

व्ही. राधा आई.ए.एस.  
संयुक्त सचिव  
**V. Radha, I.A.S.**  
Joint Secretary



भारत सरकार  
पेयजल एवं स्वच्छता मंत्रालय  
Government of India  
Ministry of Drinking Water and Sanitation

File No. WQ-11035/5/2018-WQ (efms: 14495)/75

Dated the 19<sup>th</sup> March, 2019

To

The Principal Secretary/Secretary in Charge/Commissioner  
Rural Drinking Water Supply Department  
All States/Union Territories,

**Sub.: OA No. 156 of 2015 (MA No. 474 of 2015) Mrs Sunita Pandey Vs Union of India  
regarding availability of clean water in Balia and Other Districts of Uttar Pradesh**

Madam/Sir,

Kindly refer to the Hon'ble National Green Tribunal's Order dated 25.10.2018 in OA No. 156/2015 Ms. Sunita Pandey & Anr. Vs. Union of India and Ors.(copy enclosed - related to availability of clean water to everyone), wherein this Ministry has been directed to ensure the compliance to its directions in the said order.


2. In this regard, it is informed that in addition to all the other direction issued vide the above said Order, the directions issued vide point 18 (ix), 18(xi) and 18 (xii), reiterated below, may kindly be noted for strict compliance:

18 (ix). The final responsibility for the compliance of the above directions will be of the Chief Secretary of the State.

18 (xi). The issue to be considered may include long term strategies for remediation of Arsenic contamination in the water. The hot-spots of the problem be identified and put up on the Website for the Ministry of Water Resources as well as in the concerned States and the Districts.

18 (xii) Regular monitoring and survey in the affected areas be overseen at the level of Secretary to the State Government at least once in three months, at the level of District Magistrates once in a month and at the level of Local Committees constituted for the purpose on weekly basis.'

Yours sincerely,

  
(V. Radha)

CC to : NIC, MDWS for hosting on Website

BEFORE THE NATIONAL GREEN TRIBUNAL,  
PRINCIPAL BENCH, NEW DELHI

Original Application No. 156 of 2015  
(M.A. No. 474 of 2015)

IN THE MATTER OF :-

Mrs. Sunita Pandey & Anr. Vs. Union of India & Ors.

CORAM : HON’BLE MR. JUSTICE ADARSH KUMAR GOEL, CHAIRPERSON  
HON’BLE MR. JUSTICE S.P. WANGDI, JUDICIAL MEMBER  
HON’BLE DR. NAGIN NANDA, EXPERT MEMBER

Present: Applicant: Ms. Mithilesh Kumar Pandey, Adv.  
Respondent: Mr. Pradeep Misra and Mr. Daleep Kr. Dhyani,  
Adv. for UPPCB  
Dr. Abhishek Atrey and Ms. Leena Saxena,  
Adv.  
Mr. Raj Kumar Adv. for Central Pollution  
Control Board  
Mr. Amit Tiwari, Adv. for State of Uttar Pradesh  
Mr. Varun Thakur and Ms. Shradha Srana, Adv.  
for NMC  
Mr. Ardhendumauli Kr. Prasad, Mr. Shashank  
Saxena and Ms. Rishika Gera, Adv. for CGWA  
Mr. I.K. Kapila, Adv.

Date and Remarks	Orders of the Tribunal
Item No. 01  October 25, 2018 A + PS	<p>1. Availability of clean drinking water in District Ballia and other Districts of State of Uttar Pradesh on account of ground water being contaminated is the issue for consideration in present proceedings.</p> <p>2. The original application was filed on 13.05.2015, by way of a PIL seeking direction to provide clean drinking water to the residents of the area and to direct administration to install Reverse Osmosis (RO) Plants.</p> <p>3. According to the applicant, there is high Arsenic content in ground water in districts Ballia, Lakhimpur Kheri, Agra, Mathura, Gonda, Gorakhpur etc. The permissible limit of Arsenic in water as per WHO standard is 0.01 mg/L. In the said districts, content of Arsenic is 0.05 mg/L, which five times the normal Arsenic content. Excessive Arsenic leads to poisoning known as Arsenicosis. Arsenic is a natural component of earth’s crust and is widely distributed throughout the</p>



