

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

Original Application No. 728/2023

In re: News item appearing in Hindustan dated 30.11.2023 titled “Arsenic found in groundwater in 25 States, fluoride in 27 States: Govt.”

Date of hearing: 20.12.2023

**CORAM: HON’BLE MR. JUSTICE SUDHIR AGARWAL, JUDICIAL MEMBER
HON’BLE DR. A. SENTHIL VEL, EXPERT MEMBER**

Respondent: Mr. Gigi. C. George, Adv. for CGWA

ORDER

1. This original application under Section 14 and 15 of National Green Tribunal Act, 2010 (hereinafter referred to as ‘**NGT Act, 2010**’) has been registered by exercising *suo moto* jurisdiction based on the newspaper report published in Business Standard under the heading “Arsenic found in groundwater in 25 States, fluoride in 27 States: Govt.”. The report says that Arsenic has been detected in ground water in parts of 230 Districts and 25 States and fluoride in 469 Districts and 27 States and statement to this effect was made by Union Minister of State for Jal Shakti and Rajya Sabha. It is also stated that ground water contamination reported by Central Ground Water Board (hereinafter referred to as ‘**CGWB**’) is mostly geogenic in nature and does not show significant change over the years. The newspaper item states that studies indicate occurrence of arsenic and fluoride in ground water beyond permissible limits set by the Bureau of Indian Standards for human consumption in isolated pockets of various States and Union Territories.

2. On the advance notice issued to Central Ground Water Authority (hereinafter referred to as ‘**CGWA**’), it has submitted its report dated

18.12.2023 wherein presence of arsenic in various Districts and 25 States and fluoride in various Districts and 27 States is admitted. It is also admitted that both the chemicals/metals have very serious toxic effects on human body and health and cause health hazards. Relevant extracts from the report is reproduced as under:-

“2. Monitoring and Studies on Ground Water Quality By CGWB

Water being State subject, study on ground water quality and making available safe water to public falls under States' mandate. Being the apex organization for ground water, Central Ground Water Board (CGWB) generates ground water quality data on a regional scale during various scientific studies and ground water quality monitoring throughout the country. The periodic monitoring of water quality is done by CGWB once in every year during the pre-monsoon season in which water samples are collected from about 17500 water quality monitoring stations of CGWB spread over the country and chemical analysis is carried out. The water quality monitoring stations comprise of various sources of ground water viz. dugwells, borewells, tubewells, piezometers and springs etc. CGWB has 16 chemical laboratories in different states of the country for water sample analysis, out of which 10 laboratories are NA131, accredited. The total number of samples analysed in these chemical laboratories are in the range of 27500-32500 annually. The laboratories of CGWB analyse the ground water samples for 15 major chemical parameters which include (pH, EC, Ca, Mg, TII, Na, K., F, CO₃, ITCO₃, SO₄, Cl, NO₃, SiO₂, PO₄) and heavy/trace elements (Fe, Mn, Cu, Zn, Cd, Cr, Pb, As& U) on need basis.

Apart from routine regional scale ground water quality monitoring CGWB has also taken up various studies on ground water quality and contamination of ground water as mentioned below:

- *Under the National Aquifer Mapping Programme (NAQUIM) of CGWB, special attention is being given to the aspect of ground water quality including contamination by toxic substances such as Arsenic (As) and Fluoride (F) in ground water.*
- *CGWB along with National Institute of Hydrology (NII-1) prepared a report on " Mitigation and Remedy of Ground Water menace in India: A Vision Document" in 2010.*
- *The study on identification of Arsenic hotspots throughout the country has been started from 2015 by CGWB. Since then, periodic monitoring of As is being done in the identified hot spot states.*
- *An MoU was signed between CGWB & GSI on 05-01-2022 for five years. Study on Uranium, Lead, Arsenic, Fluoride and Mercury*

contamination of Ground Water the parts of Punjab, Haryana, Andhra Pradesh, Uttar Pradesh, Bihar, Chhattisgarh, Jharkhand and Assam will be taken up. The studies taken up regarding Arsenic and Fluoride contamination are as follows:

