

**Monthly Performance Report  
(HWT-NG100-MPR-38-R0)**

**September 2019  
(From 01/09/2019 to 30/09/2019)**

**100 TPD Municipal Solid Waste (MSW) Facility  
Calangute, North Goa**

*Prepared By*  
**Hindustan Waste Treatment Pvt. Ltd.  
(HWT)**

*Submitted To*  
**Goa Waste Management Corporation (GWMC)  
Department of Science & Technology (DS&T)**

**Table – 1**  
**Summary of Overall Average Results for September 2019**  
*(As compared to Schedule – 7: Performance Standards, Volume – I of RFP)*

Sr. No.	Parameter	Performance Standard As per Schedule – 7	Actual Performance at Plant (Monthly Average)
1.	Number of fractions of recyclables sorted per day from the input mixed waste	Minimum 10 numbers of fractions shall be sorted daily from the input dry waste as received in the facility. The list of fractions are as follows: 1. PET Bottles 2. Mixed Plastic Articles 3. Newspapers / other Paper Material 4. Cardboard 5. Styrofoam & Thermocol 6. Coconut Shells 7. Clothes 8. Rubber Articles 9. Metal Articles & Cans 10. E-waste Articles and any Hazardous Waste	<b>13 numbers</b> of fractions are being sorted daily from the input dry waste as received in the facility. The list of fractions are as follows: 1. Glass 2. Aluminium 3. Metal 4. Paper + Cardboard 5. Tetra Pack 6. Hard Plastic 7. PET 8. Mixed Plastic 9. Styrofoam + Thermocol 10. Cloth + Rags + Textile 11. Leather + Rexine + Rubber 12. Coconut Shells 13. E-waste Articles and any Hazardous Waste
2.	Quantum of reject/residues to be sent to the landfill after processing. No organic fraction shall be disposed in the landfill.	Maximum 10% of inert of the total input waste as received in the facility (in TPD).	Input waste to the Plant is <b>128.31 TPD</b> . Quantum of Inert is <b>0.75 TPD</b> which is < 10% of the Total Input Waste as received in the Facility.  No Organic Waste has been disposed in the Sanitary Landfill Facility.
3.	Electricity generation in the Plant	Minimum electricity to be generated in the plant shall be 0.40 MW per 100 tons of input wet biodegradable waste as received in the Facility (in TPD).	Electricity generation is <b>0.47 MW/100 MT</b> of Input Biodegradable Waste as received in the Facility (in TPD).
4.	Biogas Flaring System	The Biogas Flaring System shall strictly be used only in case of	Biogas is being flared strictly, only under emergency and not as a

Sr. No.	Parameter	Performance Standard As per Schedule – 7	Actual Performance at Plant (Monthly Average)										
		emergency and not as a routine practice.	routine practice. The average running time of Biogas Flaring System is <b>0.44 hours/day</b> .										
5.	Discharge of treated effluent conforming to regulatory norms	Effluent Treatment Plant shall be operated under all conditions.	Effluent Treatment Plant is being operated continuously and is meeting all statutory conditions. The Treated Effluent Characteristics are as follows: <table border="1" data-bbox="1032 646 1403 856"> <tbody> <tr> <td>pH</td> <td>6.98</td> </tr> <tr> <td>BOD</td> <td>7 mg/l</td> </tr> <tr> <td>COD</td> <td>69 mg/l</td> </tr> <tr> <td>TSS</td> <td>8 mg/l</td> </tr> <tr> <td>TDS</td> <td>1,626 mg/l</td> </tr> </tbody> </table>	pH	6.98	BOD	7 mg/l	COD	69 mg/l	TSS	8 mg/l	TDS	1,626 mg/l
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6.	General Housekeeping, hygienic conditions, cleanliness, safety norms, adequate manpower, treatment methodology for plant operation & maintenance and storage conditions in the plant.	Minimum housekeeping, safety norms and cleanliness conditions shall be maintained at all times as per the Bid Document requirement.	<ul style="list-style-type: none"> <li>• High standard of Housekeeping, Cleanliness and Safety are being maintained at all times at the Plant.</li> <li>• Adequate manpower has been deployed in all shifts.</li> <li>• Also, the treatment methodology is being followed properly and proper storage conditions have been maintained in the Plant.</li> </ul>										

100 TPD Municipal Solid Waste (MSW) Facility at Calangute, North Goa

#	Plant Performance Data: September 2019		
Sr. No.	Content	Month	Signature
1	Input Waste Composition	From 01.09.2019 To 30.09.2019	
2	Recyclables		
3	Electricity Generation		
4	Biogas Flare		
5	Effluent Treatment Plant		
6	Inert		
7	Housekeeping		

100 TPD Municipal Solid Waste (MSW) Facility at Calangute, North Goa

1 WASTE:																									
Sr. No.	Description	Unit	1-Sep	2-Sep	3-Sep	4-Sep	5-Sep	6-Sep	7-Sep	Weekly Average	8-Sep	9-Sep	10-Sep	11-Sep	12-Sep	13-Sep	14-Sep	Weekly Average	15-Sep	16-Sep	17-Sep	18-Sep	19-Sep		
<b>1.1 Input Waste:</b>																									
1	Type 1: Dry Waste	TPD	56.99	71.02	70.65	65.70	69.64	60.78	60.73	65.07	58.77%	56.36	72.85	67.36	73.04	70.91	62.45	63.79	66.68	55.75%	56.20	79.44	62.54	67.91	64.20
2	Type 2: Wet Waste	TPD	38.56	40.87	44.20	44.19	39.24	39.82	43.26	41.45	37.44%	45.27	50.09	47.48	41.38	45.83	43.98	57.63	47.38	39.61%	44.68	54.08	48.97	51.02	44.85
3	Type 3: Mixed Waste	TPD	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00	
4	Type 4: Tree Waste	TPD	2.89	2.36	5.44	2.92	4.66	6.78	4.33	4.20	3.79%	1.30	5.68	11.56	2.06	4.27	8.64	5.35	5.55	4.64%	4.51	1.67	2.74	5.00	11.99
5	<b>Total.....(1)+(2)+(3)+(4)</b>	<b>TPD</b>	<b>98.44</b>	<b>114.25</b>	<b>120.29</b>	<b>112.81</b>	<b>113.54</b>	<b>107.38</b>	<b>108.32</b>	<b>110.72</b>	<b>100.00%</b>	<b>102.93</b>	<b>128.62</b>	<b>126.40</b>	<b>116.48</b>	<b>121.01</b>	<b>115.07</b>	<b>126.77</b>	<b>119.61</b>	<b>100.00%</b>	<b>105.39</b>	<b>135.19</b>	<b>114.25</b>	<b>123.93</b>	<b>121.04</b>

- # **Note:**  
 1 **Type-I: Dry Waste:** This has 25-30% Organic and 70-75% Inorganic.  
 2 **Type-II: Wet Waste:** This has 65-70% Organic and 30-35%  
 3 **Type-I: Mixed Waste:** This has 45-50% Organic and 50-55% Inorganic.

