

"Continuous Watch on Water Quality of Holy River Kshipra during Kumbh Mela"



The <u>M.P. Pollution Control Board</u> placed the state-of-the-art technology in use for the monitoring of water quality of river Kshipra to help the local administration to take possible instant remedial measures to maintain water quality for mass bathing by mammoth gathering during the month long Simhastha festival at Ujjain, Madhya Pradesh from 22/04/2016 to 21/05/2016.

Four critical locations were selected and online real-time monitoring instrument were installed at each location to assess the water quality on round the clock basis. The four **monitoring stations**, viz. Triveni Ghat, Lalpul Ghat, Ram Ghat (Narsingh Ghat) and Mangalnath Ghat, were located in a stretch of about 12 kms.

The observed values of parameters, viz. <u>Dissolved oxygen</u>, <u>Bio-chemical oxygen demand</u>, <u>pH</u> and <u>Temperature</u>, during the Simhastha festival and their station-wise <u>Graphical comparison</u> can be viewed by clicking the underlined text.





Online monitoring and regular Manual Surveillance of Kshipra River by MPPCB team

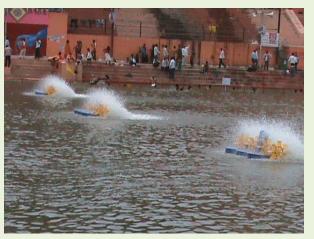




Manual sampling and analysis by MPPCB team for validation of online monitoring results

The real-time monitoring results helped the administration to take immediate measures like aeration, ozonation, addition of fresh waters etc to maintain the water quality. The Paddle wheel aerators, fountains and surface aerators were installed by UAD Deptt / local administration in the river bed.





Fountains and paddle wheel aerators at Mangalnath Ghat for River water purification

In addition to aeration process, ozone generation plants at five locations were also installed by the local administration, generating ozone continuously by corona-discharge method, to treat the river water. About 600 gm/hr ozone dozing was practiced in the river water at each of the five locations.





Ozone plant at Ramghat, Ujjain

Ozone dozing in river Kshipra during Kumbh