

GOVERNMENT OF INDIA
MINISTRY OF JAL SHAKTI,
DEPARTMENT OF WATER RESOURCES, RIVER DEVELOPMENT & GANGA
REJUVENATION

RAJYA SABHA

UNSTARRED QUESTION NO. 2973

ANSWERED ON 27.03.2023

GROUNDWATER CONTAMINATION IN DELHI-NCR REGION

2973. SHRI AKHILESH PRASAD SINGH

Will the Minister of **JAL SHAKTI** be pleased to state:

- (a) the details of the groundwater contamination in the Delhi-NCR region, year-wise;
- (b) whether it is a fact that the National Human Rights Commission (NHRC) has issued a notice to Government regarding groundwater contamination in Delhi;
- (c) if so, the details of the notice thereof;
- (d) whether Government has taken any action pursuant to the notice;
- (e) if so, the details thereof;
- (f) if not, the reasons therefor; and
- (g) the steps taken by Government to address the issue of groundwater contamination?

ANSWER

THE MINISTER OF STATE FOR JAL SHAKTI

(SHRI BISHWESWAR TUDU)

(a) Central Ground Water Board (CGWB) generates ground water quality data of the country including Delhi - NCR on a regional scale as part of its ground water quality monitoring program and various scientific studies. These studies indicate the occurrence of contaminants such as fluoride, arsenic, nitrate, iron and heavy metals beyond permissible limits (as per BIS) for human consumption in isolated pockets in various States / UTs, including Delhi NCR. The details of partly affected districts due to select contaminants in ground water in Delhi NCR for last four years are given at **Annexure**.

(b) & (c) As per the available information the National Human Rights Commission (NHRC) had issued a notice to the Government of NCT Delhi and the Department of Water Resources, River Development & Ganga Rejuvenation (DoWR, RD & GR), Ministry of Jal Shakti regarding the contamination of areas around landfill sites of Bhalaswa, Ghazipur, Bawana and Okhla as per report published in a newspaper.

(d) to (f) CGWB generates groundwater quality data of the country including 11 monitoring stations located in the vicinity of 5 km radius of landfill sites located in Delhi as part of its groundwater quality

monitoring program. The groundwater quality report has been shared with the NCT of Delhi. Further, DoWR, RD & GR is regularly monitoring status of sewage, industrial and solid waste management in Delhi through a Central Monitoring Committee. A report on the matter has been submitted to NHRC by DoWR, RD & GR.

(g) Water being a State subject, initiatives on water management, including its quality, is primarily States' responsibility; however, various steps have been taken by the Central Government for controlling water contamination in the country:

- i. Government of India is implementing Jal Jeevan Mission (JJM) – Har Ghar Jal, since August, 2019, in partnership with States, to make provision of potable tap water supply in adequate quantity, of prescribed quality and on regular & long-term basis to every rural household by 2024. Under JJM, while allocating the funds to States/ UTs, 10% weightage is given to the population residing in habitations affected by chemical contaminants.
- ii. Since, planning, implementation and commissioning of piped water supply scheme based on a safe water source may take time, purely as an interim measure, States/UTs have been advised to install community water purification plants (CWPPs) especially in arsenic and fluoride affected habitations to provide potable water to every household at the rate of 8–10 litre per capita per day (lpcd) to meet their drinking and cooking requirements.
- iii. Central Pollution Control Board (CPCB), in association with State Pollution Control Boards/Pollution Control Committees (SPCBs/PCCs), is implementing the provisions of the Water (Prevention & Control) Act, 1974 and the Environment (Protection) Act, 1986 to prevent and control pollution in water.
- iv. DoWR, RD & GR has notified guidelines dated 24 Sep 2020 for control and regulation of groundwater extraction with pan-India applicability. The guidelines include clauses on measures to be adopted to ensure prevention from pollution in the plant premises of polluting industries/projects.
- v. In addition, the quality of groundwater can be improved to some extent if concerted efforts are made to improve the groundwater resources through appropriate groundwater recharge/rainwater harvesting. Central Government has taken a number of initiatives in this direction which can be seen at https://jalshakti-dowr.gov.in/sites/default/files/Steps%20taken%20by%20the%20Central%20Govt%20for%20water_depletion_july2022.pdf

ANNEXURE

ANNEXURE REFERRED TO IN REPLY TO PART (a) OF UNSTARRED QUESTION NO. 2973 TO BE ANSWERED IN RAJYA SABHA ON 27.03.2023 REGARDING “GROUNDWATER CONTAMINATION IN DELHI-NCR REGION”.