1.2 Output Products:																									
Sr. No.	Description	Unit	1-Sep	2-Sep	3-Sep	4-Sep	5-Sep	6-Sep	7-Sep	Weekly Average	8-Sep	9-Sep	10-Sep	11-Sep	12-Sep	13-Sep	14-Sep	Weekly Average	15-Sep	16-Sep	17-Sep	18-Sep	19-Sep		
1	Organic Fraction	TPD	41.92	47.30	48.54	48.66	44.47	42.78	46.53	45.74	41.31%	45.00	52.79	49.42	49.57	52.74	47.49	56.64	50.52	42.24%	46.43	57.60	47.75	53.16	47.96
<b>2 Inorganic Fraction:</b>																									
	Recyclables	TPD	7.05	7.66	8.57	7.79	7.59	7.91	8.19	7.82	7.07%	8.06	8.80	8.05	7.87	8.30	7.17	8.51	8.11	6.78%	7.84	10.03	8.35	8.96	8.09
	RDF	TPD	45.10	55.49	50.15	51.78	53.73	48.39	46.36	50.14	45.29%	47.25	59.64	56.03	55.55	54.26	50.27	53.85	53.84	45.01%	45.38	64.33	43.08	55.43	51.37
	Bulking Material	TPD	1.48	1.43	1.41	1.66	1.38	1.52	1.29	1.45	1.31%	1.32	1.71	1.34	1.43	1.44	1.50	1.44	1.46	1.22%	1.23	1.56	1.73	1.38	1.62
	Inert	TPD	0.00	0.00	6.18	0.00	1.71	0.00	1.62	1.36	1.23%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.12%	0.00	0.00	10.60	0.00	
3	Tree Waste	TPD	2.89	2.36	5.44	2.92	4.66	6.78	4.33	4.20	3.79%	1.30	5.68	11.56	2.06	4.27	8.64	5.35	5.55	4.64%	4.51	1.67	2.74	5.00	11.99
	<b>Total.....(1)+(2)+(3)</b>	<b>TPD</b>	<b>98.44</b>	<b>114.25</b>	<b>120.29</b>	<b>112.81</b>	<b>113.54</b>	<b>107.38</b>	<b>108.32</b>	<b>110.72</b>	<b>100.00%</b>	<b>102.93</b>	<b>128.62</b>	<b>126.40</b>	<b>116.48</b>	<b>121.01</b>	<b>115.07</b>	<b>126.77</b>	<b>119.61</b>	<b>100.00%</b>	<b>105.39</b>	<b>135.19</b>	<b>114.25</b>	<b>123.93</b>	<b>121.04</b>

2 RECYCLABLES:																									
Sr. No.	Description	Unit	1-Sep	2-Sep	3-Sep	4-Sep	5-Sep	6-Sep	7-Sep	Weekly Average	8-Sep	9-Sep	10-Sep	11-Sep	12-Sep	13-Sep	14-Sep	Weekly Average	15-Sep	16-Sep	17-Sep	18-Sep	19-Sep		
1	Glass	Kg	96	123	149	121	152	131	156	133		152	184	172	172	128	128	170	158		141	160	134	143	153
2	Aluminum	Kg	48	78	69	88	87	50	104	75		71	123	69	92	58	64	109	84		50	107	78	95	87
3	Metal	Kg	172	168	207	209	163	181	208	187		173	197	230	195	198	160	243	199		171	200	190	238	185
4	Tetra Pack	Kg	48	101	80	99	54	101	83	81		91	74	103	103	93	53	85	86		101	93	56	119	87
5	Hard Plastic	Kg	105	201	149	121	185	161	135	151		173	246	230	160	210	106	243	195		131	134	145	226	153
6	PET	Kg	96	168	161	165	163	181	166	157		193	209	126	126	233	160	206	179		192	147	223	178	207
7	Mixed Plastic	Kg	6,392	6,725	7,660	6,912	6,718	7,022	7,259	6,955		7,114	7,684	7,005	6,934	7,285	6,407	7,382	7,116		6,981	9,106	7,415	7,885	7,143
8	Thermocol + Styrofoam	Kg	96	101	92	77	65	80	83	85		91	86	115	92	93	96	73	92		71	80	112	71	76
9	Cloth + Rags + Textiles	Kg	669	638	827	659	1,078	573	666	730		823	1,020	1,022	881	1,039	1,054	765	943		857	1,188	970	618	818
10	Leather + Rexine + Rubber	Kg	870	929	632	1,022	1,023	986	614	868		661	799	965	870	665	777	1,056	828		989	948	613	1,189	851
11	Paper + Cardboard	Kg	612	727	689	714	697	644	707	684		681	836	723	789	817	702	814	766		605	881	747	725	720
12	Coconut	Kg	870	705	724	945	686	875	582	770		640	873	620	641	619	798	631	689		625	681	981	654	905

- # **Note:**  
 1 Item No. 9 (Cloth + Rags + Textiles) and 10 (Leather + Rexine + Rubber) are sent to Cement Plants as RDF.  
 2 Item No. 11 (Paper + Cardboard) and 12 (Coconut) are used as Bulking Material in Composting.

