

GOVERNMENT OF INDIA
MINISTRY OF JAL SHAKTI,
DEPARTMENT OF WATER RESOURCES, RIVER DEVELOPMENT & GANGA REJUVENATION
LOK SABHA
STARRED QUESTION NO. *179
ANSWERED ON 09.12.2021

AMMONIA IN YAMUNA RIVER

*179. SHRI MANOJ TIWARI
 SHRI RAVINDRA KUSHWAHA

Will the Minister of JAL SHAKTI be pleased to state:

- (a) whether water supply has been affected in many parts of Delhi due to increased ammonia level in Yamuna river recently and if so, the details thereof;
- (b) whether the problem of increased ammonia level in major rivers has become a perennial problem due to uncontrolled amount of pollutants released into the rivers from various industrial units and if so, the details thereof;
- (c) whether the Government is aware that lack of coordination between the States is one of the primary reasons for this problem;
- (d) if so, the details thereof and the corrective steps taken by the Government to solve this problem; and
- (e) the other steps taken by the Government to prevent industrial units and factories from discharging their waste into the river?

ANSWER

THE MINISTER OF JAL SHAKTI

(SHRI GAJENDRA SINGH SHEKHAWAT)

(a) to (e) A Statement is laid on the Table of the House.

STATEMENT TO BE LAID ON THE TABLE OF LOK SABHA IN RESPECT OF PARTS (a) TO (e) OF LOK SABHA STARRED QUESTION No. *179 FOR 09.12.2021 REGARDING “AMMONIA IN YAMUNA RIVER” ASKED BY SHRI MANOJ TIWARI AND SHRI RAVINDRA KUSHWAHA, M.P.

(a) Water Quality Assessment of river Yamuna reveals that there is an occasional rise in ammonia levels in river Yamuna at Wazirabad barrage. As informed by Delhi Jal Board (DJB), the water supply was affected intermittently in many parts of the National Capital due to ammonia pollution with rise in Ammoniacal Nitrogen levels. The Water Treatment Plants (WTPs) of Delhi Jal Board at Chandrawal, Wazirabad and Okhla lift partial raw water from river Yamuna and stop water intake from Wazirabad barrage when Ammoniacal Nitrogen reaches the level of 01 mg/L, as the WTPs operated by DJB are not having adequate preliminary treatment facilities to handle such raw water. This affects production of drinking water at these plants ranging from 50 Million Gallons per Day (MGD) to 100 MGD.

(b) Possible reasons for high Ammoniacal Nitrogen in river Yamuna, are due to (i) discharge of untreated sewage from upstream towns in Haryana, (ii) discharge from industrial units especially fertiliser units, (iii) discharges from Common Effluent Treatment Plants (CETPs), Sewage Treatment Plants (STPs), (iv) illegal discharge of sewage from un-sewered colonies in outer Delhi, (v) septage discharge through tankers in Haryana and Delhi, (vi) less flows in river Yamuna coupled with anaerobic decomposition of accumulated sludge on the riverbed.

Central Pollution Control Board (CPCB) in association with the State Pollution Control Boards (SPCBs)/Pollution Control Committees (PCCs) is assessing the ambient water quality of both surface and ground water under National Water Monitoring Programme (NWMP) at 4,294 locations in the country including 2,026 locations on rivers. The water quality is assessed for various parameters (physico-chemical, bacteriological, heavy metals and pesticide concentration) as prescribed under Guidelines for Water Quality Monitoring, 2017 (GWQM, 2017) issued by Ministry of Environment, Forest & Climate Change (MoEF&CC). The assessment of water quality is done on monthly, half yearly, quarterly and yearly frequency. Water quality of the major rivers with respect to Ammoniacal Nitrogen parameter assessed and the data for year 2020 is given at **Annexure - I**.

Assessment of water quality of river Yamuna was carried out by CPCB at 7 locations and major drains upstream of Wazirabad during 7 -13 January, 2021, twice a week, during 31.05.2021 to 12.07.2021 at Palla, located on Haryana-Delhi border as well as during 08-09 November, 2021 and 11th November, 2021. It revealed that:

- i. Dhanurea Escape, Panipat Drain, and Drain No. 2 are discharging Ammoniacal Nitrogen (NH₃-N) between 13-42 Milligrams Per Liter (mg/L),
- ii. Impact of Dhanurea Escape and Panipat Drain gets assimilated by the river Yamuna at Sonapat with Ammoniacal Nitrogen levels coming down to 1.5 mg/L,
- iii. Ammoniacal Nitrogen (NH₃-N) again rises from 1.5 mg/L at Palla to 3.0 mg/L at Wazirabad.