- Study on Uranium, Lead, Arsenic, Fluoride and Mercury Contamination of Ground Water in the industrial area of North Guwahati, Kamrup, Assam.
- Reassessment of Arsenic contamination in Patna & I3hojpur District, Bihar.
- Tracing the source of Uranium in ground water resources of Biharsarif and Roh block in Nawada district of Bihar.
- Geo-environmental appraisal of Fluoride contamination and assessment of toxic heavy metals in I3agbahara area, Mahasamund district, Chhattisgarh.
- Assessment of fluoride contamination in surface and groundwater and its management in Jharkhand.
- Study on Uranium, Fluoride contamination of Ground Water in Mathura, Hathras and Aligarh Districts, Uttar Pradesh.

3. Arsenic (As) contamination of Ground Water in India

Arsenic is a naturally occurring trace element found in rocks, soils and the water in contact with them. Arsenic has been recognized as a toxic element and is considered a human health hazard. The maximum permissible limit of Arsenic for drinking purpose is 0.01 mg/L (or 10 ppb) as per I3IS (Bureau of Indian Standards) Drinking Water Standards (IS 10500:2012). The BIS permissible limit of Arsenic was revised from 0.05 mg/L (50 ppb) to 0.01 mg/L (10 ppb) in the year 2015.

Arsenic hotspots of India

The occurrence of Arsenic in ground water was first reported in 1980 in West Bengal in India. Occurrence of Arsenic in groundwater, in excess to the permissible limit of 10 ppb in the Ganges-Brahmaputra fluvial plains in India covering seven states namely. West-Bengal, Jharkhand, Bihar, Uttar Pradesh in flood plain of Ganga River; Assam and Manipur in flood plain of I3rahamaputra and Imphal rivers and Rajnandgaon in Chhattisgarh. The most affected areas are on the eastern side of Bhagirathi River in the districts of Malda, Murshidabad, Nadia, North 24 Parganas and South 24 Parganas and western side of the districts of Howrah, Hugli and Bardhaman. The occurrence of Arsenic in the states of I3ihar, West Bengal and Uttar Pradesh is in alluvial formations. The occurrence of Arsenic in ground water is mainly in the aquifers upto 100 m depth. The deeper aquifers are free from Arsenic contamination. In the state of Chhattisgarh, it is in the volcanic rocks exclusively confined to N-S trending Dongargarh-Kotri ancient rift zone. It has also been reported in Golaghat, Jorhat, Lakhimpur, Nagaon, Nalbari, Sibsagar, Sonitpur district of Assam.

Central Ground Water Board is in the process of continuously updating its database on the locations of Arsenic contamination

based on its annual quality data. The number of district included in the list has increased since the permissible limit was revised from 50 ppb to 10 ppb by BIS in 2015. The state-wise districts where cases of Arsenic > 0.01 mg/l, have been recorded in ground water are given in Table-1.

Table-1: Districts having Arsenic >0.01 mg/L, in Ground Water in Different States of India

