

Item No. 04

Court No. 1

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

Original Application No. 384/2019
(Earlier O. A. No. 156/2015)

Mrs. Sunita Pandey & Anr.

Applicant(s)

Versus

Union of India & Ors.

Respondent(s)

Date of hearing: 23.08.2019

Date of uploading the order : 11.09.2019

CORAM:

**HON'BLE MR. JUSTICE ADARSH KUMAR GOEL, CHAIRPERSON
HON'BLE MR. JUSTICE S.P. WANGDI, JUDICIAL MEMBER
HON'BLE MR. JUSTICE K. RAMAKRISHNAN, JUDICIAL MEMBER
HON'BLE DR. NAGIN NANDA, EXPERT MEMBER**

For Applicant (s):

None

For Respondent (s):

Mr. Ardhendumauli Kumar Prasad, Advocate and
Mr. Akhil Kumar, Joint Secretary
Mr. Rajkumar, Advocate for CPCB
Mr. Daleep Dhyani and Mr. Pradeep Misra,
Advocates for UPPCB
Mr. Amit Tiwari, Advocate for State of U.P

ORDER

1. The steps to deal with the problem of contamination of groundwater due to Arsenic and availability of clean drinking water in Bahraich, Ballia, Balrampur, Bareilly, Basti, Bijnor, Chandauli, Ghazipur, Gonda, Ghorakpur, Lakhimpur Kheri, Meerut, Mirzapur, Muradabad, Rai Bareilly, Santkabirnagar, Shajahanpur, Siddharthnagar, Sant Ravidas Nagar and Unnao and certain other districts in Uttar Pradesh and other similarly affected areas in the country including in Assam, Bihar,

Jharkhand, Karnataka, Punjab and West Bengal is the issue for consideration.

2. After considering the matter for more than three years, vide order dated 25.10.2018, this Tribunal undertook an extensive review on the subject and noted the gravity of situation shown by high arsenic content leading to serious diseases and environmental damage in several districts of Uttar Pradesh. 28 districts of Uttar Pradesh have been identified as affected by the problem in the report prepared by the State Water Resources Agency, Uttar Pradesh. A team of the Ministry of Environment, Forest and Climate Change (MoEF&CC) found number of deaths from the diseases on account of the problem. The Ministry of Drinking Water and Sanitation also took cognizance and identified mitigation measures. The Ministry of Agriculture also identified certain steps to be taken. The matter was discussed in the Parliament and a report was submitted on the subject. Uttar Pradesh Jal Nigam identified 310 village hamlets situated in 179 revenue villages of District Ballia and 165 village hamlets situated in 49 revenue villages in District Lakhimpur Kheri, where shallow ground water is found to contain Arsenic in excess of permissible limit of 0.05 mg/L, prescribed for potable water by Bureau of Indian Standards (BIS:10500).
3. It was noted that the CGWB in its reply stated that as per input available with the CGWB, the Arsenic is prevailing in the underground water (above 0.05 mg/L or 50 ppb) in the

districts/blocks of Bahraich, Ballia, Balrampur, Bareilly, Basti, Bijnor, Chandauli, Ghazipur, Gonda, Ghorakpur, Lakhimpur Kheri, Meerut, Mirzapur, Muradabad, Rai Bareilly, Santkabirnagar, Shajahanpur, Siddharthnagar, Sant Ravidas Nagar and Unnao in the State of Uttar Pradesh. The well water contained Arsenic, a known carcinogen that occurs in ground water at concentrations that can exceed the Maximum Contaminant Level (10 ppb/WHO Standard). In order to reduce Arsenic exposure, private well-owners can either rely on treated water for drinking or install in-house water treatment systems for Arsenic removal.