- iv. Ammoniacal Nitrogen was observed in the range of 0.4 mg/L - 7.2 mg/L during monitoring in month of June-July, 2021 at Palla.
- v. Ammoniacal Nitrogen was observed in the range of 4 – 15.8 mg/L during monitoring in month of November, 2021.

(c) & (d) 28 States/ 3 UTs are implementing Action Plans prepared by State River Rejuvenation Committees for rejuvenation of 351 polluted stretches identified by CPCB in 2018 in the country and duly approved by CPCB. Besides, CPCB monitors the performance of industries in various basin States. The matter of pollution of rivers in country is also being monitored through regular meeting by Central Monitoring Committee (CMC) under Chairmanship of Secretary, Ministry of Jal Shakti with Chief Secretaries of all States/ Union Territories as members. 11 meetings of CMC have been held since January, 2020.

In respect of ammonia problem in river Yamuna in Delhi, based on discussions in meeting chaired by Secretary, Ministry of Jal Shakti and attended by Chief Secretary of Delhi and Haryana on 20.02.2018, short and long-term measures/ recommendations were made for action by the States.

A 'Study Group' constituted by CPCB has also suggested short term and long term measures for control of pollution in river Yamuna by the States of Delhi and Haryana. Joint Surveillance Squad (JSS) comprising officials of Haryana and Delhi States has been constituted for identification of hot spots, sources of pollution, illegal discharges, if any and present practices followed for treatment of generated sewage in the unauthorized colonies between Palla and Delhi. JSS is to carryout frequent inspections as per the schedule and submit the reports.

(e) Stringent monitoring, regulation and enforcement towards compliance of Grossly Polluting Industries against regulatory framework mandated under consent mechanism issued in respect of provisions of Water (Prevention and Control of Pollution) Act, 1974 is undertaken through CPCB, SPCBs and Pollution Control Committees (PCCs).

Industry specific effluent/emission standards are notified by Ministry of Environment, Forest & Climate Change under Schedule-I: 'Standards for Emission or Discharge of Environmental Pollutants from Various Industries' of Environment Protection Act, 1986. SPCBs and PCCs in States and Union Territories respectively are to ensure compliance of these standards. So far, 47 industry specific effluent standards and 63 industry specific emission standards have been notified.

In Haryana, there are 14 Common Effluent Treatment Plants (CETPs) with total capacity of 161.5 MLD having discharge in Yamuna basin. As per report of Haryana State Pollution Control Board, all the CETPs are complying with regulatory norms. In Delhi, the compliance of all the 13 CETPs with capacity of 212.3 MLD has been improved from 'nil' compliant CETPs in July 2021 to nine compliant CETPs in September 2021 after necessary directions were issued by Ministry of Jal Shakti.

Besides this, financial assistance is also being provided under Namami Gange Programme to industrial clusters to upgrade/ augment their CETPs. For Yamuna river, upgradation of one CETP project in Mathura for textile industrial cluster has been taken.

ANNEXURE-I

ANNEXURE REFERRED TO IN REPLY TO PART (b) OF STARRED QUESTION NO. *179 TO BE ANSWERED ON 09.12.2021 REGARDING “INTER-LINKING OF RIVERS”.

Water Quality Data of Major Rivers Monitored under NWMP for Ammoniacal Nitrogen Parameter during the Year 2020			
Sl. No.	Name of the River	Ammonical Nitrogen (mg/L)	
		Min	Max
1	BEAS	0.14	18.00
2	CAUVERY	0.01	43.00
3	GANGA	0.01	41.00
4	GODAVARI	0.01	8.18
5	KRISHNA	0.01	11.20
6	MAHANADI	0.01	26.10
7	MAHI	0.01	12.04
8	NARMADA	0.01	17.64
9	SABARMATI	0.06	23.30
10	SATLUJ	0.01	30.00
11	TAPI	0.01	64.80
12	YAMUNA	0.10	31.20
13	BAITARNI	0.08	15.20
14	BRAHMANI	0.12	62.00
15	BRAHMAPUTRA	0.14	2.80
16	PENNAR	0.01	4.20
17	SWARNREKHA	0.01	14.00