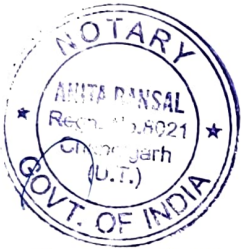


**BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL, PRINCIPAL
BENCH, NEW DELHI**

Original Application No. 676 of 2023

In Re: News Item titled "Agriculture Runoff causing groundwater pollution in Punjab, making Drinking Water unsafe Reveals Study" appearing in The Times of India dated 12.10.2023.

Reply by way of affidavit of Jasbir Singh,
**Chief Engineer-cum-Advisor Water
Quality**, Department of Water Supply and
Sanitation Punjab, Chandigarh on behalf of
Respondent No.4



Respectfully Showeth:-

I, the above named deponent do hereby solemnly affirm and declare as under:-

1. That the above captioned Original Application has been registered for hearing after the Hon'ble National Green Tribunal was pleased to take suo moto cognizance of a News Item appearing in "The Times of India" dated 12.10.2023 titled "Agriculture Runoff Causing Groundwater Pollution in Punjab, Making Drinking Water Unsafe Reveals Study" whereupon a notice was issued by the Hon'ble National Green Tribunal on dated 03.02.2024 to the Department of Water Supply and Sanitation, State of Punjab headed by the deponent being Principal Secretary of the department as Respondent No. 4 for filing its response before the Hon'ble Tribunal on 19.03.2024.
2. That in the news item as referred to above, reference has been made to a new research released by Indian Institute of Technology (IIT) Mandi as per which, the ground water demand has increased in the last two decades due to absence of

Jasbir Singh

monsoon and the ground water being exploited by the local farmers from deeper geological strata is enriched with heavy metals and few are radioactive having serious health impact. The said research paper published in the journal Environmental Science and Pollution Research, has been examined by the department of the answering respondent and the observations of the Department are recorded herein below:

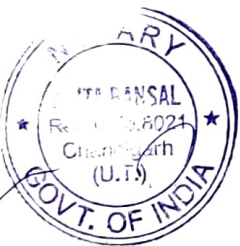
(a). That the research paper is based on the data of 11 parameters viz pH, EC, Bicarbonate, Chloride, Sulphate, Nitrate, Fluoride, Calcium, Magnesium, Sodium & Potassium of 315 locations monitored by the Central Ground Water Board (CGWB). Thus, the data used in the research paper does not have any reference to heavy metals and radioactive substances in the ground level Water in State of Punjab.

As regards, 315 locations monitored by Central Ground Water Board (CGWB) which forms basis of the Research Paper, are of shallow wells which are not being used by the Department of Water Supply & Sanitation. The department supplies safe and potable drinking water to the Rural population through its established ground water based deep tubewells or surface water based water supply schemes.

(b). That as per the observations made in the said research paper, the Water Quality Index (WQI) data for the year 2000 has categorized 13.01% of sampling locations as very poor and 20% as unsuitable for drinking, whereas, the Water Quality Index (WQI) data for the year 2020 categorized 6.35% of sampling locations as very poor and 12.38% as unsuitable for drinking.

(c). That the examination of the data presented in the research paper reveals that the percentage of locations categorized as very poor and unsuitable has actually decreased over the study period spanning into 20 years i.e. from the year 2000 up to the year 2020 based on the Central Ground Water Board (CGWB) reports.

(d). That in the Research Paper on the basis whereof the impugned news item was published, the State of Punjab has been referred to as Cancer capital of the country due to high toxicity found in the drinking water. It



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has been stated therein that the most of the Cancer cases are reported in the south western parts of the state. As per the World Health Organization Reports, long term exposure to inorganic arsenic, mainly through drinking water and food, causes skin lesions and skin Cancer besides leading to chronic arsenic poisoning. In the state of Punjab where ever such type of contamination in ground level water has been reported or found, the suitable mitigating measures like installation of surface water projects, Arsenic-cum-Iron Removal Plants as long term measures are being adopted.