	<p><b>Item No. 01</b></p> <p><b>October 25, 2018 A + PS</b></p>	<p>environment. Arsenic is highly toxic in its inorganic form. Long exposure to Arsenic leads to skin lesions, skin cancer, cancers of bladder and vessels, pigmentation, colour changes, reproductive disorders and various other diseases. Use of such water for irrigation purposes causes Arsenic to enter food chain affecting the health of people, animal and wildlife. Arsenic based fertilizers add to the percentage of the Arsenic in the ground water.</p> <p>4. The applicant has referred to the report published by the State Water Resources Agency, Government of U.P. in February, 2011, finding 28 districts affected by the problem. The study recommended testing of hand pumps and monitoring ground water supplies and other lapses. Further study was carried out in June, 2011 by a Central team appointed by Ministry of Environment, Forest and Climate Change (MoEF&amp;CC). The said team found deaths and diseases caused as a result of the problem. The Ministry of Drinking Water and Sanitation, Government of India has also appointed another team for Arsenic mitigation which gave its report on 14.09.2011. The Ministry of Agriculture wrote to the concerned States to take steps to reduce Arsenic content in the ground water. The Lok Sabha Committee also looked into the problem and submitted a report dated 11.12.2014 titled "Occurrence of High Arsenic Content in Groundwater". The Committee recommended setting up of an Authority for monitoring Arsenic consumption progress.</p> <p>5. This Tribunal issued notice to MoEF&amp;CC, State of Uttar Pradesh, District Magistrate, Ballia, Uttar Pradesh Jal Nigam, Uttar Pradesh Pollution Control Board, Central</p>
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	<p><b>Item No. 01</b></p> <p><b>October 25, 2018 A + PS</b></p>	<p>Pollution Control Board, Central Ground Water Board and others concerned.</p> <p>6. On 17.05.2016, this Tribunal directed furnishing mechanism in place for remediation of Arsenic in the ground water supplied to more than 300 villages which were found to be affected. The Tribunal also directed teams of scientists from CPCB, MoEF&amp;CC, UPPCB and CGWA to conduct inspection and give a report of the problems and the solutions.</p> <p>7. The Uttar Pradesh Jal Nigam, in its reply filed before this Tribunal on 21.07.2015 has reiterated that as per its monitoring reports, Arsenic in ground water is in excess of prescribed limits mainly due to geogenic (natural) reasons. The said respondent was not however aware of anthropogenic (man-made) causes of Arsenic content in ground water and soil in the area. 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).</p> <p>8. Accordingly, drinking water was made available in these districts by installing hand pumps equipped with Arsenic removal plant (minimum 1/hamlet) or by installing extra deep hand pump so that ground water from these hand pumps containing Arsenic within acceptable limits prescribed by Bureau of Indian Standard made available for drinking purposes to the habitants. Apart from such hand pumps, steps were taken to supply</p>
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	<p><b>Item No. 01</b></p> <p><b>October 25, 2018 A + PS</b></p>	<p>safe potable water through pipe water supply from ground water source/ deep tube well dug up to second strata of ground water (60 m or more below ground level) where Arsenic concentration is by and large within acceptable limits as prescribed by BIS.</p> <p>9. 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, Santkabir nagar, Shajahanpur, Siddharthnagar, Sant Ravidas Nagar and Unnao in the State of Uttar Pradesh. The well waters can contain 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. There are different options for remediation of Arsenic. As a short term measure, various types of ex-situ removal techniques are adopted. As medium and long term measure, alternate Arsenic free deeper aquifers can be tapped. Remediation is possible through in-house treatment system by adopting point-of-use reverse osmosis filtration.</p> <p>10. In pursuance of the direction of this Tribunal, certain inspection reports have been filed. In the inspection report filed on 24.08.2018 by team headed by Chief Engineer, Uttar Pradesh Jal Nigam and comprising</p>
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	<p><b>Item No. 01</b></p> <p><b>October 25, 2018 A + PS</b></p>	<p>of seven other officers, it is stated that said team inspected 183 hand pumps fitted with Arsenic Removal Units (ARUs). Digital Arsenator was used to test the samples. The said ARUs were found functional to supply potable drinking water, except five hand pumps. The said five hand pumps were also rectified and made functional. The Gram Panchayats are given responsibility to maintain the ARUs. Further, report was filed by the said team on 30.09.2015 with respect to the 181 hand pumps. The teams observed that regular back washing was required for proper functioning of ARUs atleast once in 15 days and this responsibility should rest with the community using the ARUs. The team also recommended that the Uttar Pradesh Government should entrust its responsibility for such maintenance and also organize public awareness programme.</p> <p>11. Reference has also been made to the Report of the Inter-Ministerial Group (IMG) for 'Arsenic Mitigation' submitted by Ministry of Water Resources, River Development and Ganga Rejuvenation, Government of India, dated July, 2015. The said report has suggested an action plan to mitigate Arsenic contamination and made comprehensive recommendations on the whole gamut. The recommendations include constitution of Arsenic Task Force (ATF) for interdepartmental coordination at the Central level and State level Task Force (STF). It is suggested that non-functional Arsenic removing systems should be replaced by exploring Public Private Partnership (PPP) model. Adequate number of water quality testing laboratories should be set up and accredited with National</p>
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	<p><b>Item No.</b> <b>01</b></p> <p><b>October</b> <b>25, 2018</b> <b>A + PS</b></p>	<p>Accreditation Board for Laboratories. Protocols should be standardized, necessary provision from the Budget should be made. Department of health and family welfare should evolve a mechanism to deal with the health issues. Department of Agriculture and Cooperation (DAC) should monitor Arsenic content in soil. Arsenic Removal Plants should be set up by making provision for the funds in the Budget of State and Central Governments. Arsenic Mitigation Programme should be initiated by the Ministry of Urban Development and Ministry of Science and technology.</p> <p>12. Our attention has also been drawn to the 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, Jal Nigam. 30 per cent affected people are poor and malnourished which require Rs. 19,700 crores. The news item further refers to research showing that the 90 per cent of Arsenic laden water is used for irrigation and adversely affecting the crops.</p> <p>13. Our attention has also been drawn to the Joint Inspection Report filed before this Tribunal on 19.10.2016 by a team headed by the Scientist from Central Pollution Control Board and also comprising scientist from Ministry of Environment, Forest and Climate Change, CGWA and an Engineer from UPPCB. The report observed that some of the ARUs are not properly functioning. Apart from Arsenic, other heavy metals have also been noticed such</p>
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	<p><b>Item No. 01</b></p> <p><b>October 25, 2018 A + PS</b></p>	<p>as Iron, Manganese, Lead and Zinc and other water pollutants namely pH, Color, Conductivity, TDS, Ca, Mg, Na, % Na, K, Cl, F, Sulphate, Phosphate, Nitrate, Nitrite, Carbonate, Bicarbonate and COD. The report filed before this Tribunal on 30.01.2017 by the Joint Inspection Team headed by Central Pollution Control Board states that water was available in all the 310 Arsenic affected habitations either by ARUs or by Arsenic free extra deep bored hand pumps. All the physicochemical parameters were found as per the prescribed norms for drinking water, except nitrate content at Maniyar Block in respect of private owned hand pumps.</p> <p>13. This Tribunal directed dismantling private hand pumps with concentration of Arsenic beyond the permissible limit. An affidavit has been filed by the UPPCB on 15.05.2017 stating that the said order is in compliance.</p> <p>14. Learned Counsel for the Uttar Pradesh Jal Nigam has handed over a letter signed by the Executive Engineer of the Jal Nigam, giving the status of supply of drinking water in the affected area in Ballia. The said letter is to the effect that piped water supply is available in 221 of the habitations and in the remaining areas hand pumps without ARUs have been stopped.</p> <p>15. The report of the Neeti Ayog published in June 2018 on “Water Management Index” has also been furnished. The report is to the effect that 70% of the water is contaminated in India on account of which India is placed at number 120 out of 122 countries in water quality index. The report mentions that the acute water crisis is</p>
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	<div><div><div>Item No. 01</div><div>October 25, 2018</div><div>A + PS</div></div></div>	<p>being faced by 600 million people. About two lakh people die every year due to inadequate access to safe water. Water demand is likely to be twice the available supply which called for intervention for efficient and sustainable use of the water. The Neeti Ayog has developed mechanism for effective water management. Composite Water Management Index is a step to establish clear baseline and benchmark for performance on key water indicators for decision making on the subject.</p> <p>16. It is clear from the pleadings and documents referred to above, that there is serious problem of drinking water availability specially in the area in question. It is not safe to consume the ground water which is contaminated with Arsenic beyond permissible norms. In <i>Subhash Kumar v State of Bihar</i>,<sup>1</sup> the Hon’ble Supreme Court held that the right to live ‘includes the right of enjoyment of pollution-free water and air for full enjoyment of life. In <i>M.C. Mehta v Kamalnath</i>,<sup>2</sup> the Hon’ble Supreme Court categorically ruled that the State is not only bound to regulate water supply, but should also help realize the right to healthy water and prevent health hazards. The principle of Roman Law ‘<i>salus populi est suprema lex</i>’(welfare of the people is paramount law) is the abiding faith in Indian Constitution and the ‘State is assigned a positive role to help people realize their rights and needs’. Availability of potable water to every citizen has been recognized as fundamental right in the decision of the Hon’ble Supreme Court in the case of <i>Narmada Bachao Andolan v. Union of India</i> <sup>3</sup> and in <i>M.K.</i></p>
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<sup>1</sup> (1991) 1 SCC 598  
<sup>2</sup> (1997) 1 SCC 388  
<sup>3</sup> (2000) 10 SCC 664