3 DISPOSAL OF INERT:																									
Sr. No.	Description	Unit	1-Sep	2-Sep	3-Sep	4-Sep	5-Sep	6-Sep	7-Sep	Weekly Average	8-Sep	9-Sep	10-Sep	11-Sep	12-Sep	13-Sep	14-Sep	Weekly Average	15-Sep	16-Sep	17-Sep	18-Sep	19-Sep		
1	<b>As per Tender:</b> Maximum 10% of Inerts of the Total Input Waste (excluding Mulched Tree Waste) as received in the Facility.																								
2	Input Waste	TPD	95.55	111.89	114.85	109.89	108.88	100.60	103.99	106.52		101.63	122.94	114.84	114.42	116.74	106.43	121.42	114.06		100.88	133.52	111.51	118.93	109.05
3	Inert Fraction	TPD	0.00	0.00	6.18	0.00	1.71	0.00	1.62	1.36		0.00	0.00	0.00	0.00	0.00	0.00	0.97	0.14		0.00	0.00	10.60	0.00	0.00
4	% of Total Input Waste.....(3) ÷ (2)	%	0.00%	0.00%	5.38%	0.00%	1.57%	0.00%	1.56%	1.22%		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.80%	0.11%		0.00%	0.00%	9.51%	0.00%	0.00%

4 ELECTRICITY GENERATION:																									
Sr. No.	Description	Unit	1-Sep	2-Sep	3-Sep	4-Sep	5-Sep	6-Sep	7-Sep	Weekly Average	8-Sep	9-Sep	10-Sep	11-Sep	12-Sep	13-Sep	14-Sep	Weekly Average	15-Sep	16-Sep	17-Sep	18-Sep	19-Sep		
<b>3.1 Biogas Gensets:</b>																									
1	Biogas Genset-I: Running Time	hr/day	21.00	20.95	20.85	16.25	17.76	19.50	16.60	18.99		16.48	17.97	16.31	16.63	16.41	17.80	19.75	17.34		23.25	23.20	22.60	21.80	23.40
2	Biogas Genset-I: Biogas Consumption	Nm <sup>3</sup> /day	1,937	1,921	1,816	1,544	1,634	1,812	1,577	1,749		1,500	1,654	1,484	1,579	1,559	1,388	1,564	1,533		1,743	1,756	1,724	1,757	1,868
3	Biogas Genset-I: Energy Generation	kW.hr/day	2,650	2,570	2,790	2,516	2,729	2,670	2,602	2,647		2,460	2,712	2,390	2,606	2,557	2,190	2,450	2,481		2,640	2,740	2,600	2,600	2,700
4	Biogas Genset-II: Running Time	hr/day	20.75	20.75	20.85	16.44	18.68	19.40	18.76	19.38		17.49	17.48	19.44	17.74	17.16	22.15	23.30	19.25		22.70	23.55	23.95	23.55	23.40
5	Biogas Genset-II: Biogas Consumption	Nm <sup>3</sup> /day	1,785	1,773	1,699	1,545	1,718	1,652	1,763	1,705		1,662	1,608	1,788	1,614	1,561	1,681	1,753	1,667		1,718	1,708	1,737	1,777	1,813
6	Biogas Genset-II: Energy Generation	kW.hr/day	2,580	2,500	2,800	2,611	2,835	2,600	2,874	2,686		2,709	2,701	2,951	2,663	2,592	3,010	3,040	2,809		2,950	2,900	2,870	2,890	2,880
7	<b>Total Biogas Consumption = (2)+(5)</b>	<b>Nm<sup>3</sup>/day</b>	<b>3,721</b>	<b>3,695</b>	<b>3,514</b>	<b>3,089</b>	<b>3,352</b>	<b>3,464</b>	<b>3,340</b>	<b>3,454</b>		<b>3,162</b>	<b>3,261</b>	<b>3,273</b>	<b>3,193</b>	<b>3,121</b>	<b>3,069</b>	<b>3,317</b>	<b>3,200</b>		<b>3,462</b>	<b>3,464</b>	<b>3,461</b>	<b>3,534</b>	<b>3,680</b>
8	<b>Total Energy Generation = (3)+(6)</b>	<b>kW.hr/day</b>	<b>5,230</b>	<b>5,070</b>	<b>5,590</b>	<b>5,127</b>	<b>5,564</b>	<b>5,270</b>	<b>5,476</b>	<b>5,332</b>		<b>5,169</b>	<b>5,413</b>	<b>5,341</b>	<b>5,269</b>	<b>5,149</b>	<b>5,200</b>	<b>5,490</b>	<b>5,290</b>		<b>5,590</b>	<b>5,640</b>	<b>5,470</b>	<b>5,490</b>	<b>5,580</b>

100 TPD Municipal Solid Waste (MSW) Facility at Calangute, North Goa

Sr. No.	Description	Unit	1-Sep	2-Sep	3-Sep	4-Sep	5-Sep	6-Sep	7-Sep	Weekly Average	8-Sep	9-Sep	10-Sep	11-Sep	12-Sep	13-Sep	14-Sep	Weekly Average	15-Sep	16-Sep	17-Sep	18-Sep	19-Sep
<b>3.2 Electricity Generation:</b>																							
1	As per Tender: Minimum electricity to be generated in the plant shall be 0.4 MW per 100 tons of Input Biodegradable Waste as received in the Facility.	MW/100 MT	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40
2	Biodegradable Waste = 1.2.2	TPD	38.56	40.87	44.20	44.19	39.24	39.82	43.26	41.45	45.27	50.09	47.48	41.38	45.83	43.98	57.63	47.38	44.68	54.08	48.97	51.02	44.85
3	Guaranteed Electricity Generation = (3.2.2 x 3.2.1) ÷ 100	kW	0.15	0.16	0.18	0.18	0.16	0.16	0.17	0.17	0.18	0.20	0.19	0.17	0.18	0.18	0.23	0.19	0.18	0.22	0.20	0.20	0.18
4	Guaranteed Electricity Generation = 3.2.3 x 24 x 1000	kW.hr/day	3,702	3,924	4,243	4,242	3,767	3,823	4,153	3,979	4,346	4,809	4,558	3,972	4,400	4,222	5,532	4,548	4,289	5,192	4,701	4,898	4,306
5	Available Electricity Generation = (A2 ÷ 24) + (A4 ÷ 24)	kW	218	211	233	214	232	220	228	222	215	226	223	220	215	217	229	220	233	235	228	229	233
6.00	Available Electricity Generation = 3.2.5 ÷ 100	MW/100 MT	0.57	0.52	0.53	0.48	0.59	0.55	0.53	0.54	0.48	0.45	0.47	0.53	0.47	0.49	0.40	0.47	0.52	0.43	0.47	0.45	0.52

