

GOVERNMENT OF INDIA
MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE

RAJYA SABHA
UNSTARRED QUESTION NO. 541
TO BE ANSWERED ON 23.07.2026

Industrial Effluents and groundwater contamination

541. SHRI SANJAY RAUT:

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

- (a) whether Government has assessed the impact of toxic industrial effluents on rivers, groundwater, drinking water and agricultural land, including in Maharashtra and if so, the details thereof;
- (b) whether heavy metals such as arsenic, lead, chromium, cadmium and nickel have been detected above permissible limits in major river basins during the last five years, and whether vulnerable villages have been identified;
- (c) the number of industries found violating effluent discharge norms and the action taken against them; and
- (d) whether Government proposes to strengthen real-time water quality monitoring and pollution control measures to safeguard public health, agriculture and water resources?

ANSWER

MINISTER OF STATE IN THE MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE
(SHRI KIRTI VARDHAN SINGH)

(a) and (b): The Ministry of Environment, Forest and Climate Change (MoEFCC) regulates water quality by enactment of the Water (Prevention and Control of Pollution) Act, 1974 and the Environment (Protection) Act, 1986 and notified Rules, Regulations based on the said acts. The Government has notified general discharge standards and industry specific effluent discharge standards under Environment (Protection) Rules, 1986 with an aim to prevent pollution in the water bodies.

State Pollution Control Boards (SPCBs)/Pollution Control Committees (PCCs), through Consent mechanism under the Water Act, 1974 monitor the establishment and operation of industries and polluting activities through prescription of pollution control measures and monitoring the compliance of effluent discharge standards.

The Central Ground Water Board (CGWB) carry out comprehensive groundwater quality monitoring in the country including state of Maharashtra, through its groundwater quality monitoring programme. The outcome of the report is available at Annual Ground Water Quality Report-2025 in <https://cgwb.gov.in/cgwbpm/public/uploads/documents/1762854375262680475file.pdf>

Further, CPCB in association with SPCBs/PCCs has established a Water Quality Monitoring Network under the National Water Quality Monitoring Programme (NWMP). Under NWMP, CPCB regularly assesses status of water quality of water resources to facilitate prevention and control of pollution in water bodies. At present, CPCB monitors water quality of aquatic resources in the country at 4922 locations, of which 2265 locations are on rivers and 1271 locations of groundwater. Out of 1271 groundwater locations, there are 50 locations in Maharashtra. Under NWMP, CPCB through SPCBs/PCCs periodically monitors the water quality data of the afore-mentioned aquatic resources, covering various parameters like Dissolved Oxygen, pH, Biochemical Oxygen Demand (BOD), Fecal Coliform and Fecal Streptococci once every month and various other parameters including heavy metals twice a year. However, the permissible limits for heavy metals for river water have not been prescribed by the CPCB.

(c) and (d): The inspections are carried out to assess the adequacy and performance of treatment facilities and to verify compliance with the conditions stipulated in the Consent to Operate (CTO) issued by the respective SPCBs/PCCs.

In order to strengthen self-regulation, 17 category of highly polluting industries and Grossly polluting industries (GPIs) industries are mandated to install Online Continuous Effluent Monitoring Systems (OCEMS), for real-time monitoring and alert system with connectivity to the server of SPCBs/PCCs and CPCB.

Based on the alerts generated from OCEMS, CPCB also conduct surprise inspection of selected industries. In cases of non-compliance found during inspections, appropriate actions such as issue of Show Cause Notice & Closure direction and imposition of Environmental Compensation are issued under Section 5 of the Environment (Protection) Act, 1986. The details of directions issued by CPCB under Section 5 of the Environment (Protection) Act, 1986 are available at CPCB website at <https://cpcb.gov.in/cpcb-directions-5ep.php>

Based on the water quality monitoring data under NWMP, the CPCB has identified polluted river stretches based on the water quality data for rivers with respect to Biochemical Oxygen Demand (BOD) parameter. The PRS are classified under Priority Class I to V, Priority I being most polluted with BOD value of more than 30 mg/l and Priority V least polluted with BOD ranging between 3 – 6 mg/l. For the rejuvenation of these identified PRS all State Governments and UT Administrations have formed River Rejuvenation Committees (RRCs) of the concerned states/ UTs. The RRCs are responsible for developing action plans for the rejuvenation of the PRS identified by CPCB for their respective states/ UTs. The action plans including Industrial pollution control were prepared for bringing the water quality of polluted river stretches to the quality level fit for bathing purposes (i.e. BOD < 3 mg/L). Progress of implementation of action plans are reviewed by the RRC at State level and Central Monitoring Committee (CMC) constituted under the Chairmanship of Secretary, Ministry of Jal Shakti at Central Level.