Sl. No.	State	Parts of Districts having As > 10 ppb (0.01 mg/l)	No of Districts
1.	Andhra Pradesh	Ananthapur, Last Godavari, Guntur, Krishna, Kurnool, Nellore, Prakasam	7
2.	Assam	Baksha, Barpeta, Bongaigaon, Cachar, Darrang, Dhemaji, Dibrugarh, Dhubri, Goalpara, Golaghat, Hailakandi, Jorhat, Kamrup, Karimganj, Lakhimpur, Morigaon, Nagaon, Nalbari, Sivsagar, Sonitpur, Biswanth	21
3.	Bihar	Araria, Begusarai, Bhagalpur, Bhojpur, Buxar, Darbhanga, Katihar, Khagaria, Kishanganj, Lakhisarai, Munger, Patna, Purnea, Samastipur, Saran, Vaishali, E. Champaran, Gopalganj, Sheohar, Supaul, Madhepura, Muzaffarpur, Saharsa, Siwan, W. Champaran, Sitamarhi, Madhubani.	27
4.	Chhattisgarh	Rajnandgon, Raipur, Raigarh, Koriya	4
5.	Delhi	East Delhi, North East Delhi, South east Delhi, Central, Nazul Land	5
6.	Gujarat	Amreli, Anand, Bharuch, Bhavnagar, Dahod, Gandhinagar, Kachchh, Mehesana, Patan, Rajkot, Surendranagar, Vadodara	12
7.	Haryana	Ambala, Bhiwani, Faridabad, Fatehabad, Jhissar, Jhajjar, Jind, Karnal, Panipat, Rohtak, Sirsa, Sonapat, Yamunanagar, Mahendergarh, Palwal, Panchkula, Rewari, Kaithal	18
8.	Himachal Pradesh	Kangra	1
9.	Jammu & Kashmir	Jammu, Kathua, Rajouri	3
10.	Jharkhand	Sahebganj, Lohardaga, Godda, Dhanbad	4
11.	Karnataka	Raichur, Gadag, Yadgir	3
12.	Kerala	Kollam	1
13.	Madhya Pradesh	Betul, Burhanpur, Chhindwara, Dhar, Khandwa, Mandasaur, Morena, Neemuch, Umaria	9
14.	Manipur	Bishnupur, Thoubal	2
15.	Odisha	Bhadrak, Gajapati, Ganjam, Jagatsinghpur, Kendrapara	5
16.	Punjab	Mansa, Amritsar, Bhatinda, Fazilka, Ferozpur, Gurdaspur,	17

		Hoshiarpur, Kapurthala, Ropar, Faridkot, Nawashahar, Sangrur, TaranTaran, SAS Nagar, Pathankot, Patiala, Chandigarh	
17.	Rajasthan	Ganganagar, Pali, Bikaner, Banswara, Bhilwara, Churu, Hanumangarh, Jodhpur, Sirohi, Tonk.	10
18.	Tamil Nadu	Ariyalur, Perambalur, Dindigul, Cuddalore, Nagapattinam, Ramnathapuram, Tiruvallur, Tirunetveli, Thiruvarur, Trichchirappalli, Tuticorin, Sivaganga, Chennai, Dharmapuri	14
19.	Telangana	Nalgonda	1
20.	Tripura	North Tripura, Gomati and South Tripura	3
21.	Uttar Pradesh	Bahraich, Balia, Balrampur, Bareilly, Basti, Bijnor, Chandauli, Ghazipur, Gonda, Gorakhpur, LakhimpurKheri, Meerut, Mirzapur, Moradabad, Rai Bareilly, SantKabirNagar, Shajahanpur, Siddaithnagar, SantRavidas Nagar, Unnao, Azamgarh, Rampur, Badaun, Deoria, Jhansi, Kausambi., Kushinagar, Pilibhit, Banda, Sitapur, HardoiMuzaffarnagar, Sultanpur, Faizabad, Pratapgarh, Maunath Bhanjan, Barabanki, Maharajgang, Nagar, Ayodhya, Bulandsahr, Firozabad, Farrukhabad, Hapur, Kannauj	45
22.	Uttarakhand	Dehradun, Udham Singh Nagar, Haridwar, Almora, Uttarkashi	5
23.	West Bengal	Purba Bardhaman, Dakshin Dinajpur, Hooghly, Howrah, Malda, Murshidabad, Nadia, N-24 Parganas, S- 24 Parganas, Coochbehar, Uttar Dinajpur	11
24.	Daman & Diu	Diu	1
25.	Puducherry	Pondicherry	1
	Total	25 States/UTs	230 Districts

Thus there are 230 districts in 25 states/UTs across the country where instances of one or more Arsenic contamination have been detected.

4. Fluoride (F) contamination of Ground Water in India

Fluorine is the most electronegative and reactive of all elements that occur naturally within many types of rock. It exists in the form of fluorides in a number of minerals of which fluorspar, cryolite, fluorite and fluorapatite are the most common. The fluoride found in groundwater is naturally occurring from the breakdown of rocks and soils or weathering and deposition of atmospheric particles. Most of the fluorides are sparingly soluble and are present in ground water in small amounts.

