

Water Quality Characteristics of Sewage Treatment Plant (STP) during the Year 2017

S.N.	STP	Parameters	Month													
			January	February	March	April	May	June	July	August	September	October	November	December		
1.	27 MLD STP Jagjeetpur Haridwar (outlet)	Color	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	Turbid	Turbid	Colourless	Colourless	Colourless	
		Odor	Odorless	Odorless	Odorless	Odorless	Odorless	Odorless	Odorless	Odorless	Odorless	Odorless	Odorless	Odorless	Odorless	Odorless
		pH	7.47	7.62	7.0	7.35	7.42	7.18	7.25	7.38	7.41	7.36	7.12			
		TSS (mg/L)	9	10	16	14	22	14	10	12	10	10	16			
		TDS (mg/L)	272	263	428	368	458	406	371	364	284	340	406			
		TS (mg/L)	281	273	444	382	580	420	381	376	294	350	422			
		BOD (mg/L)	9.6	9.6	10	9.2	14	11	9.2	9.6	9.2	9.6	8.4			
		COD(mg/L)	32	34	38	34	92	52	42	44	34	38	38			
2.	18 MLD STP Jagjeetpur Haridwar (outlet)	Color	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	
		Odor	Odorless	Odorless	Odorless	Odorless	Odorless	Odorless	Odorless	Odorless	Odorless	Odorless	Odorless	Odorless	Odorless	
		pH	7.51	7.46	7.30	7.24	7.81	7.22	7.19	7.25	7.21	7.16	7.31			
		TSS (mg/L)	11	12	15	12	17	11	9	10	9	10	14			
		TDS (mg/L)	290	288	346	319	388	410	328	318	252	236	390			
		TS (mg/L)	301	300	361	331	405	421	337	328	261	246	404			
		BOD (mg/L)	9.2	10	9.6	10	11	10	8.4	9.2	9.6	10	11			
		COD(mg/L)	34	36	32	38	56	48	36	32	36	34	44			
3.	06 MLD Oxidation Pond Lakarghat Rishikesh (outlet)	Color	Turbid	Turbid	Turbid	Turbid	Turbid	Turbid	Turbid	Turbid	Turbid	Turbid	Turbid	Turbid	Turbid	
		Odor	Not Specific	Not Specific	Unpleasant	Unpleasant	Unpleasant	Sewage like	Unpleasant	Unpleasant	Unpleasant	Unpleasant	Unpleasant	Unpleasant	Not Specific	
		pH	7.86	7.64	7.68	7.75		6.24	7.74	7.84	7.67	7.84	6.92			
		TSS (mg/L)	44	58	65	54		127	88	68	61	52	115			
		TDS (mg/L)	262	348	387	324		688	384	398	288	312	628			
		TS (mg/L)	306	406	452	378		815	472	466	349	364	743			
		BOD (mg/L)	32	34	32	34		35	34	32	34	32	35			
		COD(mg/L)	158	176	168	162		258	196	186	192	184	214			
4.	03 MLD STP Swargashram Rishikesh	Color	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless		
		Odor	Odorless	Odorless	Odorless	Odorless	Odorless	Odorless	Odourless	Odourless	Odorless	Odorless	Odorless	Odorless		
		pH	7.42	7.65	7.45	7.39	7.21	7.24	7.38	7.46	7.36	7.45	7.21			
		TSS (mg/L)	11	10	12	14	36	10	10	12	10	10	13			

	(outlet)	TDS (mg/L)	148	176	210	216	458	388	277	284	228	220	388		
		TS (mg/L)	159	186	222	230	494	398	287	296	238	230	401		
		BOD (mg/L)	10	9.6	10	9.6	19	9	9.6	9.2	9.6	9.2	11		
		COD(mg/L)	38	32	34	40	84	42	36	34	32	36	44		
5.	Mixing Point of both STP27 & 18 MLD STP, Jagjeetpur, Hairdwar	Color	Turbid	Turbid	Turbid	Turbid	Turbid	Turbid	Turbid	Turbid	Turbid	Turbid	Turbid	Turbid	
		Odor	Not Specific	Not Specific	Unpleasant	Unpleasant	Unpleasant	Unpleasant	Unpleasant	Unpleasant	Unpleasant	Not Specific	Not Specific	Sewage like	Unpleasant
		pH	7.79	7.81	6.80	7.81	6.84	6.88	7.68	7.82	7.92	7.81	6.42		
		TSS (mg/L)	72	73	64	71	122	121	86	77	68	54	124		
		TDS (mg/L)	556	438	387	408	588	612	482	462	314	392	618		
		TS (mg/L)	628	511	451	479	710	733	568	539	382	446	742		
		BOD (mg/L)	34	32	34	32	45	43	34	32	34	32	39		
		COD(mg/L)	176	154	170	168	248	278	204	192	176	164	192		
6.	18 MLD STP, Vill-Sarai, Jwalapur, Haridwar	Color	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	
		Odor	Odorless	Odorless	Odorless	Odorless	Odorless	Odorless	Odorless	Odorless	Odorless	Odorless	Odorless	Odorless	
		pH	7.28	7.51	6.90	7.16	8.02	7.14	7.25	7.14	7.18	7.24	7.41		
		TSS (mg/L)	10	9	14	16	32	10	10	10	10	10	11		
		TDS (mg/L)	202	208	340	292	452	403	312	288	221	284	372		
		TS (mg/L)	212	217	354	308	484	413	322	298	231	294	383		
		BOD (mg/L)	9.2	9.6	9.2	9.6	15	9	9.6	9.2	8.8	9.2	10		
		COD(mg/L)	32	36	34	32	68	36	32	34	30	36	42		
7.	M/s 3.5, M LD STP Tapovan Rishikesh	Color	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	
		Odor	Odorless	Odorless	Odorless	Odorless	Odorless	Odorless	Odorless	Odorless	Odorless	Odorless	Odorless	Odorless	
		pH	7.42	7.38	7.42	7.38	7.84	7.22	7.25	7.38	7.46	7.38	7.42		
		TSS (mg/L)	9.0	10	14	12	40	10	10	10	10	12	12		
		TDS (mg/L)	194	21	218	226	466	362	286	262	208	198	418		
		TS (mg/L)	203	220	232	236	506	372	296	272	218	210	430		
		BOD (mg/L)	9.6	9.2	9.6	10	19	8	9.2	9.6	9.2	9.6	10		
		COD(mg/L)	32	34	36	42	88	36	34	42	34	38	40		

EFFLUENT DISCHARGED STANDARDS FOR SEWAGE TREATMENT PLANT

S.NO.	Parameters	Parameters Limit (Standards for New STPs Design after notification date)
1.	pH	6.5-9.0
2.	BOD (mg/L)	Not more than 10
3.	COD (mg/L)	Not more than 50
4.	TSS (mg/L)	Not more than 20
5.	NH-4 (mg/L)	Not more than 5
6.	N-Total (mg/L)	Not more than 10
7.	Fecal Coliform (MPN/100ml)	Less than 100

Note:

(i) These standards will be applicable for discharge in water resources as well as for land disposal. The standards for Fecal Coliform may not be applied for use of treated sewage in industrial purposes.

(ii) * Achievement of Standards for existing STPs within 02 years from the date of notification.