<b>5 BIOGAS FLARE:</b>																							
Sr. No.	Description	Unit	1-Sep	2-Sep	3-Sep	4-Sep	5-Sep	6-Sep	7-Sep	Weekly Average	8-Sep	9-Sep	10-Sep	11-Sep	12-Sep	13-Sep	14-Sep	Weekly Average	15-Sep	16-Sep	17-Sep	18-Sep	19-Sep
1	Operation Time	hr/day	0.00	0.00	0.00	0.37	0.42	0.35	1.05	0.31	1.02	0.00	0.00	0.00	0.00	0.00	0.00	0.15	0.00	0.00	0.00	0.00	0.00
2	Biogas Flared	Nm <sup>3</sup> /day	0	0	0	83	94	79	236	70	229	0	0	0	0	0	0	33	0	0	0	0	0

<b>6 DIGESTERS:</b>																							
Sr. No.	Description	Unit	1-Sep	2-Sep	3-Sep	4-Sep	5-Sep	6-Sep	7-Sep	Weekly Average	8-Sep	9-Sep	10-Sep	11-Sep	12-Sep	13-Sep	14-Sep	Weekly Average	15-Sep	16-Sep	17-Sep	18-Sep	19-Sep
<b>5.1 Digester-I: Front End</b>																							
1	pH	---	7.61	7.36	7.23	7.25	7.06	6.96		7.25													
2	TSS	ppm					81,080	76,228		78,654													
3	VSS	ppm					51,508	54,001		52,755													
4	Total Alkalinity	ppm as CaCO <sub>3</sub>	6,000	6,150	4,875	5,500	4,775	4,400		5,283													
5	VFA	ppm as HAc	4,075	4,075	5,403	5,320	4,407	4,573		4,642													
<b>5.2 Digester-I: Back End</b>																							
1	pH	---	7.68	7.41	7.34	7.4	7.1	7.07		7.33		7.16						7.16					
2	TSS	ppm					78,333	75,746		77,040													
3	VSS	ppm					52,797	51,827		52,312													
4	Total Alkalinity	ppm as CaCO <sub>3</sub>	6,200	6,275	5,000	5,875	4,900	4,550		5,467		4,000						4,000					
5	VFA	ppm as HAc	3,494	3,909	5,320	4,822	4,490	4,490		4,421		5,071						5,071					
<b>5.3 Buffer Tank: Front End</b>																							
1	pH	---	8.32	8.17	7.93	7.98	7.87	7.84		8.02	7.91	8.01	8.17	7.94	7.87	7.87	7.86	7.95	7.92	7.88	7.9	7.87	7.85
2	TSS	ppm					70,019	70,118		70,069		56,566	51,063	52,725	49,216		43,567	50,627		46,378	47,834	44,208	44,337
3	VSS	ppm					45,379	46,658		46,019		36,454	34,056	34,514	32,811		28,230	33,213		28,718	35,562	28,012	29,058
4	Total Alkalinity	ppm as CaCO <sub>3</sub>	8,750	9,075	8,025	8,850	8,425	8,275		8,567	9,500	9,925	11,000	11,750	11,650	11,050	10,450	10,761	10,150	10,600	10,200	10,200	10,000
5	VFA	ppm as HAc	2,249	2,249	3,079	3,411	2,996	3,245		2,872	3,328	2,747	2,664	2,664	2,498	2,415	2,332	2,664	1,834	2,083	2,166	2,000	2,000
<b>5.4 Buffer Tank: Back End</b>																							
1	pH	---	8.35	8.21	8	8.02	7.88	7.81		8.05	7.93	8.06	8.14	7.9	7.93	7.9	7.89	7.96	7.95	7.9	7.91	7.92	7.92
2	TSS	ppm					69,458	75,359		72,409		56,194	52,008	52,867	48,607		46,312	51,198		46,863	48,617	43,164	44,513
3	VSS	ppm					38,376	47,743		43,060		35,966	34,803	34,236	31,184		29,316	33,101		28,316	32,468	27,249	27,301
4	Total Alkalinity	ppm as CaCO <sub>3</sub>	9,200	9,250	8,550	9,075	8,625	8,125		8,804	9,250	10,025	10,850	11,575	11,800	10,925	10,575	10,714	11,050	10,675	10,350	10,475	10,375
5	VFA	ppm as HAc	2,332	2,083	2,498	2,996	2,747	3,245		2,650	3,245	2,747	2,498	2,581	2,664	2,332	2,249	2,617	1,917	1,834	1,917	1,668	1,668
<b>5.5 Digester-II: Front End</b>																							
1	pH	---										7.51	7.53	7.58	7.47	7.38		7.49	7.41	7.49	7.41	7.4	7.38
2	TSS	ppm										56,300	57,526	47,523		49,467		52,704		49,952	56,477	51,450	50,113
3	VSS	ppm										40,529	42,652	33,813		34,992		37,997		33,829	42,344	33,427	35,177
4	Total Alkalinity	ppm as CaCO <sub>3</sub>										5,325	6,500	6,700	6,425	6,300		6,250	6,875	6,675	6,825	7,075	6,875
5	VFA	ppm as HAc										2,498	5,071	4,988	5,071	5,652		4,656	5,486	5,652	5,569	5,320	5,901
<b>5.6 Digester-II: Back End</b>																							
1	pH	---										7.12	7.58	7.56	7.52	7.42	7.43		7.44	7.48	7.53	7.43	7.48
2	TSS	ppm										58,836	53,450	54,168	47,926		50,318		52,940		50,275	55,424	48,045
3	VSS	ppm										34,955	37,760	38,888	33,745		35,577		36,185		34,312	40,775	31,793
4	Total Alkalinity	ppm as CaCO <sub>3</sub>										3,800	5,225	6,850	6,750	6,600	6,500		5,954	7,025	6,850	7,000	7,500
5	VFA	ppm as HAc										5,071	4,075	4,905	4,739	4,905	5,486		4,864	5,237	5,403	5,237	5,071

