Board)	Agra Water Supply Scheme (Cantonment Board)	10309	70.00	Under State Review

12. District Magistrate has clearly said that the groundwater of Agra city is saline in nature and not being used for drinking. Groundwater is used for other activities like washing, bathing etc.

13. Respondent 3, Ground Water Department, U.P has submitted a compliance report vide email dated 22.07.2024. Conclusion has been drawn in para 6 from the Joint Committee report that STP and Main Pump Station are being operated and maintained by U.P Jal Nigam, Agra; there is no leakage from the sump well and since extraction of groundwater exceed the recharge category of groundwater at Agra is 'over-exploited' and therefore attempt is being made to supply drinking water to people basically from surfacewater. From the Joint Committee report conclusions drawn by the respondent 3 in its report dated 22.07.2024 are reproduced as under:-

> "6. यह कि संयुक्त समिति द्वारा पूर्व में प्रेषित की गयी रिपोर्ट से स्वतः स्पष्ट है कि सिवेज ट्रिटमेंट प्लांट (STP) एवं मेन पंपिंग स्टेशन (MPS) का संचालन व रख-रखाव उत्तर प्रदेश जल निगम, जनपद आगरा द्वारा किया जा रहा है।
>
> 7. यह कि मेन पंपिंग स्टेशन में 45 फिट व 65 फिट गहरे कुल 02 संम्प-वेल निर्मित किए गए है, जिनके माध्यम से घरेलू सिवेज को 36 एमएलडी क्षमता के ट्रिटमेंन्ट प्लांट में लाया जा रहा है।
>
> 8. यह कि संयुक्त समिति द्वारा जॉच के दौरान दोनो सम्प-वेल से किसी भी प्रकार का रिसाव नही पाया गया है एवं समिति द्वारा कतिपय 04 स्थलो से लिए गए भूजल नमूनों के परीक्षणोपरान्त एस०टी०पी० द्वारा किसी भी प्रकार के प्रदूषण का आंकलन नहीं किया है।
>
> 9. यह कि केन्द्रीय भूमि जल बोर्ड, भारत सरकार द्वारा अनुमोदित Ground Water Resource Estimation (GWRE)-2023 रिपोर्ट के अनुसार जनपद आगरा के 16 विकासखण्डों में से 05 विकासखण्ड सेमीकिटिकल, 01 विकासखण्ड किटिकल तथा 10 विकासखण्ड अतिदोहित श्रेणी में वर्गीकृत किये गये है तथा जनपद में 01 भी सुरक्षित श्रेणी में नहीं है।
>
> 10. यह कि दिये गये उक्त सभी आंकडों से स्पष्ट है कि जनपद में उपलब्ध कुल भूजल संसाधन की मात्रा के सापेक्ष भूजल निकासी की कुल मात्रा बहुत अधिक है, जिससे जनपद आगरा में भूजल की स्थिति अति भयावह है। इसके साथ ही जनपद

में पेय जल आपूर्ति एवं अन्य दैनिक उपयोग हेतु जलापूर्ति सतही जल के माध्यम से पूर्ण की जा रही है। म० अधिकरण द्वारा गठित संयुक्त समिति की दी गयी रिपोर्ट तथा नोडल अधिकारी, जनपद आगरा के उक्त तथ्यों व परिस्थितियों से स्पष्ट है कि प्रश्नगत वाद में अंकित बिन्दुओं के सापेक्ष कोई भी त संज्ञान में नही आते है। अतएव ओ०ए० संख्या–621/2023, डॉ० संजय कुलश्रेष्ठ बनाम स्टेट ऑफ यू०पी० में पारित आदेश दिनांक 02.05.2024 में विभागीय मंतव्य को सम्मिलित करते हुए प्रश्नगत वाद को निरस्त/खारिज करने का कष्ट करें।"

Translation by Tribunal

"6. It is self explained from the report sent earlier by the Joint Committee that the sewage treatment plant (STP) and main pumping station (MPS) are being operated and maintained by Uttar Pradesh Jal Nigam, Agra district.

7. A total of 02 sump-wells of 45 feet and 65 feet deep have been constructed in the main pumping station, through which domestic sewage is being brought to the treatment plant of 36 MLD capacity.

8. During the investigation by the Joint Committee, no leakage of any kind was found from both the sump-wells and after testing the ground water samples taken from certain 04 places by the Committee, no pollution of any kind was assessed by the STP.

9. As per the Ground Water Resource Estimation (GWRE)-2023 report approved by the Central Ground Water Board, Government of India, out of the 16 development blocks of Agra district, 05 development blocks have been classified as semi-critical, 01 development block as critical and 10 development blocks as over-exploited category and not even 01 block in the district is in the safe category.

10. It is clear from all the above mentioned figures that the total amount of groundwater extraction is very high in comparison to the total amount of groundwater resources available in the district, due to which the condition of groundwater in Agra district is very frightening. Along with this, the water supply for drinking water supply and other daily use in the district is being completed through surface water. It is clear from the report given by the Joint Committee constituted by the Hon'ble Tribunal and the above mentioned facts and circumstances of the Nodal Officer, District Agra that no facts come to the notice of the court as per the points mentioned in the above said case. Therefore, please cancel/dismiss the case in question by including the departmental opinion in the order dated 02.05.2024 passed in OA No.-621/2023, Dr. Sanjay Kulshrestha vs State of U.P."

14. UPPCB vide letter dated 08.08.2024 has referred to response submitted by District Magistrate, Agra, State Ground Water Authority and Joint Committee Report and states that it does not require to add

anything further and agrees with the recommendations of Joint Committee.

