

**Water Quality Characteristics of Sewage Treatment Plant (STP) during the Year 2018**

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	Colourless	Colourless	Colourless	Colourless
		Odor	Odorless	Odorless	Odorless	Odorless	Odorless	Odorless	Odorless	Odorless	Odorless	Odorless	Odorless	Odorless
		pH	7.80	7.71	7.38	7.45	7.21	7.99	7.34	7.24	7.77	7.80	8.19	7.67
		TSS (mg/L)	10	12	15	12	10	24	16	18	14	16	18	17
		TDS (mg/L)	278	266	272	244	228	355	272	268	281	293	287	252
		TS (mg/L)	288	178	287	256	238	379	288	286	295	309	305	269
		BOD (mg/L)	10	8.8	12	9.6	9.2	12	10	10.4	12	10	9.2	10
		COD(mg/L)	46	36	42	34	32	42	36	38	44	42	36	42
2.	18 MLD STP Jagjeetpur Haridwar (outlet)	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	7.89	7.42	7.62	7.38	7.25	8.18	7.35	7.65	7.75	7.89	7.92	7.73
		TSS (mg/L)	12	16	18	16	14	22	12	14	18	22	25	28
		TDS (mg/L)	264	278	286	262	238	347	264	258	249	344	301	321
		TS (mg/L)	276	294	304	278	252	369	276	272	267	366	326	349
		BOD (mg/L)	12	10	14	10	11.2	10	10.4	12	10	9.2	9.6	9.2
		COD(mg/L)	42	36	44	38	36	38	34	42	38	36	32	36
3.	06 MLD Oxidation Pond Lakarghat Rishikesh (outlet)	Color	Turbid	Turbid	Turbid	Turbid	Turbid	Turbid	Turbid	Turbid	Turbid	Turbid	Turbid	Turbid
		Odor	Unpleasant	Unpleasant	Unpleasant	Unpleasant	Not Specific	Not Specific	Not Specific	Not Specific	Not Specific	Not Specific	Not Specific	Not Specific
		pH	7.65	7.80	7.68	7.74	7.65	7.74	7.67	7.68	7.83	7.88	7.94	7.76
		TSS (mg/L)	62	58	64	74	56	58	54	54	58	52	54	60
		TDS (mg/L)	386	347	344	378	358	326	318	298	312	305	322	364
		TS (mg/L)	448	405	408	452	414	384	372	352	370	357	376	424
		BOD (mg/L)	32	34	36	32	32	34	32	32	34	36	32	30
		COD(mg/L)	168	162	168	136	160	166	158	154	136	144	128	136
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	Odorless	Odorless	Odorless	Odorless	Odorless	Odorless
		pH	7.38	7.48	7.45	7.38	7.36	7.63	7.38	7.28	7.35	7.48	7.36	7.28
		TSS (mg/L)	10	16	14	14	12	23	14	16	18	17	16	18

	<b>(outlet)</b>	<b>TDS (mg/L)</b>	288	310	218	228	234	278	268	258	262	260	248	264	
		<b>TS (mg/L)</b>	298	326	232	242	246	301	282	274	280	277	264	282	
		<b>BOD (mg/L)</b>	10	8	12	10.4	10.4	9.6	10.4	10	10.8	9.6	10	9.6	
		<b>COD(mg/L)</b>	46	32	38	36	36	32	36	42	42	34	38	32	
5.	<b>Mixing Point of both STP27 &amp; 18 MLD STP, Jagjeetpur, Hairdwar</b>	<b>Color</b>	Turbid	Turbid	Turbid	Turbid		Turbid	Turbid	Turbid	Turbid	Turbid	Turbid	Turbid	
		<b>Odor</b>	Not Specific	Not Specific	Not Specific	Not Specific		Not Specific	Not Specific	Not Specific	Not Specific	Not Specific	Not Specific	Not Specific	Not Specific
		<b>pH</b>	7.80	7.86	7.91	7.82		7.65	7.68	7.58	7.50	7.47	7.55	7.20	
		<b>TSS (mg/L)</b>	62	70	66	72		57	62	58	53	60	56	61	
		<b>TDS (mg/L)</b>	386	412	396	378		346	312	348	320	355	325	367	
		<b>TS (mg/L)</b>	448	482	462	450		403	374	406	373	415	381	428	
		<b>BOD (mg/L)</b>	30	34	32	34		32	30	32	34	36	32	30	
		<b>COD(mg/L)</b>	124	146	138	144		152	146	160	154	176	146	138	
6.	<b>18 MLD STP, Vill-Sarai, Jwalapur, Haridwar</b>	<b>Color</b>	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	
		<b>Odor</b>	Odorless	Odorless	Odorless	Odorless	Odorless	Odorless	Odorless	Odorless	Odorless	Odorless	Odorless	Odorless	Odorless
		<b>pH</b>	7.81	7.68	7.58	7.42	7.32	7.95	7.36	7.24	7.15	7.88	7.43	7.54	
		<b>TSS (mg/L)</b>	10	14	16	18	16	26	10	12	10	10	10	9	
		<b>TDS (mg/L)</b>	228	242	238	244	236	394	228	234	232	281	380	381	
		<b>TS (mg/L)</b>	238	256	254	262	252	420	238	246	242	291	390	390	
		<b>BOD (mg/L)</b>	10	12	13	10	10	9.2	8.8	9.6	9.2	8	8.8	8	
		<b>COD(mg/L)</b>	42	44	42	38	38	34	32	36	34	32	34	32	
7.	<b>M/s 3.5, M LD STP Tapovan Rishikesh</b>	<b>Color</b>	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	
		<b>Odor</b>	Odorless	Odorless	Odorless	Odorless	Odourless	Odorless	Odorless	Odorless	Odorless	Odorless	Odorless	Odorless	
		<b>pH</b>	7.48	7.65	7.42	7.58	7.32	7.68	7.42	7.41	7.56	7.76	7.57	7.48	
		<b>TSS (mg/L)</b>	10	15	18	14	18	27	16	18	23	17	18	16	
		<b>TDS (mg/L)</b>	264	282	210	232	244	266	257	277	284	293	276	254	
		<b>TS (mg/L)</b>	274	297	228	246	262	293	273	295	307	310	294	270	
		<b>BOD (mg/L)</b>	10	12	14	10	14	12	10	10	12	10	8.8	10	
		<b>COD(mg/L)</b>	42	36	46	38	42	34	32	38	40	38	32	34	

## 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.