<b>7 EFFLUENT TREATMENT PLANT:</b>																							
Sr. No.	Description	Unit	1-Sep	2-Sep	3-Sep	4-Sep	5-Sep	6-Sep	7-Sep	Weekly Average	8-Sep	9-Sep	10-Sep	11-Sep	12-Sep	13-Sep	14-Sep	Weekly Average	15-Sep	16-Sep	17-Sep	18-Sep	19-Sep
<b>6.1 Raw Effluent Quality:</b>																							
1	Flow	m <sup>3</sup> /day	62.07	62.20	69.83	67.31	72.97	67.93	38.64	62.99	50.00	46.73	51.92	64.24	80.01	76.15	72.97	63.15	79.33	76.25	66.35	82.39	85.65
2	pH	---	7.06	7.24	7.91	6.80	7.05	7.66	7.93	7.38	6.09	6.25	6.35	7.48	6.28	6.85	6.98	6.61	6.24	6.76	6.39	7.97	7.96
3	Biochemical Oxygen Demand (BOD <sub>5</sub> )	mg/l	1,575	2,182	1,591	2,205	1,641	2,009	1,644	1,835	2,354	1,810	1,536	1,520	2,170	1,895	2,097	1,912	2,159	2,176	2,209	2,321	1,901
4	Chemical Oxygen Demand (COD)	mg/l	3,717	7,070	3,468	5,998	3,397	4,661	5,639	4,850	7,180	5,213	4,178	3,602	4,449	4,074	5,767	4,923	5,419	4,874	5,368	6,661	4,791
5	Total Suspended Solids (TSS)	mg/l	3,371	4,669	3,468	5,336	3,298	4,400	3,420	3,995	3,766	3,367	2,811	3,435	3,906	2,880	4,467	3,519	3,713	5,201	3,689	4,642	3,574
6	Total Dissolve Solids (TDS)	mg/l	1,307	1,761	1,712	1,714	1,412	1,488	1,711	1,586	1,434	1,791	1,635	1,403	1,553	1,370	1,555	1,534	1,366	1,607	1,466	1,306	1,324

100 TPD Municipal Solid Waste (MSW) Facility at Calangute, North Goa

Sr. No.	Description	Unit	1-Sep	2-Sep	3-Sep	4-Sep	5-Sep	6-Sep	7-Sep	Weekly Average	8-Sep	9-Sep	10-Sep	11-Sep	12-Sep	13-Sep	14-Sep	Weekly Average	15-Sep	16-Sep	17-Sep	18-Sep	19-Sep
<b>6.2 Treated Effluent Quality:</b>																							
1	pH	---	6.93	7.24	6.77	7.18	7.32	7.30	7.38	7.16	6.85	6.77	7.13	6.58	7.23	6.72	6.88	6.88	7.00	6.57	7.06	7.50	7.41
2	Biochemical Oxygen Demand (BOD5)	mg/l	9	9	7	5	6	6	9	7	6	8	7	7	6	6	6	7	9	9	6	6	8
3	Chemical Oxygen Demand (COD)	mg/l	78	59	67	53	83	54	62	65	90	58	62	72	85	52	85	72	66	59	87	67	70
4	Total Suspended Solids (TSS)	mg/l	10	10	8	6	7	7	10	8	7	9	8	8	7	7	7	8	10	10	7	7	9
5	Total Dissolve Solids (TDS)	mg/l	1,359	1,884	1,832	1,851	1,497	1,503	1,779	1,672	1,448	1,827	1,684	1,459	1,631	1,507	1,695	1,607	1,462	1,639	1,598	1,358	1,377

<b>8 HOUSEKEEPING:</b>																							
Sr. No.	Description	Unit	1-Sep	2-Sep	3-Sep	4-Sep	5-Sep	6-Sep	7-Sep	Weekly Average	8-Sep	9-Sep	10-Sep	11-Sep	12-Sep	13-Sep	14-Sep	Weekly Average	15-Sep	16-Sep	17-Sep	18-Sep	19-Sep
1	Hygienic Conditions	---	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted
2	Cleanliness	---	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted
3	Manpower Deployed	---	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted
4	Safety Norms	---	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted
5	Treatment Methodology	---	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted
6	Storage Conditions	---	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted

100 TPD Municipal Solid Waste (MSW) Facility at Calangute, North Goa

1 WASTE:																					
Sr. No.	Description	Unit	20-Sep	21-Sep	Weekly Average	22-Sep	23-Sep	24-Sep	25-Sep	26-Sep	27-Sep	28-Sep	Weekly Average	29-Sep	30-Sep	Weekly Average	Monthly Average				
<b>1.1 Input Waste:</b>																					
1	Type 1: Dry Waste	TPD	64.96	70.50	66.54	53.10%	54.42	74.06	68.07	74.85	68.69	78.56	67.92	69.51	47.72%	58.80	76.48	67.64	48.23%	67.09	52.71%
2	Type 2: Wet Waste	TPD	52.68	68.98	52.18	41.65%	68.24	66.15	72.65	71.95	60.93	64.78	65.93	67.23	46.15%	65.61	72.80	69.21	49.35%	55.49	42.84%
3	Type 3: Mixed Waste	TPD	0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00%	0.00	0.00%
4	Type 4: Tree Waste	TPD	10.66	9.50	6.58	5.25%	9.34	8.37	3.24	19.61	4.76	9.40	7.77	8.93	6.13%	3.48	3.30	3.39	2.42%	5.73	4.45%
5	<b>Total.....(1)+(2)+(3)+(4)</b>	<b>TPD</b>	<b>128.30</b>	<b>148.98</b>	<b>125.30</b>	<b>100.00%</b>	<b>132.00</b>	<b>148.58</b>	<b>143.96</b>	<b>166.41</b>	<b>134.38</b>	<b>152.74</b>	<b>141.62</b>	<b>145.67</b>	<b>100.00%</b>	<b>127.89</b>	<b>152.58</b>	<b>140.24</b>	<b>100.00%</b>	<b>128.31</b>	<b>100.00%</b>

- # **Note:**  
 1 **Type-I: Dry Waste:** This has 25-30% Organic and 70-75% Inorganic.  
 2 **Type-II: Wet Waste:** This has 65-70% Organic and 30-35%  
 3 **Type-I: Mixed Waste:** This has 45-50% Organic and 50-55% Inorganic.

