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November 2, 2023

Subject: Performance Assessment of Various STPs in Kanpur

Ref: Email dated May 11, 2023

Shapoorji Pallonji and Company Pvt Ltd via email dated May 11, 2023 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), and 210 MLD STP (Bingawan, 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 16-21, 2023.


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	October 16-17, 2023	530	240	560	5.00E+07	5.00E+08
130 MLD, Jajmau (Outlet) ²	October 16-17, 2023	42	28	88	3.00E+05	1.30E+06
43 MLD, Jajmau (Outlet) ³	October 16-17, 2023	60	36	98	2.30E+05	5.00E+06
42 MLD, Sajari (Inlet) ⁴	October 20-21, 2023	422	172	460	3.00E+04	8.00E+06
42 MLD, Sajari (Outlet) ⁵	October 20-21, 2023	36	20	76	1.40E+02	2.20E+03
210 MLD, Bingawan (Inlet) ⁶	October 18-19, 2023	550	248	554	3.00E+07	1.30E+08
210 MLD, Bingawan (Outlet) ⁷	October 18-19, 2023	44	38	138	2.30E+05	5.00E+07

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: Composite Sample prepared assuming uniform flow as there is no device installed for measurement of flow; 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.

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)