4. The Tribunal noted that the Inter-Ministerial Group (IMG) of the Government of India also prepared a report suggesting an action plan to mitigate Arsenic contamination and made comprehensive recommendations on the whole gamut.
5. The Tribunal noted that the matter was highlighted in news item in Hindustan Times dated 26.11.2015 under the heading “Arsenic contamination on the rise:1 Lakh dead, 3 lakh suffering”. According to the said news item, 7.04 crore people are affected by Arsenic related diseases in 12 States and 1 lakh persons have died as per report of a Committee of Secretaries. A Joint Inspection Report was filed before this Tribunal by the Central Pollution Control Board, MoEF&CC, CWGA and Uttar Pradesh Pollution Control Board to the effect that Arsenic Removal Units were not working properly. Heavy metals were seen in the water samples. The Tribunal directed dismantling

of hand pumps with concentration of Arsenic beyond permissible limits.

6. The Tribunal also noted the report of the NITI Aayog published in June, 2018 on “Water Management Index” to the effect that 70% water in India is contaminated. India is at 120th number out of 122 countries in water quality index. The report mentions that the acute water crisis is being faced by 600 million people. About two lakh people die every year due to inadequate access to safe water.

7. Accordingly the Tribunal issued directions for remedial action including a direction to the Secretary, Ministry of Drinking Water and Water Resources to file a report compiling information from the States in terms of the order of the Tribunal.

8. Accordingly, an affidavit was jointly filed by the Ministry of Drinking Water & Sanitation and Ministry of Water Resources, River Development and Ganga Rejuvenation, on 30.03.2019 to the effect that 1.3 crore population was affected spread across seven states, namely Assam, Bihar, Jharkhand, Karnataka, Punjab, Uttar Pradesh and West Bengal. Water supply was responsibility of the State but the Central Ministry supplemented the efforts of the States by way of financial and technical assistance. The matter was considered on 04.04.2019 as follows:-

“9. The Ministry of Drinking Water and Sanitation and Ministry of Water Resources has filed an affidavit

on 30.03.2019 through Member, CGWA, enclosing a report to the effect that 15,615 rural habitations are affected with Arsenic contamination in drinking water with a total population of 1.35 crore. Drinking water supply is a State subject and it is primary responsibility of the States to provide safe drinking water. The Central Ministries supplement the efforts of the States in the form of financial and technical assistance through Centrally Sponsored Scheme "National Rural Drinking Water Programme (NRDWP)". Piped Water Supply projects may take 3-5 years and States/UTs are advised to take up community water purification plant schemes in affected areas and also to plan long terms measures. "National Water Quality Sub Mission (NWQSM)" was launched to provide safe drinking water. Recently, "SWAJAL" program has been launched. NRDWP can be utilized for Water Quality Monitoring and Surveillance (WQMS). The Central Government also provides technical assistance. "Compendium of Innovative Technologies on Rural Drinking Water Sanitation" and "Handbook on Drinking Water Treatment Technologies" has been published. A workshop was also organized called "National Workshop on Grey Water Management and Arsenic and Fluoride remediation". "Uniform Drinking Water Quality Monitoring Protocol" has been prepared.

10. It has also been pointed out that Arsenic contaminated water is used for agriculture and thereby enters the food chain, affecting the food safety and health of the people. This aspect needs special attention and awareness. The details along with map indicating hot-spots of arsenic affected areas is available in public domain and can be seen in the web-links at <http://cgwb.gov.in/WQ/WOMAPS/ARSENIC.pdf> and <http://mowr.gov.in/sites/default/files/ARSENIC.pdf>. Report has been received from Indian Council of Agriculture Research (ICAR), expressing concern about adverse impact of Arsenic contaminated ground water on soil/plant/animal/human systems. Remedial measures require discouraging cultivation of Boro rice, dwarf variety of rice, leafy vegetables in arsenic affected areas. This also needs to be broadcasted on All India Radio and Prasar Bharati and other media. Further remedial measures are required to prevent the use of Arsenic contaminated water in agriculture so that Arsenic does not become part of the crops to be consumed by animals or the human beings.