Sr. No.	Description	Unit	20-Sep	21-Sep	Weekly Average	22-Sep	23-Sep	24-Sep	25-Sep	26-Sep	27-Sep	28-Sep	Weekly Average	29-Sep	30-Sep	Weekly Average	Monthly Average				
<b>1.2 Output Products:</b>																					
1	Organic Fraction	TPD	54.85	66.00	53.39	42.61%	59.83	65.44	68.13	68.97	59.72	67.91	60.64	64.38	44.19%	61.62	72.64	67.13	47.87%	56.23	43.65%
<b>2 Inorganic Fraction:</b>																					
	Recyclables	TPD	8.71	9.55	8.79	7.01%	9.08	10.88	9.82	10.58	9.49	9.82	9.14	9.83	6.75%	8.87	11.48	10.18	7.26%	8.95	6.97%
	RDF	TPD	52.43	62.28	53.47	42.68%	52.01	61.60	60.50	65.18	58.70	58.46	62.49	59.85	41.09%	52.12	63.13	57.62	41.09%	54.98	43.03%
	Bulking Material	TPD	1.66	1.65	1.55	1.23%	1.74	2.29	2.27	2.07	1.71	1.88	1.58	1.93	1.33%	1.80	2.03	1.92	1.37%	1.66	1.29%
	Inert	TPD	0.00	0.00	1.51	1.21%	0.00	0.00	0.00	0.00	0.00	5.27	0.00	0.75	0.52%	0.00	0.00	0.00	0.00%	0.75	0.61%
3	Tree Waste	TPD	10.66	9.50	6.58	5.25%	9.34	8.37	3.24	19.61	4.76	9.40	7.77	8.93	6.13%	3.48	3.30	3.39	2.42%	5.73	4.45%
	<b>Total.....(1)+(2)+(3)</b>	<b>TPD</b>	<b>128.30</b>	<b>148.98</b>	<b>125.30</b>	<b>100.00%</b>	<b>132.00</b>	<b>148.58</b>	<b>143.96</b>	<b>166.41</b>	<b>134.38</b>	<b>152.74</b>	<b>141.62</b>	<b>145.67</b>	<b>100.00%</b>	<b>127.89</b>	<b>152.58</b>	<b>140.24</b>	<b>100.00%</b>	<b>128.31</b>	<b>100.00%</b>

2 RECYCLABLES:																	
Sr. No.	Description	Unit	20-Sep	21-Sep	Weekly Average	22-Sep	23-Sep	24-Sep	25-Sep	26-Sep	27-Sep	28-Sep	Weekly Average	29-Sep	30-Sep	Weekly Average	Monthly Average
1	Glass	Kg	153	139	146	184	196	155	161	143	201	187	175	162	224	193	161
2	Aluminum	Kg	118	139	96	74	70	70	132	91	100	107	92	75	104	90	87
3	Metal	Kg	176	237	200	209	280	225	235	220	229	201	228	236	284	260	215
4	Tetra Pack	Kg	118	84	94	98	126	127	117	130	86	134	117	62	75	69	89
5	Hard Plastic	Kg	224	209	175	159	210	155	264	194	229	134	192	162	239	201	183
6	PET	Kg	153	223	189	135	238	155	191	156	186	201	180	162	284	223	186
7	Mixed Plastic	Kg	7,647	8,452	7,804	8,157	9,646	8,851	9,366	8,438	8,715	8,071	8,749	7,950	10,196	9,073	7,940
8	Thermocol + Styrofoam	Kg	118	70	85	61	112	84	117	117	72	107	96	62	75	69	85
9	Cloth + Rags + Textiles	Kg	765	837	865	846	1,094	1,182	837	1,231	774	1,231	1,028	1,008	836	922	898
10	Leather + Rexine + Rubber	Kg	1,071	753	916	1,055	757	732	749	868	917	1,205	898	871	1,403	1,137	929
11	Paper + Cardboard	Kg	812	851	763	797	967	915	984	817	1,003	910	913	834	955	895	804
12	Coconut	Kg	847	795	784	944	1,318	1,351	1,086	894	874	669	1,019	970	1,075	1,023	857

- # **Note:**  
 1 Item No. 9 (Cloth + Rags + Textiles) and 10 (Leather + Rexine + Rubber) are sent to Cement Plants as RDF.  
 2 Item No. 11 (Paper + Cardboard) and 12 (Coconut) are used as Bulking Material in Composting.

3 DISPOSAL OF INERT:																	
Sr. No.	Description	Unit	20-Sep	21-Sep	Weekly Average	22-Sep	23-Sep	24-Sep	25-Sep	26-Sep	27-Sep	28-Sep	Weekly Average	29-Sep	30-Sep	Weekly Average	Monthly Average
1	<b>As per Tender:</b> Maximum 10% of Inerts of the Total Input Waste (excluding Mulched Tree Waste) as received in the Facility.																
2	Input Waste	TPD	117.64	139.48	118.72	122.66	140.21	140.72	146.80	129.62	143.34	133.85	136.74	124.41	149.28	136.85	122.58
3	Inert Fraction	TPD	0.00	0.00	1.51	0.00	0.00	0.00	0.00	0.00	5.27	0.00	0.75	0.00	0.00	0.00	0.75
4	% of Total Input Waste.....(3) ÷ (2)	%	0.00%	0.00%	1.36%	0.00%	0.00%	0.00%	0.00%	0.00%	3.68%	0.00%	0.53%	0.00%	0.00%	0.00%	0.64%