15. U.P Jal Nigam has separately filed its response vide email dated 08.08.2024 placing test reports of treated water for 36 MLD STP to demonstrate that it is complying with the prescribed standards.

16. Municipal Corporation, Agra has also submitted its response/report vide email dated 16.08.2024. It has referred to Joint Committee's report dated 09.02.2024, submitted vide email dated 21.02.2024. Rest stand taken by Municipal Corporation, Agra is similar to response of District Magistrate, Agra. In brief, extract of the reply of Municipal Corporation Agra is as under:-

> *VI. That in compliance of the recommendation of the Joint Committee report which was submitted in Hon'ble National Green Tribunal on dated 21-02-2024, it is submitted that on an average 381 MLD Water supply is being done to approx. 12 Lacs population from two water treatment plants established in Agra City. In which 309 MLD Ganga Water is being supplied through Rapid Sand Filter Plant and 72 MLD Yamuna Water is being supplied through MBBR Plant. Drinking water in Agra City is being provided in various areas of Agra City through 30 Zonal Pumping Station, 30 Over Head Tanks & 29 Under Ground Reservoir.*
>
> *A true copy of details of water supply in various regions of Agra City through Department of Drinking Water and Sanitation, Municipal Corporation, Agra (Jalkal Vibhag, Nagar Nigam Agra) is annexed herewith and marked as ANNEXURE RI2 (Page No. t).*
>
> *VII. Committee report which was submitted in Hon'ble National Green Tribunal on dated 21-02-2024, it is submitted that on an average 381 MLD Water supply is being done to approx. 12 Lacs population from two water treatment plants established in Agra City. In which 309 MLD Ganga Water is being supplied through Rapid Sand Filter Plant and 72 MLD Yamuna Water is being supplied through MBBR Plant. Drinking water in Agra City is being provided in various areas of Agra City through 30 Zonal Pumping Station, 30 Over Head Tanks & 29 Under Ground Reservoir.*

A true copy of details of water supply in various regions of Agra City through Department of Drinking Water and Sanitation, Municipal Corporation, Agra (Jalkal Vibhag, Nagar Nigam Agra) is annexed herewith and marked as ANNEXURE RI2 (Page No. to).

That if a complaint regarding supply of dirty water/contaminated water is received in the office, it is immediately resolved. From various places in Agra City Ortho Tolidine Test is done daily by collecting water samples by the Employees of water supply department. A part from the above fortnightly water samples collected from water treatment plant is also being sent to State Health Institute, Lucknow for the analysis of Bacterial & Chemical Tests. A true copy of the recent analysis report of water quality by the State Health Institute, Lucknow is annexed herewith)

VIII That under JICA (Japan International Corporation Agency) assisted Gangajal Project, tender of Agra Water Supply Scheme, 24x7 Water Supply Project in 2 pilot zone (Sikandra North & Swamibagh Dayalbagh area) of Rs. 98.82 Cr has been finalised and awarded to M/s R.G.I. TAPI (JV). The work is being executed by U.P. Jal Nigam (Urban), Agra.

IX That apart from the above, to provide surface water in Agra City, Uttar Pradesh Jal Nigam has sent CWAP under AMRUT 2.0 Programme to State Government. A true copy of the details of the aforesaid project are annexed herewith and marked as ANNEXURE R/4 (Page No.).
That it is pertinent to mention that the ground water of the Agra City is saline in nature and is not being used for drinking purpose. The ground water is used for other purposes/ activities such as washing, bathing etc."

17. Applicant has filed its response to the Joint Committee report with the title 'rejoinder affidavit to Joint Committee report' vide email dated 21.08.2024. It has made its comments with regard to serious stress condition of groundwater in Agra and also poor availability of surface water for water supply to people at Agra. Applicant has also made certain suggestions with regard to disposal of effluents of STP in river, use of effluent for developing forest or green cover.

18. We find that basic complaint of applicant is that groundwater at Agra is getting contaminated due to mixing of sewage with ground water

which may be due to leakage of sewage from 36 MLD Main Pumping Station which has 65 feet deep sump well. Joint Committee's reports is very clear that there is no leakage reported or found and no fecal contamination has been found which shows that there is no leakage of sewage in ground water. This aspect of Joint Committee's report has not been found objectionable by applicant as no otherwise objection has been submitted by applicant to said part of the report.

19. So far as the geogenic and anthropogenic pollution of groundwater problem with regard to nature of groundwater at Agra being saline in nature and in presence of heavy metals is concerned, we find that similar issue PAN India is already under consideration before this Tribunal in *O.A No. 728/2023, News Item titled "arsenic found in groundwater in 25 States fluoride in 27 states: Gov" appearing in Hindustan dated 30.11.2023* before by this Tribunal, therefore, that issue may not be looked into in this matter, particularly, since issue raised by applicant is confined to a limited aspect in respect whereto, Joint Committee has ruled out such probability.

20. In these facts and circumstances, we find that no further order is required to be passed in the matter except that a direction be issued to UPPCB to continue to monitor quality of water supply at Agra by periodical inspection, collection of samples and testing thereof and if it finds any pollution therein or violation in regard to the prescribed standards, appropriate preventive, prohibitive and remedial action shall be taken without any further delay.

21. With the above observations /direction we dispose of this Original Application.

22. Copy of this order be forwarded to UPPCB; Municipal Corporation, Agra; U.P Jal Niga;, Ground Water Department, U.P; and District Magistrate, Agra by email for compliance.

Sudhir Agarwal, JM

Dr. Afroz Ahmad, EM

August 27, 2024
Original Application No. 621/2023
AB