It is well known that small amounts of fluoride (less than 1.0 mg/L) have proven to be beneficial in reducing tooth decay. Community water supplies commonly are treated with NO or fluorosilicates to maintain fluoride levels ranging from 0.8 to 1.2 mg/L, to reduce the incidence of dental caries. However, high concentrations such as 1.5 mg/L and above have resulted in staining of tooth enamel while at still higher levels of fluoride ranging between 5.0 and 10 mg/L, further pathological changes such as stiffness of the back and difficulty in performing natural movements may take place.

BIS has recommended an upper desirable limit of 1.0 mg/L of fluoride in drinking water, which can be extended to 1.5 mg/L of fluoride in case no alternative source of water is available. Water with concentration of fluoride more than 1.5 mg/L, are not suitable for drinking purposes.

The fluoride content in groundwater from observation wells in a major part of the country is found to be less than 1.0 mg/L. The distribution of ground water samples with fluoride concentration more than 1.5 mg/L at several locations in the States of Andhra Pradesh, Gujarat, Karnataka, Madhya Pradesh, Rajasthan, Chhattisgarh, Haryana, Orissa, Punjab, Tamil Nadu, Kerala, Telangana, Haryana, Uttar Pradesh West Bengal, Bihar, Delhi, Jharkhand, Maharashtra, and Assam West Bengal where the fluoride in ground water exceeds 1.5 mg/L. The state-wise districts where instances of Arsenic > 0.01 mg/L in ground water have been recorded are given in **Table-2**.

Table-2: Districts having localized occurrence of Fluoride (>1.5mg/L) in groundwater in India

Sl. No	State	Parts of Districts having Fluoride (>1.5mg/L)	No of Districts
1.	Andhra Pradesh	Alluri Sitharama Raju, Ananthapur, Annamayya, Bapatla, Chittoor, Guntur, Krishna, Kurnool, NTR District, Palnadu, Prakasam, Sirkakulam, SPS Nellore, Sri Balaji Dist, Sri Satyasai District, Visakhapatnam, Vizianagaram, West-Godavari, YSR, Kadapa.	19
2.	Assam	Bangiagaon, Cachar, Dhubri, Dibrugarh, Goalpara, Hailakandi, Kamrup, Karbi Anglong, Lakhimpur, Naugaon, Golaghat, Karimganj, Sivasagar, Jorhat, Sonitpur, Morigaon, Darrang	17
3.	Bihar	Aurangabad, Banka, Bhagalpur, Gaya, Jamui, Kaimur (Bhabua), Munger, Nawada, Rohtas, Jahanabad, Lakhisarai, Sheikhpura, Nalanda, Saharsa, Supaul, Samastipur, Sheikhpura, Nalanda, Muzaffarpur	19
4.	Chhattisgarh	Bastar, Balod, Balrampur, Bemetra, Bijapur, Durg, Kanker, Kondagaon, Korba, Koriya, Raigarh, Surajpur, Surguja, Jashpur, Dhamtari, Mahasamund, Rajnandgaon, Bilaspur, Raipur, Mungeli, Janjgir - Champa, Raigarh, Gariyabandh	23
5.	Delhi	East Delhi, New Delhi, North West Delhi, Central, South Delhi, South West Delhi, North Delhi, West Delhi	8
6.	Gujarat	Ahmedabad, Amreli, Anand, Aravalli, Banaskantha, Bharuch, Bhavnagar, Chota Udaipur, Dahod, Gandhinagar, Jamnagar, Junagadh, Kachchh, Kheda, Mehesana, Panchmahals, Patan, Porbandar,	30