11. It is further stated that in compliance of directions of this Tribunal, the States/UTs were called for a meeting and a national workshop was

organized. Annual Action Plan meeting was held and a meeting was also organized through video-conferencing with all the States/UTs. Reports have been received by Integrated Management Information System (IMIS) showing that seven states namely, Assam, Bihar, Jharkhand, Karnataka, Punjab, Uttar Pradesh and West Bengal are affected with Arsenic contamination in drinking water. On the subject of Community based hand pumps, the States have taken steps and where Community based hand pumps are not viable, single unit hand pumps have been provided or proposed. Rain water harvesting system was installed or has been directed to be installed. Awareness programs have been undertaken. Steps have also been taken for long term action plan. High risk population has been monitored for early signs of Arsenic poisoning. Long term mitigation measures have also been taken by way of water supply schemes for utilising every source of water supply. The affected areas are separately monitored.

12. While the report compiles the information and data, it is difficult to discern the progress achieved on ground level on the subject of removal or reduction of Arsenic contamination water by way of verifiable indicators on the subject of enhancement in access to the drinking water in the affected areas. There is also nothing to show the progress on the aspect of improvement in health standards in the affected areas. Monitoring expected in terms of order of this Tribunal is not merely compiling the information. The Tribunal expected fixing of specific miserable standards and benchmarks and reviewing progress in achieving such standards. Further, prescription of timelines for achieving the targets is crucial with the identified authorities accountable for achieving such targets.”

9. Again on 16.07.2019, the issue remained unaddressed due to failure on part of the Ministry of Jal Shakti, and the Tribunal directed:-

“4. Particular response may be given about the extent of problem, actions taken so far and what needs to be done without going into the question of inter se responsibilities of Central and State Governments.”

10. We are again faced with the same problem, even after further affidavit has been filed on 22.08.2019 by the Ministry of Jal Shakti. Relevant part of the said affidavit is as follows:-

“8. ACTION TAKEN SO FAR:

1. Action by DoDW & S: That DoDW &S has forwarded details with respect to benchmarks, targets, timelines, progress achieved with respect to targets, designated authorities accountable for mitigating the arsenic problem etc. The following are the respectful submissions from D/o Drinking Water & Sanitation in this regard:

a. As per Allocation of Business Rule, 1961, D/o DW&S is looking after “Ruler Water Supply” (subject to overall national perspective of water planning and coordination assigned to the D/o WR, RD & GR).

b. Drinking water supply is a State subject and it is the primary responsibility of State Governments/UT Administrations to provide safe drinking water to the public of the States/UTs. For improving the coverage of safe drinking water to rural population, D/o DW&S supplements the efforts of the State by providing them with technical and financial assistance through the centrally sponsored scheme National Rural Drinking Water Programme (NRDWP). It is the State Governments who plan, design, approve, execute, operate & maintain the schemes for providing safe drinking water to rural population.

c. During March 2016, with the recommendation of NITI Aayog, an amount of Rs. 1000 crore was released to various Arsenic/fluoride affected States for installation of community water purification plants in Arsenic/Fluoride affected habitations. In addition to this, the Department of Drinking Water and Sanitation had launched the National Water Quality Sub-Mission (NWQSM) on 22nd March 2017 under NRDWP to provide safe drinking water to 27,544 arsenic/fluoride affected rural habitations in the country. The State-wise number of Arsenic affected rural habitations identified under NWQSM is as given below:-

S. No.	States	Total Nos. of Arsenic affected Habs identified under NWQSM in respective States

1.	Assam	3726
2.	Bihar	1077
3.	Haryana	45
4.	Jharkhand	130
5.	Karnataka	21
6.	Punjab	492
7.	Uttar Pradesh	262
8.	West Bengal	8066
Total		13819