<div><div>Item No. 01</div><div>October 25, 2018 A + PS</div></div>	<p><i>Balakrishnan &amp; Ors v. Union of India &amp; Ors.</i><sup>4</sup> The Hon'ble Supreme Court directed formulation of a Committee to address the problem of water shortage in the country.</p> <p>17. The parliamentary Committee Report of July 2015 shows that steps have been taken by the Authorities in the matter. Learned Counsel for the parties are unable to assist about the status of the recommendations made in the report of July, 2015, referred to above.</p> <p>18. In view of above, we direct that necessary steps must be taken to ensure access to potable water, particularly the following:-</p> <div><div>(i) Community based hand pumps with Arsenic Removal Unit (ARU) be provided, ensuring the maintenance and operations for pipelines for potable water supply. Potable water by tankers be provided where potable water is not otherwise available.</div><div>(ii) Where community based hand pumps are not viable, single unit hand pumps may be considered with ARU.</div><div>(iii) Harvesting rain water be done by using indigenous or latest technology.</div><div>(iv) Massive awareness programmes be undertaken, particularly in educational institutions in the area.</div><div>(v) Long-term Action Plan be prepared to reduce occupational exposure of water from industrial processes.</div><div>(vi) Awareness be created about the risks of high Arsenic exposure and the sources of Arsenic</div></div>
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<sup>4</sup> AIR 2009 SC (Supp) 1916