3. That it is pertinent to mention here that the Central Ground Water Authority (CGWA) constituted by the Central Government in exercise of the powers conferred under the Environment (Protection) Act, 1986 is the statutory authority responsible for the regulation, control, management and development of ground water in the country and to issue necessary regulatory directions for the purpose.
4. That the drinking water supply arrangement for urban population in the State of Punjab is being regulated and monitored by Department of Local Government, Punjab and at some places by the Punjab Water Supply and Sewerage Board (PWSSB) which works under the control of Department of Local Government Punjab.
5. That as far as health related issues are concerned, the Health and Family Welfare Department, Punjab shall be in a better position to explain the facts mentioned in the news item.

That the data relating to the usage of ground water from deeper geological strata which is alleged to be used by the farmers may be available with the Department of Agriculture and Farmer's Welfare, as well as the Department of Water Resources, Punjab.

7. That the Department of Water Supply and Sanitation, Punjab is responsible only for providing safe and potable drinking water to the people of rural areas of the state through ground/canal/surface based water supply schemes. DWSS, Punjab is extracting water through tube well based schemes only for drinking & cooking purposes of the rural population to meet their basic needs only. However, if any contamination is found in the Departmental sources only then accordingly remedial measures are being taken by the Department.



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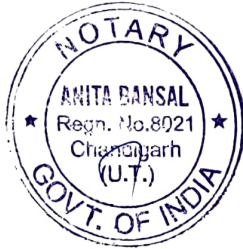
8. That Department of Water Supply & Sanitation carries out regular testing of all its sources throughout the year.
9. That as far as water quality deterioration due to ground water depletion is concerned, the Department is taking steps for providing safe and potable drinking water to the people through surface water based water supply schemes for meeting cooking & drinking water needs of rural population in Quality Affected villages. Details are attached as **Annexure R-1**.

Submitted for kind consideration please.

Date: Chandigarh

Place: 18.03.2024

Jashh 18/3/2024
Chief Engineer-cum-Advisor
Water Quality, Department Of
Water Supply & Sanitation,
Punjab.



18 MAR 2024

Attested as Identified
Anita
ANITA BANSAL
 Notary, Chandigarh (U.T.)

The contents of this Affidavit/Document has been explained to the deponent/ executants He/ She has admitted the same to be correct the deponent/ executant has signed Register at Sr. No. *148* P. No. *1* & Date *18/3/24*

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Ongoing 15 Surface Water Project

Annexure-R1

BE	Sr.No.	District	Block	WTP Site	No. of Villages
	1	Patiala	Block- Ganour, Patiala, Rajpura & Sanour	Mandouli	204
	2	Fatehgarh Sahib	Block- Bassi Pathana, Khera,	Nanowal	93
	3	Patiala	Block-Rajpura, Sirhind & Patiala	Pabra	112
	4	Gurdaspur	Block-Fatehgarh Churrian, Dera Baba Nanak	Parowal	40
	5	Amritsar	Block- Chogawan, Harcha Chhina & Ajnala	Chawinda Kalan	112
	6	Tarn Taran/Amritsar	Block-Attari, Gandiwind	Sangna	38
	7	Amritsar	Block-Majitha	Gaunsal Afgana	54
	8	Amritsar	Block-Harcha Chinna, Ajnala, Majitha	Kandowali	167
	9	Gurdaspur	Block-Dhariwal, Kalanour, Gurdaspur, Dera Baba Nanak	Kunjar	102
	10	Tarn Taran	Block-Gandiwind, Bhikhiwind, patti, Tarn taran, Valtoha	Bhuchar Kalan	99
	11	Ropar	Block Anandpur sahib -	Manakpur, Jawahar Market	67
	12	Hoshiarpur	Block-Talwara, Bhunga and Dasuya	Bhambotar and Bhatoli	197
	13	Fazilka	Block-Fazilka and Jalalabad	Ghattian wala Bodla	205
	14	Ferozepur	Block-Guruhar sahai	Sohangarh urf Ratte wala	94
	15	Fazilka	Block-Abohar, Fazilka , Arniwala and Khuhian Sarwar	Pattre wala	137
Completed 2 Surface Water Project					
	1	Ropar	Block-Nurpur Bedi	Ropar Surface Water Project	45
	2	Moga	Block-Bagha Purana, Nihal Singh Wala	Moga Surface Water Project	85

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