



Dr Vinod Tare

Founder and Consultant - cGanga

Centre for Ganga River Basin Management and Studies INDIAN INSTITUTE OF TECHNOLOGY, KANPUR

Shapoorji Pallonji and Company Pvt Ltd

Nagindas Master Road, Fort Mumbai

400001 Maharashtra India

November 4, 2024

Subject: Performance Assessment of Various STPs in Kanpur

Ref: Email dated April 23, 2024

Shapoorji Pallonji and Company Pvt Ltd via email dated April 23, 2024 requested to carryout 24 h composite sampling through collection of grab samples at 2 h interval and analysis of various composite samples prepared by mixing grab samples in proportion to the measured flows at the inlet and outlet of 130 MLD STP (Jajmau Kanpur), 43 MLD STP (Jajmau Kanpur), 42 MLD STP (Sajari, Kanpur), 210 MLD STP (Bingawan, Kanpur) and 30 MLD STP (Pankha, Kanpur) for certain parameters.

The samples were collected by sampling team of cGanga, IIT Kanpur in presence of representatives from Shapoorji Pallonji and Co. Pvt Ltd and GPCU, UPJN during October 18-27, 2024.

The preservation and analysis of the samples were done as per the Standard Methods (Standard Methods for the Examination of Water and Wastewater, APHA). The analysis of the sample for the requested parameters started immediately after bringing it to laboratory. The results of the analysis are reported in following table.

Estimated Parameter Values of Various STPs in Kanpur

Location	Date of Sampling	TSS (mg/l)	BOD (mg/l)	COD (mg/l)	Fecal Coliform	Total Coliform
130 MLD, Jajmau (Inlet) ¹	Oct 18-19, 2024	508	240	544	2.30E+07	3.00E+07
130 MLD, Jajmau (Outlet) ²	Oct 18-19, 2024	40	27	88	1.30E+04	2.30E+05
43 MLD, Jajmau (Outlet) ³	Oct 18-19, 2024	The STP was temporarily shut down for plant cleaning				
42 MLD, Sajari (Inlet) ⁴	Oct 24-25, 2024	486	224	512	3.00E+06	7.00E+06
42 MLD, Sajari (Outlet) ⁵	Oct 24-25, 2024	36	18	72	9.00E+01	3.00E+02
210 MLD, Bingawan (Inlet) ⁶	Oct 21-22, 2024	456	200	480	3.00E+07	5.00E+07
210 MLD, Bingawan (Outlet) ⁷	Oct 21-22, 2024	48	46	152	2.30E+06	4.00E+06
30 MLD, Pankha (Inlet) ⁸	Oct 26-27, 2024	228	102	288	2.10E+05	2.30E+05
30 MLD, Pankha (Outlet) ⁹	Oct 26-27, 2024	28	16	64	7.00E+01	1.70E+02

1: Composite Sample prepared based on flow recorded as per reading of the flow meter installed; 2: Composite Sample prepared assuming uniform flow as there is no device installed for measurement of flow; 3: The STP was temporarily shut down for plant cleaning; 4: Composite Sample prepared based on flow recorded as per reading of the flow meter installed; 5: Composite Sample prepared based on flow recorded as per reading of the flow meter installed; 6: Composite Sample prepared assuming uniform flow as there is no device installed for measurement of flow; 7: Composite Sample prepared assuming uniform flow as there is no device installed for measurement of flow; 8: Composite Sample prepared based on flow recorded as per reading of the flow meter installed; 9: Composite Sample prepared based on flow recorded as per reading of the flow meter installed.

The results presented are based on one-time analysis of the samples collected over 24 h period on the dates mentioned in the table by cGanga, IIT Kanpur.


(Vinod Tare)