The details of the name of districts partly affected due to select contaminants in ground water of Delhi NCR for last four years

Delhi – NCT

| Year | Electrical Conductivity (EC above 3000 micro mhos/cm) at 25°C | Fluoride (above 1.5 mg/l) | Nitrate (above 45 mg/l) | Iron (above 1mg/l) | Arsenic (above 0.01 mg/l) | Uranium (above 0.03mg/l) |
|----------------|--|--|--|--|-----------------------------------|--|
| 2018-19 | North, West, South West, North West | North, South West, North West, Central, West | North, South West, South, West, New Delhi, Central, North West, East, South East | -- | -- | -- |
| 2019-20 | North, Shahdara, South, South West, North West, West | North west, west | New Delhi, Central, North West, South West, West, North | West | Nazulland | North, North West, South West, West |
| 2020-21 | North, west, Shahdara, South West, South, North West, Nazulland | South West, North, North West, West | West, South, New Delhi, North West, South East | North, South East, South West | South East | North, West, South West, North West, Nazulland |
| 2021-22 | North, New Delhi, North West, South West, Shahdara | North, New Delhi, South West, South, Nazulland, West, North West | North, New Delhi, Central, North West, South, South West, West | North, Central, South East, North West | South East, Nazulland, North East | North West |

Delhi – NCR (part of Uttar Pradesh)

| Year | Electrical Conductivity (EC above 3000 micro mhos/ cm) at 25°C | Fluoride (above 1.5 mg/l) | Nitrate (above 45 mg/l) | Iron (above 1mg/l) | Arsenic (above 0.01 mg/l) | Uranium (above 0.03mg/l) |
|----------------|---|----------------------------------|--|---|----------------------------------|---|
| 2018-19 | | G.B. Nagar | Baghpat, Bulandshahr, Ghaziabad, Meerut, Muzaffarnagar | Samples not collected for Heavy Metal analysis | | |
| 2019-20 | | G.B. Nagar | Bulandshahr, Muzaffarnagar | Meerut, Muzaffarnaga, Shamli, Bulandshahr | Muzaffarnagar | Ghaziabad, Bulandshahr, G.B. Nagar |
| 2020-21 | | | Baghpat, Meerut, Muzaffarnagar | Samples not collected for Heavy Metal analysis due to Covid Pandemic. | | |
| 2021-22 | | G.B. Nagar | Baghpat, Bulandshahr, G. B. Nagar, Meerut, Muzaffarnagar | Bulandshahr, Ghaziabad, Meerut, Muzaffarnagar | Muzaffarnagar | Baghpat, Bulandshahr, G. B. Nagar, Ghaziabad, Muzaffarnagar |

Delhi – NCR (part of Rajasthan)

| Year | Electrical Conductivity (EC above 3000 micro mhos/ cm) at 25°C | Fluoride (above 1.5 mg/l) | Nitrate (above 45 mg/l) | Iron (above 1mg/l) | Arsenic (above 0.01 mg/l) | Uranium (above 0.03mg/l) |
|----------------|---|----------------------------------|--------------------------------|----------------------------|----------------------------------|----------------------------------|
| 2018-19 | Alwar, Bharatpur | Bharatpur | Alwar, Bharatpur | | Parameter not analysed | Parameter not analysed |
| 2019-20 | Alwar, Bharatpur | Alwar, Bharatpur | Alwar, Bharatpur | Parameter not analysed | | Alwar |
| 2020-21 | Alwar, Bharatpur | Alwar, Bharatpur | Bharatpur | Parameter not analysed | Parameter not analysed | Parameter not analysed |
| 2021-22 | Alwar, Bharatpur | Alwar, Bharatpur | Alwar, Bharatpur | Parameter not analysed | Parameter not analysed | |

Delhi – NCR (part of Haryana)

| Year | Electrical Conductivity (EC above 3000 micro mhos/ cm) at 25°C | Fluoride (above 1.5 mg/l) | Nitrate (above 45 mg/l) | Iron (above 1mg/l) | Arsenic (above 0.01 mg/l) | Uranium (above 0.03mg/l) |
|----------------|---|--|---|---------------------------------------|-----------------------------------|--|
| 2018-19 | Faridabad, Gurugram, Jhajjar, Mewat, Palwal, Panipat, Rewari, Rohtak, Sonipat | Faridabad, Jhajjar, Palwal, Panipat, Rohtak, Sonipat | Faridabad, Gurugram, Jhajjar, Mewat, Palwal, Panipat, Rohtak, Sonipat | | | |
| 2019-20 | Faridabad, Gurugram, Jhajjar, Mewat, Palwal, Panipat, Rewari, Rohtak, Sonipat | Jhajjar, Panipat, Rohtak, Sonipat | Sonipat, Rewari | Faridabad, Panipat, Rohtak, Sonipat | Sonipat | Faridabad, Gurugram, Jhajjar, Palwal, Panipat, Rohtak, Sonipat |
| 2020-21 | Faridabad, Gurugram, Jhajjar, Mewat, Palwal, Panipat, Rewari, Rohtak, Sonipat | Faridabad, Jhajjar, Mewat, Palwal, Panipat, Rewari, | Faridabad, Gurugram, Jhajjar, Mewat, Palwal, Panipat, Rewari, Rohtak, Sonipat | Faridabad, Panipat, Gurugram, Sonipat | Jhajjar, Rohtak | Faridabad, Jhajjar, Palwal, Panipat, Rewari, Rohtak, Sonipat |
| 2021-22 | Faridabad, Gurugram, Jhajjar, Mewat, Palwal, Panipat, Rewari, Rohtak, Sonipat | Faridabad, Gurugram, Jhajjar, Palwal, Panipat, Rewari, Rohtak, Sonipat | Faridabad, Jhajjar, Mewat, Palwal, Panipat, Rohtak, Sonipat | Panipat, Jhajjar | Rewari, Jhajjar, Panipat, Sonipat | Faridabad, Gurugram, Jhajjar, Palwal, Panipat, Rewari, Rohtak, Sonipat |