		<i>Rajkot, Sabarkantha, Surendranagar, Vadodara, Naysari, Surat, Val sad, Botad, Morvi, Dev Bhumi Dwarka, Gir Somnath, Mahisagar</i>	
7.	<i>Haryana</i>	<i>Ambala, Bhiwani, Fatehabad, Faridabad, Gurgaon, Hissar, Jhajjar, Jind, Kaithal, Karnal, Kurukshetra, Mahendergarh, Panchkula, Palwal, Panipat, Rewari, Rohtak, Sirsa, Sonapat, Yamuna Nagar, Mcwat</i>	21
8.	<i>Himachal Pradesh</i>	<i>Sirmour, Una</i>	2
9.	<i>Jammu & Kashmir</i>	<i>Jammu, Kathua, Udhampur, Samba</i>	4
10.	<i>Jharkhand</i>	<i>Bokaro, Chatra, Deoghar, Dhanbad, Garhwa, Giridih, Godda, Gumla, Jamtara, Koderma, Pakur, Palamu, Ramgarh, Ranchi, Sahebganj, Khunti, Latchar</i>	17
11.	<i>Karnataka</i>	<i>Bagalkot, Bangalore-Rural, Bangalore-Urban, Belgaum, Bellary, Bidar, Bijapur, Chikaballapur Chamarajanagar, Chikmagalur, Chitradurga, Davanagere, Dharwad, Dakshina Kannada, Gadag, Gulburga, Hassan, Haveri, Kolar, Koppal, Mandya, Mysore, Raichur, Ramnagara, Shimoga, Tumkur, Yadgir, Uttara Kannada, Udupi, Kodagu, Vijayanagara</i>	31
12.	<i>Kerala</i>	<i>Palakkad, Alappuzha, Idukki, Ernakulum, Thiruvananthpuram, Malappuram</i>	6
13.	<i>Madhya Pradesh</i>	<i>Alirajpur, Balaghat, Barwani, Betul, Bhind, Bhopal, Chhatarpur, Chhindwara, Datia, Dewas, Dhar, Dindori, Guna, Gwalior, Harda, Jabalpur, Jhabua, Khargon, Mandla, Mandsaur, Morena, Narsinhpur, Neemuch, Panna, Raisen, Rajgarh, Ratlam, Sagar, Satna, Schore, Sconi, Shandol, Shajapur, Sheopur, Sidhi, Shivpuri, Singrauli, tJajain, Vidisha, Anuppur, Indore, Khandwa, Tikkamgarh, Umaria</i>	44
14.	<i>Maharashtra</i>	<i>Ahmednagar, Amravati, Beed, Chandrapur, Bhandara, Dhule, Gadchiroli, Gondia, Jalna, Nagpur, Nanded, Parbhani, Ratnagiri, Sangli, Satara, Sindhudurg, Solapur, Wardha, Washim, Yavatmal, Hingoli, Nandurbar</i>	22
15.	<i>Manipur</i>	<i>Thoubal</i>	1
16.	<i>Meghalaya</i>	<i>East Jaintia, West Garo Hills, Ri Bhoi, North Garo Hillls, Khowai.</i>	5
17.	<i>Nagaland</i>	<i>Dimapur, Phek, Kohima</i>	3
18.	<i>Odisha</i>	<i>Angul, Balasore, Bhadrak, Bargarh, Bolangir, Boudh, Cuttack, Deogarh, Dhenkanal, Jajpur, Kandhamal, Kconjhar, Khurda, Mayurbhanj, Nayagarh, Nuapada, Ganjam, Jagatsinghpur, Kalahandi, Koraput, Puri, Rayagada, Sambalpur, Sonapur, Sundargarh, Gajapati</i>	26
19.	<i>Punjab</i>	<i>Amritsar, Barnala, Bhatinda, Fazilka, Faridkot, Fatehgarh Sahib, Firozpur, Gurdaspur, Jalandhar, Ludhiana, Mansa, Moga, Muktsar, Pathankot, Patiala, Ropar, Sangrur, SAS Nagar (Mohali), Tarn-Taran</i>	19
20.	<i>Rajasthan</i>	<i>Ajmer, Alwar, Banswara, Bartner, Bharatpur, Baran, Bhilwara, Bikaner, Bundi, Chittaurgarh, Churu, Dausa, Dhaulpur, Dungarpur, Ganganagar, Hanumangarh, Jaipur, Jaisalmer, Jalore, Jhalawar Jhunjhunu, Jodhpur, Karauli, Kota, Nagaur, Pali, Pratapgarh, Rajsamand, Sirohi, Sikar, Sawai Madhopur, Tank, Udaipur</i>	33
21.	<i>Tamil Nadu</i>	<i>Coimbatore, Dharmapuri, Dindigul, Erode, Karur, Kancheepuram, Krishnagiri, Namakkal, Madurai, Puddukotai, Ramanathanpuram, Salem, Sivagangai, Theni, Thiruvannamalai, Tiruchirapally, Thirunelveli, Tirupur, Veilore, Cuddalore, Perambalur, Thanjavur, Thiruvarur, Tuticorin, Virudhunagar, Tiruvallur, Madurai,</i>	30

