

No.DGWD/73/2024/T1

Directorate of Groundwater Department,
Jalavijnana Bhavan, Ambalamukku
Kowdiar P.O, Thiruvananthapuram
Dated:#ApprovedDate#
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From
Director

To
Principal Secretary to Government
Water Resources (GW) Department
Thiruvananthapuram

Sir,

Sub:- Groundwater Department - OA No. 728/2023- Arsenic found
in Groundwater in 25 States, Fluoride in 27 States- Govt- SOF
forwarding -reg

Ref:- Government Letter No. GW3/19/2024/WRD dated : 30/01/2024

Inviting kind attention to the reference cited, I am furnishing the
Statement of Facts (Para 3 and 4) on OA No. 728/2023 to be presented before the
Hon'ble NGT. This is for favour of your information and necessary action.

Yours faithfully,

DIRECTOR

Encl: As above

Report on OA No.728/2023 before the Hon'ble National Green Tribunal**Arsenic found in Groundwater in 25 States , Fluoride in 27 States****Para - 3****a. Arsenic Contamination of Groundwater in Kerala:-**

Central Ground Water Board was reported one isolated case of Arsenic contamination in groundwater during the analysis conducted during 2016. Detailed analysis in the location has proved no such contamination .Hence no locations in the State is having Arsenic content higher than the BIS limit.

Para – 4**b. Fluoride contamination of Groundwater in Kerala:-**

In Kerala, Fluoride contamination in groundwater is mainly reported in certain pockets in Palakkad, Alappuzha and Malappuram Districts. The fluoride contamination is solely geogenic in nature.

Observation Well Locations showing the Fluoride concentration higher than BIS limit (>1.5mg/L)- Established by Central Groundwater Board

Sl.No.	District	Block	Village	Latitude	Longitude	Fluoride (Fl) (>1.5mg/L)
1	Malappuram	Manjeri	Manjeri	11.1201	76.1201	2.092
2	Palakkad	Chittur	Koppanur	10.7600	76.7800	4.49
3	Palakkad	Attappadi	Vattaluki	11.1400	76.7200	1.52
4	Alappuza	Ambalappuzha	Pazhaveedu	9.4644	76.3655	1.88
5	Alappuza	Aryad	Komalapuram-1	9.5422	76.3422	1.8

Observation Well Locations showing the Fluoride concentration higher than BIS limit (>1.5mg/L)- established by State Groundwater Department

District	Block	Village	Well Type	Latitude	Longitude	Fluoride(Fl) (>1.5mg/L)
Palakkad	Alathur	Kannambra	Open Well	10.6158	76.4583	1.85
Palakkad	Mannarkad	Kalladikode	Open Well	10.8930	76.5391	1.53
Palakkad	Ottappalam	Cherpulacherry	Open Well	10.8813	76.3186	1.97
Palakkad	Mannarkad	Mannarkad	Open Well	10.9925	76.4586	1.87
Palakkad	Chittur	Nalleppilly	Open Well	10.7405	76.8169	1.7
Palakkad	Chittur	Elavancherry	Bore well	10.5974	76.6636	3.58
Alappuzha	Kuttanad	Ramankari	Tube Well	9.4286	76.4674	1.6

Remedial Measures being Implemented by the State Groundwater Department

➤ The fluoride contamination can be reduced by enhancing the recharge of groundwater in the affected areas. The State Groundwater Department is implementing artificial recharge measures all over the State utilizing the State Budget. Apart from this, Jal Shakti Abhiyan – Catch the rain Programme proposed by Ministry of Jal Shakti, Government of India by utilizing State and Central funds for implementing different water conservation activities. The State is giving priority to areas where the ground water quantity and quality is deteriorating as per the Groundwater Resource Estimation Reports prepared jointly by CGWB and State Groundwater Department.

- In order to reduce the consumption of fluoride contaminated groundwater, the Department is generating awareness classes among the public to opt surface water for drinking purpose and adopt suitable groundwater management interventions in those areas.
- More spatial analysis studies shall be carried out to understand the spatial concentration of the fluoride contamination in the affected areas. Based on this the possibility of dilution techniques with surface water can be adopted.

(Sd/-)

DIRECTOR