

GOVERNMENT OF INDIA
MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE

LOKSABHA
UNSTARRED QUESTION NO.1894
TO BE ANSWERED ON 29.11.2019

Water Quality of Indira Gandhi Canal

1894. SHRI RAHUL KASWAN:

Will the Minister of ENVIRONMENT, FOREST AND CLIMATE CHANGE be pleased to state:

- (a) whether the Government has made any assessment of the quality of Indira Gandhi Canal water in Rajasthan under National Water Quality Monitoring Programme during the last three years;
- (b) if so, the details thereof; and
- (c) the reaction of the Government thereto?

ANSWER

MINISTER OF STATE IN THE MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE
(SHRI BABUL SUPRIYO)

(a) & (b) In order to assess water quality of Indira Gandhi Canal, Central Pollution Control Board (CPCB) in association with Punjab Pollution Control Board (PPCB) and Rajasthan State Pollution Control Board (RSPCB) is conducting water quality monitoring of river Sutluj in Punjab region and canals, namely Rajasthan Feeder and Sir hind Feeder coming from Harike into Punjab. Water quality data of Indira Gandhi Canal at Hanumangarh for last three years is at **Annexure**.

Water quality monitoring data of Indira Gandhi Canal at Hanumangarh during the pre-monsoon period of 2019 indicates the parameters DO, BOD & Total Coliform (TC) as 5.9 mg/L, 1.5 mg/L (<3mg/L) and 2000 MPN/100mL, respectively. Heavy metals Chromium (Total), Zinc and Iron (Total) are in the order of 0.02, 0.06 & 3.73 mg/L, respectively. The water quality of Indira Gandhi Canal at Hanumangarh is not complying to TC and Iron content in comparison with Drinking Water Specifications IS 10500:2012.

Similarly, the post monsoon water quality data of Indira Gandhi Canal at Hanumangarh indicates the parameters DO, BOD & Total Coliform (TC) as 5.9 mg/L, 3.5 mg/L & 2200 MPN/100mL, respectively. Heavy metals for parameters Chromium (Total), Zinc and Iron (Total) were in the order of 0.01, 0.04 & 3.34 mg/l, respectively. Above data reveals that water quality of Indira Gandhi Canal at Hanumangarh is not complying to BOD, TC and Iron content on comparison with Drinking Water Specifications IS 10500:2012. However, conventional treatment of canal water will provide safe drinking water.

(c) In order to control pollution in Indira Gandhi Canal the Government has taken various initiatives which *inter alia*, include issuance of directions under Section 18 (1) (b)

of the Water (Prevention and Control of Pollution) Act, 1974 to PPCB and RSPCB in the matter of contamination of Rajasthan Feeder and Sirhind Feeder originating from Punjab for management of Municipal as well as Industrial wastewater in Punjab and conventional treatment with disinfection of water of Rajasthan feeder and other canals for drinking purpose in Rajasthan, installation of Real Time Water Quality Monitoring Systems (RTWQMS) at the respective jurisdiction of all the Inter-State borders on river Sutlej, issuance of direction to PPCB for ensuring compliance to the discharge norms by CETPs, issuance of Show Cause Notice under Section 5 of the Environment (Protection) Act, 1986 to Municipal Commissioner, Ludhiana Municipal Corporation (MCL) for noncompliance of sewage treatment plants installed at Ludhiana, etc.

In Addition to these, PunjabState has also taken various initiatives like, preparation of action plan for cleaning of River Sutlej, monitoring of domestic and industrial effluents discharged by Local bodies and industries. In compliance to Hon'ble NGT order, Punjab State has prepared action plans based on the gap analysis with respect to Sewage, Industrial effluent and Waste management apart from maintain E-flows, utilization of treated sewage etc.

ANNEXURE

Annexure referred in reply to the Lok Sabha Unstarred Question No. 1894 due for answer on 29.11. 2019 regarding 'Water Quality of Indira Gandhi Canal'

Water Quality of Indira Gandhi Canal (IGC), Hanumangarh– Physico-chemical & Biological Parameters						
Sampling Date	Dissolved Oxygen	pH	Conductivity	BOD	Faecal Coliform	Total Coliform
IS 10500:2012 Drinking Water Standards	-	6.5 – 8.5	-	-	-	Shall not be detectable in any 100 ml sample
14-06-2017	7.4	8.2	253	1	170	320
03-07-2017	7.2	7.3	230	2	1700	13000
23-04-2018	-	7.2	355	3	3100	4600
21-05-2019	5.9	7.1	294	1.5	2000	2000
02-09.2019	6.2	7.1	301	1	450	2300
14.10.2019	5.9	7.3	284	3.5	680	2200

Note: All the values are in mg/l except pH, EC (in μ -mhos/cm) and TC & FC (in MPN/100 ml)

Water Quality of Indira Gandhi Canal (IGC), Hanumangarh - Heavy Metals (mg/L)							
Sampling Date	Cadmium	Copper	Lead	Chromium Total	Nickel	Zinc	Iron Total
IS 10500:2012 Drinking Water Standards	0.003	0.05	0.01	0.05	0.02	5	0.3
14-06-2017	BDL	BDL	BDL	0.02	BDL	0.02	7.22
23-04-2018	BDL	BDL	BDL	BDL	BDL	BDL	0.17
21-05-2019	BDL	BDL	BDL	0.02	BDL	0.06	3.73
02-09.2019	BDL	BDL	BDL	BDL	BDL	0.01	4.34
14.10.2019	BDL	BDL	BDL	0.01	BDL	0.04	3.34