		Chennai, Kanyakumari,	
22.	Telangana	Adilabad, Bhadrachalam, Hanamkonda, Hyderabad, Jagtial, Jangaon, Karimnagar, Khammam, Komarambhem, Mahabubabad, Mahabubnagar, Mancherial, Medak, Medchal, Mulugu, Nagarkurnool, Nalgonda, Narayanpet, Nirmal, Nizamabad, Peddapalle, Rajanna, Rangareddy, Sangareddy, Siddipet, Suryapet, Vikarabad, Warangal, Yadadri.	29
23.	Tripura	Unakoti, Khowai and North Tripura	3
24.	Uttar Pradesh	Agra, Aligarh, Allahabad, Auraiya, Azamgarh, Banda, Bulandshahar, Chitrakoot, Etah, Etawah, Farrukhabad, Fatehpur, Firozabad, G B Nagar, Ghazipur, Gonda, Ghaziabad, Hamirpur, Hathras, Jaunpur, Kannauj, Kanpur Nagar, Kasganj (Kashiram Nagar), Lalitpur, Mahoba, Mainpuri, Mathura, MaunathBhanjan, Pratapgarh, Rai Bareilly, Shajahanpur, Sonbhadra, Sultanpur, Varanasi and Unnao, Chandauli, Gonda, Hardoi, Sitapur, Jalaun, Amroha, Kanpur Dehat, Rampur	43
25.	Uttarakhand	Uttarkashi	1
26.	West Bengal	Bankura, Bardhaman, Birbhum, Dakshin Dinajpur, Malda, Purulia, Uttar Dinajpur, South 24 Praganas, Nadia, Murshidabad, Paschim Medinipur, Paschim Bardhaman	12
27.	DNH, Daman & Diu	Dadra and Nagar Haveli	1
	Total	27 States/UTs	469 Districts

Thus there are 469 districts in 27 states/UTs across the country where instances of one or more Fluoride contamination have been detected.

5. Mitigation of Ground Water Contamination by As and F

The studies on arsenic and fluoride contamination indicate that occurrence of these contamination in various parts of the country are mostly geogenic in nature, which means these constituents are already in the rock and soil matrix and they get in to the ground water through various chemical processes. There is no conclusive evidence regarding increase in concentration of these contaminants over time. However, when the contaminant is in the ground water, it has the tendency to spread along with the flow of ground water.

Various steps have been taken by the Central Government for facilitating ground water quality improvement/ remediation of contamination in the country, as given below:

1. Data on ground water quality available with CGWB are being shared with concerned State Governments for taking necessary remedial measures such as prohibition of contaminated sources of ground water for drinking purposes and finding alternate sources for drinking water supply.
2. CGWB constructs wells for Exploration of Ground Water. Successful contamination-free wells are handed over to the State Governments for gainful utilization.