	<p><b>Item No. 01</b></p> <p><b>October 25, 2018 A + PS</b></p>	<p>exposure, including the intake of Arsenic by crops (e.g. rice) from irrigation water and the intake of Arsenic into food from contaminated cooking water.</p> <p>(vii) High-risk populations should be monitored for early signs of Arsenic poisoning- usually skin problems.</p> <p>(viii) A quarter by review must be undertaken by the Central Ground Water Authority either by calling reports or organizing meetings in person or through video conferencing.</p> <p>(ix) The final responsibility for the compliance of the above directions will be of the Chief Secretary of the State.</p> <p>(x) The Secretary Water Resources Government of India should organize a review meeting for the purpose within two months from today involving the States where such problem is faced.</p> <p>(xi) The issue to be considered may include long term strategies for remediation of Arsenic contamination in the water. The hotspots of the problem be identified and put up on the Website for the Ministry of Water Resources as well as in the concerned States and the Districts.</p> <p>(xii) Regular monitoring and survey in the affected areas be overseen at the level of Secretary to the State Government at least once in three months, at the level of District Magistrates once in a month and at the level of Local Committees constituted for the purpose on weekly basis.</p>
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	<div><div><div>Item No. 01</div><div>October 25, 2018</div><div>A + PS</div></div></div>	<div><div><div>19. We direct the Secretaries Ministry of Drinking Water and Ministry of Water Resources, Government of India, to file a joint report after compiling the relevant information about compliance of the above directions on or before 31<sup>st</sup> March, 2018.</div><div>20. The application is disposed of.</div><div>21. Put up the report as a fresh matter on 3<sup>rd</sup> April, 2019.</div></div><div><div>....., CP (Adarsh Kumar Goel)</div><div>.....,JM (S.P. Wangdi)</div><div>.....,EM (Dr. Nagin Nanda)</div></div><div>25.10.2018</div></div>
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व्ही. राधा आई.ए.एस.  
संयुक्त सचिव  
**V. Radha, I.A.S.**  
Joint Secretary