- d.** Over and above the earmarked affected habitation, the left-out arsenic affected habitations can be covered through NRDWP Funds and special exemptions have been made under NRDWP Guidelines for prioritizing the coverage to provide safe drinking water for the remaining Arsenic affected habitations.
- e.** With regard to the targeted coverage for providing safe drinking water in the remaining arsenic affected rural habitations identified under NWQSM and not identified under NWQSM, the affected States have furnished the quarter-wise targets/achievements for coverage during 2019-20, 2020-21 and beyond and the same are placed as Annexure – R-4 and ANNEXURE- R-5 respectively. The Annexures also indicate the name/designation of State Government officers responsible for completion of targeted coverage.
- f.** The D/o DW&S follows Bureau of Indian Standards (BIS standards) for drinking water quality and the permissible limit of Arsenic in drinking water is 0.01mg/l as per BIS IS 10500: 2012 standard.
- g.** As per the information reported by various State Governments in the Integrated Management Information System (IMIS) of D/o DW&S, as on 25.03.2019, 15,615 rural habitations were affected with Arsenic contamination in drinking water and as on 25.06.2019, 13,972 rural habitations are affected from Arsenic contamination in drinking water as detailed below:

	As on 25.03.2019		As on 25.06.2019	
State	No. of Arsenic Affected Habitations	Populations In Arsenic Affected Habitations	No. of Arsenic Affected Habitations	Populations in Arsenic Affected Habitations
Assam	4301	16,07,660,	4293	16,05,148
Bihar	807	12,05,934	804	12,01,715
Jharkhand	19	13,336	19	13,336
Karnataka	03	2,590	02	1706
Punjab	652	8,28,073	660	8,36,625
Uttar Pradesh	707	5,32,507	650	4,57,893
West Bengal	9126	93,19,930	7,544	69,93,938
Total	155615	1,35,10,030	13,972	1,11,10,361

h. Further updates on NRDWP are also accessible at "IMISI Reports" link at India Water Portal of DoDW&S viz. <https://indiawater.gov.in>.

(ii) Action by DoWR & RD & GR :

(a) Hon'ble NGT has directed the DoWR, RD & GR to put Arsenic related data on website and the web-link created should be interactive and in compliance of directions of Hon'ble NGT an interactive link specifically dedicated to Arsenic Mitigation has been Created and put in the website of DoWR, RD & GR. This may be accessed at:

- (i) Arsenic Hot Spot in Ground Water - <http://mowr.gov.on/sites/default/files/ARSENIC.pdf>,
- (ii) R&D Activities Related to Arsenic Mitigation <http://mowr.gov.in/rd-activitiesother-efforts-related-arsenic-mitigation>,
- (iii) Submit Grievance/ Complaint/ Suggestion <http://pmksy-mowr.nic.in/arsenic/>
- (iv) Report-Target under NWQSM <http://pmksy-mowr.nic.in/arsenic/TargetNWSQM.aspx>

(v) Target other than NWQSM

<http://pmsky-mowr.nic.in/arsenic/TargetotherNWQSM.aspx>

(vi) Progress Achieved

<http://pmsky-mowr.nic.in/arsenic/ProgressAchieved.aspx>

The Links include information pertaining to Arsenic Mitigation, planned targets, progress achieved etc. in Arsenic affected areas and also caters for active public participations through grievance, complaint, suggestions etc. for suitable action by the concerned authorities.

(vii) It is further submitted that DoWR, RD & GR has revived the Inter-Ministerial Group (IMG) headed by Mission Director, National Water Mission who periodically meet, review and recommend further action on arsenic mitigation.

(viii) A review meeting under the chairmanship Secretary, DoWR, RD, GR was held on 12.03.2019 with the concerned States and Central Ministries/ Organisations and efforts towards arsenic mitigation by States/ UTs / Central Ministries/ Organizations were deliberated upon.