3. *Under the National Aquifer Mapping Programme (NAQUIM) of CGWB, special attention is being given to the aspect of ground water quality including contamination by toxic substances such as Arsenic in ground water. Further, under NAQUIM, CGWB constructs arsenic safe exploratory wells in arsenic affected parts of the States of West Bengal, Bihar and Uttar Pradesh. The arsenic safe deeper aquifer zones have been identified and wells have been constructed tapping the arsenic safe deeper aquifers using innovative cement sealing technique. So far, 522 exploratory wells tapping arsenic safe aquifers have been constructed under NAQUIM programme including 40 in Bihar, 188 in West Bengal and 294 in Uttar Pradesh. In addition, the innovative cement sealing technique of CGWB has been shared with the state agencies to utilize to construct arsenic free wells.*
4. *Awareness generation programs/ workshop on various aspects of ground water including preventing ground water pollution and safe use of contaminated water are being conducted by CGWB periodically.*
5. *Department of Water Resources, River Development and Ganga Rejuvenation, Ministry of Jal Shakti has issued guidelines for control and regulation of groundwater extraction with pan-India applicability notified on 24 September 2020. The guidelines include clauses on 'Measures to be adopted to ensure prevention from pollution in the plant premises of polluting industries/projects'. It is pointed out that ground water in and around polluting industries like Tannery, Slaughter Houses, Dye, Chemical, Coal-washery, other hazardous units, etc. and is generally observed to be polluted. In order to prevent further deterioration of ground water quality in such places, it is essential to take necessary measures for well head protection, such as Tube well/ bore well to be constructed at the place which is hygienically maintained, RCC (Reinforced Concrete Cement) grouting around tubewell, no recharge measures within the plant premises etc."*

3. From the report we find that while presence of toxic elements like arsenic and fluoride in ground water, contaminating it and also causing serious toxic effects to human body are admitted but no effective steps have been taken by CGWA, though under law, it is the body responsible for regulating ground water. Report says that water is the subject of State and therefore, CGWA on its own is not capable of taking any serious action in matter but this contention has been rejected long back by the Supreme Court in MC Mehta vs. UOI, (1997) 11 SCC 312 and order of

this Tribunal dated 25.02.2022 in OA 176/2015, Shailesh Singh vs. Hotel Holiday Regency. We are surprised that after such a long time, even today, CGWA has the audacity of shirking away from its own statutory responsibility and obligations and taking such flimsy grounds which have already been rejected by the Apex Court itself.

4. Be that as it may since, various States are involved in the matter, we find it appropriate to implead them as they all are necessary parties and hear the matter after notice to them.

5. Let following be impleaded as respondents:-

1. State of Andhra Pradesh through Chief Secretary, Amaravati, 1st Block, 1st Floor, A.P Secretariat Office, Velagapudi-522023;
2. State of Assam through Chief Secretary, Dispur, Block- C, 3rd Floor, Assam Sachivalaya, Dispur, Guwahati-781006;
3. State of Bihar through Chief Secretary, Patna, Main Secretariat, Patna-800015;
4. State of Chhattisgarh through Chief Secretary, Raipur, Mahanadi Bhawan, Mantralaya, Naya Raipur-492002;
5. UT Delhi (Delhi) through Chief Secretary, Delhi Secretariat, IP Estate, New Delhi-110002;
6. State of Gujarat (Gandhinagar) through Chief Secretary, 1st Block, 5th Floor, Sachivalaya, Gandhinagar-382010;
7. State of Haryana (Chandigarh) through Chief Secretary, 4th Floor, Haryana Civil Secretariat, Sector-1, Chandigarh-160019;
8. State of Himachal Pradesh (Shimla) through Chief Secretary,
9. UT Jammu & Kashmir through Chief Secretary Government of Himachal Pradesh, H.P. Secretariat, Shimla-171002;
10. State of Jharkhand (Ranchi) through Chief Secretary, 1st Floor, Project Building, Dhurwa, Ranchi -834004;
11. State of Karnataka (Bengaluru) through Chief Secretary, Room No. 320, 3rd Floor, Vidhana Soudha, Bengaluru-560001;
12. State of Kerala (Thiruvananthapuram) through Chief Secretary, Government of Kerala, Secretariat, Thiruvananthapuram-695001;
13. State of Madhya Pradesh (Bhopal) through Chief Secretary, MP Mantralaya, Vallabh Bhavan, Bhopal-462004;
14. State of Manipur (Imphal) through Chief Secretary, South Block, Old Secretariat, Imphal-795001;
15. State of Odisha (Bhubaneswar) through Chief Secretary, General Administration Department, Odisha Secretariat, Bhubaneswar-751001;
16. State of Punjab (Chandigarh) through Chief Secretary, Chandigarh-160001;