भारत सरकार  
पेयजल एवं स्वच्छता मंत्रालय  
Government of India  
Ministry of Drinking Water and Sanitation

D.No. WQ-11035/5/2018-WQ/446  
Dated the 27<sup>th</sup> November, 2018

To

The Chief Secretary  
All States/Union Territories

Subject: OA No. 156 of 2015 (MA No. 474 of 2015) Mrs Sunita Pandey Vs Union of India  
regarding availability of clean water in Balia and Other Districts of Uttar Pradesh

Sir/Madam,

Kindly refer to the Hon'ble National Green Tribunal's Order dated 25.10.2018 in OA No. 156/2015 Ms. Sunita Pandey & Anr. Vs. Union of India and Ors.(copy enclosed), wherein this Ministry has been directed to ensure the compliance of directions of Hon'ble Tribunal related to availability of clean water to everyone.

2. State Governments plan, design, approve, execute and operate & maintain the schemes for providing safe drinking water to rural population whereas this Ministry supplements the efforts of the State Governments by providing them with technical and financial assistance under National Rural Drinking Programme (NRDWP) for improving the coverage of safe drinking water in respect of rural areas.

3. In view of the above, I request you to furnish an appropriate reply/action taken on all the points in the above said Order latest by 31.12.2018 to this Ministry for onward submission to the Hon'ble Tribunal.

Yours faithfully,

(V.Radha)

Copy for information to the Secretary, Ministry of Water Resource, Shram Shakti Bhawan,  
Rafi Marg, New Delhi - 110001

(V.Radha)

I/11341/2019

**Reminder II**

D.O. No. WQ-11035/5/2018-WQ (efms: 14495)

Dated the 26 February, 2019

Dear

Kindly refer to the my D.O. dated 15.01.2019 and Hon'ble National Green Tribunal's Order dated 25.10.2018 in OA No. 156/2015 Ms. Sunita Pandey & Anr. Vs. Union of India and Ors.(copy enclosed), wherein this Ministry has been directed to ensure the compliance of directions of Hon'ble Tribunal related availability of clean water to everyone and submit a joint report along with Ministry of Water Resources on or before 31.03.2019.

2. However, the requisite reply in this regard is still awaited from your State/Union Territory. In view of the urgency of the matter, you are requested to furnish an appropriate reply/action taken on all the points in the above said Order latest by 28.02.2019 to this Ministry for onward submission the requisite reply to Hon'ble Tribunal.

With Regards,

Yours sincerely,

(Parameswaran Iyer)

To

The Chief Secretary, Government of Sikkim, Chandigarh, Dadra&Nagar Haveli, Daman&Diu, West Bengal, Puducherry, NCT of Delhi, Mizoram, Uttar Pradesh, Jharkhand, Punjab, Chhattisgarh, Gujarat, Manipur, Jammu&Kashmir, Himachal Pradesh, Nagaland, Kerala, Andhra Pradesh, Maharashtra, Odisha.



I/11150/2019

D.O. No. WQ-11035/5/2018-WQ (efms: 14495)

Dated the 15 January, 2019

Dear

Please refer to this Ministry's D.O. Letter of even number dated 22.11.2018 (copy enclosed) regarding Hon'ble National Green Tribunal's Order dated 25.10.2018 in OA No. 156/2015 Ms. Sunita Pandey & Anr. Vs. Union of India and Ors. (copy enclosed), wherein this Ministry has been directed to ensure the compliance of directions of Hon'ble Tribunal.

2. You were requested to furnish an appropriate reply/action taken on all the points in the above said Order latest by 31.12.2018 to this Ministry for onward submission the requisite reply to Hon'ble Tribunal. However, this Ministry is yet to receive the same from your side.

3. I request you again to kindly look into the matter personally and direct the concerned to forward the requisite information to this Ministry latest by 22.01.2019 positively.

With Regards

Yours sincerely,

(PARAMESWARAN IYER)

To,

The Chief Secretaries,

All States/Union Territories, [Except Govt. of Bihar, Goa, Madhya Pradesh, and Tripura]

Encl. As above