(iii) Action by MoH & UA :

(a) It is most respectfully submitted that as per MoH & UA that urban infrastructure development including water supply is a State subject. Govt. of India has launched 'Atal Mission for Rejuvenation and Urban Transformation' (AMRUT). Special water supply arrangement for difficult areas, hill and coastal cities including those having water quality problems (e.g. arsenic, fluoride) is an admissible component for funding under the scheme. However, individual projects are selected, appraised, approved and implemented by the concerned State / UT Governments. MoH & UA approves only State annual action plans (SAAPs) submitted by States/ UTs and releases the Central assistance as per the mission guidelines. The timelines for the mission is upto March 2020.

(b) It was further intimated that MoH & UA at present neither provides any specific funding for Arsenic mitigation nor, maintains any data regarding Arsenic contamination in water under AMRUT.

(iv) Action by DST:

- (c) That DST has intimated about the research related activities undertaken by them in the field of Arsenic mitigation which has now been put in the DoWR, RD & GR website at the web-link
<http://mowr.gov.in/sites/default/files/ArseniccompediumDST.pdf> for the benefit of general public stakeholders.

(v) Action by Directorate General of Health Services (Dte. GHS) under Ministry of Health & Family Welfare:

- (a) That Directorate of General of Health Services (Ministry of Health and Family Welfare) intimated that 'Guidelines for Detection, Prevention & Management of Arsenicosis in India' were finalized by Dte. GHS and sent to seven Arsenic affected States i.e. Assam, Bihar, Jharkhand, Karnataka, Punjab, Uttar Pradesh and West Bengal for taking further necessary action. These guidelines are meant for sensitizing the Health Program Managers and for training of Health functionaries such as medical officers, para-medical staffs etc. in the affected States and districts.
- (b) That efforts have been made to spread awareness among the affected community regarding problem due to water contamination through IEC material such as Radio spots and printed materials sent to the seven Arsenic affected States.
- (c) That the diagnosis and treatment of Arsenicosis is being done in the existing Health Infrastructure in the States such as sub-centres, PHCs, District hospitals, medical colleges etc."

11. The affidavit filed by the Ministry of Jal Shakti further goes into the question of responsibilities of different departments which need not be focused for our consideration. We may only note that the subject of regulation and control of groundwater management have been held to be covered by Entry 13 of List I

as these subjects covered by international treaties.¹ The Central legislation or administrative action for dealing with the subject is not out of place. Having regard to the fact that more than 1 Crore population of the Country is affected by the Arsenic contaminated water which is carcinogenic, issue of making available potable drinking water to the said population is a inalienable constitutional duty for which the Central Government as well as the States have to make all possible efforts. The problem being in several States, the Central Government should take lead in the matter in the interest of health and safety of large population of the Country.

12. Arsenic is one of major public health concern identified by the WHO.² Under the new 2030 Agenda for Sustainable Development, the indicator of "safely managed drinking water services" calls for tracking the population accessing drinking water which is free of faecal contamination and priority chemical contaminants, including arsenic.³

13. Accordingly, the existing plan of action needs to be relooked as it has quite relaxed timelines and the strategies need to be redrawn by a suitable mechanism because of urgency in this matter. The concerned States may be pushed harder to reduce the timelines in the action plans and to also consider viable options of immediate supply of drinking water. This needs to be monitored by the Central Government on war footing to enforce

¹ (1997) 11 SCC 312 M.C Mehta Vs. Union of India

² <https://www.who.int/news-room/fact-sheets/detail/arsenic>,

³ [www.unwater.org › app › uploads › 2018/07 › SDG6_SR2018_web_v5](http://www.unwater.org/app/uploads/2018/07/SDG6_SR2018_web_v5),
<https://sustainabledevelopment.un.org/post2015/transformingourworld>,

Fundamental Right to access potable drinking water which is part of 'Right to Life' under the Indian Constitution.

14. Let a further compliance report be filed by the Secretary, Ministry of Jal Shakti before the next date.

List again on 16.12.2019

Adarsh Kumar Goel, CP

S.P. Wangdi, JM

K. Ramakrishnan, JM

Dr. Nagin Nanda, EM

11.09.2019
Original Application No. 384/2019
(Earlier O. A. No. 156/2015)