17. State of Rajasthan (Jaipur) through Chief Secretary, Secretariat, Jaipur-302005;
18. State of Tamil Nadu (Chennai) through Chief Secretary, Secretariat, Chennai-600009;
19. State of Telangana(Hyderabad) through Chief Secretary, Block C, 3rd Floor, Telangana, Secretariat, Khairatabad, Hyderabad;
20. State of Tripura (Agartala) through Chief Secretary, New Secretariat Complex, PO:Secretariat, Agartala-799010;
21. State of Uttar Pradesh (Lucknow) through Chief Secretary, 1st Floor, Room No. 110, Lalbahadur Sastri Bhawan, Uttar Pradesh Secretariat, Lucknow-226001;
22. State of Uttarakhand (Dehradun) through Chief Secretary, 4 Subhash Road, Uttarakhand Secretariat, Dehradun-248001;
23. State of West Bengal (Kolkata) through Chief Secretary, Nabanna, 13th Floor, 325, Sarat Chatterjee Road, Mandirtala, Shibpur, Howrah-711102;
24. UT DNH Daman & Diu (Daman) through Chief Secretary, Daman & Diu; Secretariat, Fort Area, Moti Daman, Daman (U.T.) - 396220
25. UT Puducherry (Pondicherry) through Chief Secretary, Chief Secretariat, Goubert Avenue, -605001;
26. State of Maharashtra (Mumbai) through Chief Secretary, CS Office Main Building, Mantralaya, 6th Floor, Madame Cama Road, Mumbai-400032;
27. State of Meghalaya (Shillong) through Chief Secretary, Main Secretariat Building, Rilang Building, Room No. 321, Meghalaya Secretariat, Shillong-793001;
28. State of Nagaland (Kohima) through Chief Secretary, Civil Secretariat, Kohima-797004;
29. CGWA through Member Secretary,18/11, Jamnagar House, Man Singh Road. New Delhi-110011;
30. MoEF&CC through its Secretary, Indira Paryavaran Bhawan, Jor Bagh Road, New Delhi-110003.

6. We may also notice at this stage that the problem of contamination of ground water due to arsenic in the context of certain Districts of State of UP and some other States like Assam, Bihar, Jharkhand, Karnataka, Punjab and West Bengal was considered by this Tribunal in O.A. No. 384/2019, Mrs. Sunita Pandey & Anr. vs. Union of India & Ors. & while disposing of the matter finally vide judgment dated 01.02.2021, the Tribunal directed as under:-

“16. In view of the above, let further steps in the matter be taken by the concerned States which may be monitored by the MoJS at the National level and by the Chief Secretaries of the concerned States, particularly in West Bengal and Punjab. The Chief Secretary, UP may sort out inter-departmental responsibilities and ensure compliance with regard to dismantling of hand pumps in arsenic

affected habitations, along with action on other recommendations of the Oversight Committee. The CGWA, the CPCB and concerned State PCBs/PCCs may monitor water quality in the affected areas and compile the relevant data and place on a common portal for future reference and remedial action.

Due attention may be given to cover other geogenic contaminants like fluoride, nitrate and other contaminants harmful to human and animal health as well as for irrigation. CPCB and SPCBs/PCCs may give emphasis to remediate identified contaminated sites having potential threats to groundwater contamination as directed vide order dated 29.01.2021 in OA No. 804/2018, Rajive Narayan & Anr. vs. Union of India & Ors.

MoJS may, in contaminated areas where there is geogenic contamination, explore possibility of rain water harvesting systems for recharging and dilution of the contaminated water and also avoiding excessive abstraction of groundwater, so that building of contaminants does not take place.”

7. The issue raised in the present matter with regard to presence of arsenic and fluoride in ground water in such large number of States and Districts is very serious and requires urgent preventive and protective steps by all concerned authorities.

8. Let Notices be issued to all the above respondents. Response may be filed by above respondents within one month after receipt of notice, by e-mail at judicial-ngt@gov.in preferably in the form of searchable PDF/ OCR Support PDF and not in the form of Image PDF.

9. List this matter on 15.02.2024.

Sudhir Agarwal, JM

Dr. A. Senthil Vel, EM

December 20, 2023
Original Application No. 728/2023
SN