4 ELECTRICITY GENERATION:																	
Sr. No.	Description	Unit	20-Sep	21-Sep	Weekly Average	22-Sep	23-Sep	24-Sep	25-Sep	26-Sep	27-Sep	28-Sep	Weekly Average	29-Sep	30-Sep	Weekly Average	Monthly Average
<b>3.1 Biogas Gensets:</b>																	
1	Biogas Genset-I: Running Time	hr/day	24.00	23.40	23.09	24.00	23.35	23.15	23.15	24.00	15.00	24.00	22.38	23.85	19.85	21.85	20.73
2	Biogas Genset-I: Biogas Consumption	Nm <sup>3</sup> /day	2,011	2,012	1,839	2,003	2,083	2,031	2,152	2,202	1,329	2,276	2,011	2,234	1,833	2,033	1,833
3	Biogas Genset-I: Energy Generation	kW.hr/day	2,800	2,880	2,709	3,000	2,900	2,690	3,520	3,680	2,200	3,770	3,108.57	3,630	3,250	3,440	2,877
4	Biogas Genset-II: Running Time	hr/day	24.00	23.40	23.51	24.00	23.35	22.55	23.20	22.95	23.65	23.95	23.38	22.20	19.05	20.63	21.23
5	Biogas Genset-II: Biogas Consumption	Nm <sup>3</sup> /day	1,927	1,883	1,795	1,931	1,932	1,859	2,010	1,928	1,987	2,104	1,964	1,908	1,592	1,750	1,776
6	Biogas Genset-II: Energy Generation	kW.hr/day	2,940	2,940	2,910	3,180	2,890	2,620	3,520	3,430	3,440	3,730	3,259	3,250	2,940	3,095	2,952
7	<b>Total Biogas Consumption = (2)+(5)</b>	<b>Nm<sup>3</sup>/day</b>	<b>3,938</b>	<b>3,895</b>	<b>3,633</b>	<b>3,934</b>	<b>4,015</b>	<b>3,890</b>	<b>4,162</b>	<b>4,130</b>	<b>3,316</b>	<b>4,380</b>	<b>3,975</b>	<b>4,142</b>	<b>3,425</b>	<b>3,784</b>	<b>3,609</b>
8	<b>Total Energy Generation = (3)+(6)</b>	<b>kW.hr/day</b>	<b>5,740</b>	<b>5,820</b>	<b>5,619</b>	<b>6,180</b>	<b>5,790</b>	<b>5,310</b>	<b>7,040</b>	<b>7,110</b>	<b>5,640</b>	<b>7,500</b>	<b>6,367</b>	<b>6,880</b>	<b>6,190</b>	<b>6,535</b>	<b>5,829</b>



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Sr. No.	Description	Unit	20-Sep	21-Sep	Weekly Average	22-Sep	23-Sep	24-Sep	25-Sep	26-Sep	27-Sep	28-Sep	Weekly Average	29-Sep	30-Sep	Weekly Average	Monthly Average
<b>3.2 Electricity Generation:</b>																	
1	As per Tender: Minimum electricity to be generated in the plant shall be 0.4 MW per 100 tons of Input Biodegradable Waste as received in the Facility.	MW/100 MT	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40
2	Biodegradable Waste = 1.2.2	TPD	52.68	68.98	52.18	68.24	66.15	72.65	71.95	60.93	64.78	65.93	67.23	65.61	72.80	69.21	55.49
3	Guaranteed Electricity Generation = (3.2.2 x 3.2.1) ÷ 100	kW	0.21	0.24	0.20	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.21
4	Guaranteed Electricity Generation = 3.2.3 x 24 x 1000	kW.hr/day	5,057	5,760	4,886	5,760	5,760	5,760	5,760	5,760	5,760	5,760	5,760	5,760	5,760	5,760	4,987
5	Available Electricity Generation = (A2 ÷ 24) + (A4 ÷ 24)	kW	239	243	234	258	241	221	293	296	235	313	265	287	258	272	243
6.00	Available Electricity Generation = 3.2.5 ÷ 100	MW/100 MT	0.45	0.40	0.46	0.43	0.40	0.37	0.49	0.49	0.39	0.52	0.44	0.48	0.43	0.45	0.47

<b>5 BIOGAS FLARE:</b>																	
Sr. No.	Description	Unit	20-Sep	21-Sep	Weekly Average	22-Sep	23-Sep	24-Sep	25-Sep	26-Sep	27-Sep	28-Sep	Weekly Average	29-Sep	30-Sep	Weekly Average	Monthly Average
1	Operation Time	hr/day	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.83	0.00	0.12	0.15	3.12	1.63	0.44
2	Biogas Flared	Nm <sup>3</sup> /day	0	0	0	0	0	0	4	0	187	0	27	34	701	367.54	99.55

