PROJECT DEVELOPMENT DELIVERY OF SPRINT-4

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PROJECT NAME	REAL TIME RIVER WATER QUALITY MONITORING AND CONTROL SYSTEM

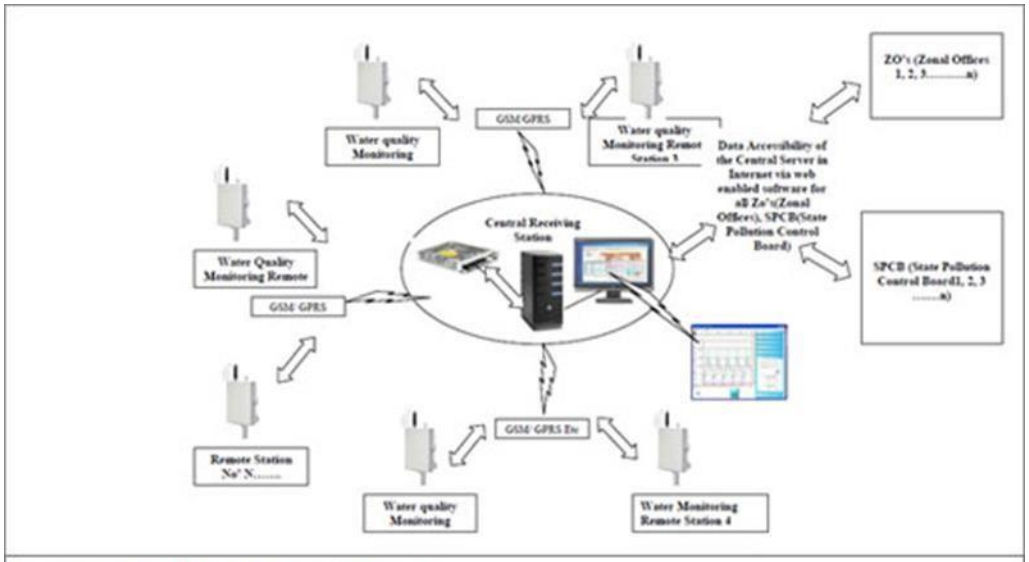
CPCB Real time river water monitoring and control system:

In order to eliminate problems associated with manual water quality monitoring, Central Pollution Control Board (CPCB) has planned to go for hi-tech solution. CPCB is planning to install 'Real Time Water Quality Monitoring Network' across Ganga Basin for testing ten parameters. The Ganga is the largest and the most important river of India, with its watershed covering 10 Indian states, namely Uttaranchal, Uttar Pradesh, Bihar, Jharkhand, West Bengal, Himachal Pradesh, Rajasthan, Haryana, Madhya Pradesh and Delhi. Discharge of untreated sewage from urban centres is a major cause of water quality degradation in the river. The total wastewater generation from 222 towns in Ganga basin is reportedly 8250 MLD, out of which 2538 MLD is directly discharged into the River, 4491 MLD is disposed into its tributaries and 1220 MLD is disposed on land or low lying areas. "River Yamuna is one of the most grossly

polluted rivers in the country. There are number of inter-state issues and events of episodal pollution. In case of Ganga, we have to address large number of petitions, RTIs, VIP references etc and the NGRBA is constituted for large scale investment towards STPs etc", says Dr R M Bhardwaj, Senior Scientist, Central Pollution Control Board The parameters that CPCB plans to monitor online are pH, turbidity, conductivity, temperature, Dissolved Oxygen, Dissolved Ammonia, Biochemical Oxygen Demand, Chemical Oxygen Demand, nitrates and chlorides. All the stations will be operational in real time mode and central station will be able to access data from any of these stations. The stations will also be tolerant to extreme environmental conditions in India such as high or low temperature, high humidity coastal conditions and high temperature desert conditions. Moreover, the stations will be such that it won't require manual intervention for at-least 5 years, except for routine calibration and battery replacement.

HOW SYSTEM WORKS:

Earlier, with manual sampling we used to get analysis report of one sample in a month. But with real time monitoring, we will get at least 50 and a maximum of 95 data every day. Regular and large number of data will enable us to take decision which can be implemented on time and is effective", adds Dr Bhardwaj.



Source: Central Pollution Control Board