<b>6 DIGESTERS:</b>																	
Sr. No.	Description	Unit	20-Sep	21-Sep	Weekly Average	22-Sep	23-Sep	24-Sep	25-Sep	26-Sep	27-Sep	28-Sep	Weekly Average	29-Sep	30-Sep	Weekly Average	Monthly Average
<b>5.1 Digester-I: Front End</b>																	
1	pH	---							7.98	7.99	7.98	7.98	7.98	7.93	8.06	8.00	7.74
2	TSS	ppm							38,589	48,089	47,539	47,715	45,483		46,311	46,311	56,816
3	VSS	ppm							25,238	31,788	32,858	32,133	30,504		30,857	30,857	38,039
4	Total Alkalinity	ppm as CaCO <sub>3</sub>							9,550	9,450	9,700	9,675	9,594	10,000	10,400	10,200	8,359
5	VFA	ppm as HAC							3,245	2,581	2,332	2,415	2,643	2,581	2,332	2,461	3,249
<b>5.2 Digester-I: Back End</b>																	
1	pH	---						7.83	7.99	8.01	7.99	8.04	7.97	7.98	8.04	8.01	7.62
2	TSS	ppm						49,785	45,936	47,504	46,902	48,808	47,787		48,935	48,935	57,921
3	VSS	ppm						34,398	29,089	30,173	31,270	31,174	31,221		32,667	32,667	38,733
4	Total Alkalinity	ppm as CaCO <sub>3</sub>						8,875	9,475	9,500	9,750	9,850	9,490	10,200	10,600	10,400	7,339
5	VFA	ppm as HAC						3,992	3,079	2,415	2,083	2,166	2,747	2,249	2,083	2,266	3,626
<b>5.3 Buffer Tank: Front End</b>																	
1	pH	---	7.91	7.86	7.88	7.91	7.87						7.89				7.93
2	TSS	ppm	46,205	44,921	45,647	50,256	45,169						47,713				35,999
3	VSS	ppm	30,524	29,474	30,225	27,357	33,632						30,495				34,988
4	Total Alkalinity	ppm as CaCO <sub>3</sub>	10,475	10,225	10,264	9,550	9,500						9,525				9,779
5	VFA	ppm as HAC	2,249	2,498	2,119	1,834	2,249						2,042			2,042	2,347
<b>5.4 Buffer Tank: Back End</b>																	
1	pH	---	7.97	7.89	7.92	7.95	7.9	7.93					7.93				7.96
2	TSS	ppm	46,356	44,368	45,647	44,551	48,273	45,015					45,946				53,800
3	VSS	ppm	30,692	28,997	29,171	29,546	32,227	24,542					28,772				33,526
4	Total Alkalinity	ppm as CaCO <sub>3</sub>	10,750	10,050	10,532	9,925	9,675	10,250					9,950				10,000
5	VFA	ppm as HAC	1,834	2,249	1,870	1,585	2,000	1,751					1,779			1,779	2,139
<b>5.5 Digester-II: Front End</b>																	
1	pH	---	7.41	7.27	7.40	7.31	7.28	7.25	7.27	7.24	7.27	7.3	7.27	7.34	7.54	7.44	7.40
2	TSS	ppm	52,799	53,807	52,433	56,017	56,074	52,746	57,977	55,109	55,267	56,595	55,684		55,943	55,943	54,191
3	VSS	ppm	37,386	38,316	36,747	38,638	34,400	36,452	39,877	37,822	39,840	40,182	38,173		36,722	36,722	37,410
4	Total Alkalinity	ppm as CaCO <sub>3</sub>	7,075	6,700	6,871	6,875	6,500	6,425	6,475	6,425	6,575	6,675	6,564	6,900	7,350	7,125	6,703
5	VFA	ppm as HAC	5,901	6,067	5,699	6,067	6,233	6,067	6,067	6,399	6,316	6,233	6,197	6,648	6,067	6,292	5,711
<b>5.6 Digester-II: Back End</b>																	
1	pH	---	7.46	7.23	7.44	7.35	7.31	7.26	7.22	7.2	7.22	7.24	7.26	7.38	7.5	7.44	7.39
2	TSS	ppm	51,841	54,316	51,856	55,048	56,690	56,739	54,420	55,195	55,489	53,627	55,315		54,418	54,418	53,632
3	VSS	ppm	35,586	38,500	36,074	36,252	39,678	38,497	36,813	36,178	38,967	36,583	37,567		37,558	37,558	36,846
4	Total Alkalinity	ppm as CaCO <sub>3</sub>	7,350	6,825	7,121	7,200	6,725	6,550	6,100	6,350	6,375	6,550	6,550	7,000	7,350	7,175	6,700
5	VFA	ppm as HAC	5,569	5,818	5,379	5,320	5,652	5,901	6,067	6,399	6,067	6,067	5,925	6,399	6,067	6,105	5,568

<b>7 EFFLUENT TREATMENT PLANT:</b>																	
Sr. No.	Description	Unit	20-Sep	21-Sep	Weekly Average	22-Sep	23-Sep	24-Sep	25-Sep	26-Sep	27-Sep	28-Sep	Weekly Average	29-Sep	30-Sep	Weekly Average	Monthly Average
<b>6.1 Raw Effluent Quality:</b>																	
1	Flow	m <sup>3</sup> /day	76.64	73.78	77.20	70.94	79.28	60.64	80.34	74.83	82.76	82.68	75.92	81.32	75.58	78.45	71.54
2	pH	---	6.03	6.01	6.77	6.23	7.20	7.09	7.92	6.86	6.93	7.41	7.09	6.72	7.56	7.14	7.00
3	Biochemical Oxygen Demand (BOD <sub>5</sub> )	mg/l	2,187	1,679	2,090	1,700	2,238	1,746	1,757	1,822	2,404	1,559	1,889	2,075	2,045	2,060	1,957
4	Chemical Oxygen Demand (COD)	mg/l	4,615	5,339	5,295	4,012	7,542	3,789	5,693	5,758	7,861	5,316	5,710	6,827	6,012	6,420	5,440
5	Total Suspended Solids (TSS)	mg/l	5,118	3,425	4,195	3,502	3,693	3,422	3,303	3,280	3,678	3,134	3,430	5,042	3,579	4,311	3,890
6	Total Dissolve Solids (TDS)	mg/l	1,527	1,470	1,438	1,320	1,372	1,393	1,401	1,591	1,622	1,674	1,482	1,576	1,740	1,658	1,540

100 TPD Municipal Solid Waste (MSW) Facility at Calangute, North Goa

Sr. No.	Description	Unit	20-Sep	21-Sep	Weekly Average	22-Sep	23-Sep	24-Sep	25-Sep	26-Sep	27-Sep	28-Sep	Weekly Average	29-Sep	30-Sep	Weekly Average	Monthly Average
<b>6.2 Treated Effluent Quality:</b>																	
1	pH	---	6.98	6.90	7.06	6.78	6.98	7.50	6.71	6.89	6.57	6.57	6.86	6.74	7.15	6.95	6.98
2	Biochemical Oxygen Demand (BOD5)	mg/l	6	5	7	8	5	8	5	8	8	9	7	5	8	7	7
3	Chemical Oxygen Demand (COD)	mg/l	67	80	71	59	79	51	57	80	75	64	66	62	80	71	69
4	Total Suspended Solids (TSS)	mg/l	7	6	8	9	6	9	6	9	9	10	8	6	9	8	8
5	Total Dissolve Solids (TDS)	mg/l	1,680	1,514	1,518	1,399	1,413	1,518	1,527	1,671	1,784	1,841	1,593	1,718	1,757	1,738	1,626

<b>8 HOUSEKEEPING:</b>																	
Sr. No.	Description	Unit	20-Sep	21-Sep	Weekly Average	22-Sep	23-Sep	24-Sep	25-Sep	26-Sep	27-Sep	28-Sep	Weekly Average	29-Sep	30-Sep	Weekly Average	Monthly Average
1	Hygienic Conditions	---	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted
2	Cleanliness	---	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted
3	Manpower Deployed	---	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted
4	Safety Norms	---	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted
5	Treatment Methodology	---	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted
6	Storage Conditions	---	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted