

**Monthly Performance Report
(From 01/01/2017 to 31/01/2017)
(HWT-NG100-MPR-06-R0)**

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

Prepared By
Hindustan Waste Treatment Pvt. Ltd.

Submitted To
**Goa State Infrastructural Development
Corporation Limited**

Table – 1
Summary of Overall Average Results for January 2017
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	13 numbers 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. Metal Articles & Cans 3. Tetrapacks 4. Paper / Cardboard 5. Plastic Film 6. Hard Plastics 7. PET Bottles 8. Styrofoam & Thermocol 9. Cloth / Rags / Textile 10. Jute bags 11. Leather / Rubber / Rexine 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 <u>123.91 TPD</u> . Quantum of Inert is 8.50 TPD 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 <u>0.47</u> MW/100 tons of Input Biodegradable Waste as received in the Facility (in TPD).

Sr. No.	Parameter	Performance Standard As per Schedule – 7	Actual Performance at Plant (Monthly Average)										
4.	Biogas Flaring System	The Biogas Flaring System shall strictly be used only in case of emergency and not as a routine practice.	Biogas is being flared strictly, only under emergency and not as a routine practice. The average running time of Biogas Flaring System is 6.54 hours/day .										
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 684 1403 898"> <tbody> <tr> <td>pH</td> <td>7.05</td> </tr> <tr> <td>BOD</td> <td>7 mg/l</td> </tr> <tr> <td>COD</td> <td>68 mg/l</td> </tr> <tr> <td>TSS</td> <td>8 mg/l</td> </tr> <tr> <td>TDS</td> <td>1704 mg/l</td> </tr> </tbody> </table>	pH	7.05	BOD	7 mg/l	COD	68 mg/l	TSS	8 mg/l	TDS	1704 mg/l
pH	7.05												
BOD	7 mg/l												
COD	68 mg/l												
TSS	8 mg/l												
TDS	1704 mg/l												
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"> • High standard of Housekeeping, Cleanliness and Safety are being maintained at all times at the Plant. • Adequate manpower has been deployed in all shifts. • Also, the treatment methodology is being followed properly and proper storage conditions have been maintained in the Plant. 										

#	Plant Performance Data: January 2017		
Sr. No.	Content	Month	Signature
1	Input Waste Composition	January 2017 From 01.01.2017 To 31.01.2017	
2	Recyclables		
3	Electricity Generation		
4	Biogas Flare		
5	Effluent Treatment Plant		
6	Inert		
7	Housekeeping		

1 INPUT WASTE COMPOSITION:

Sr. No.	Description	Unit	1-Jan	2-Jan	3-Jan	4-Jan	5-Jan	6-Jan	7-Jan	Weekly Average		8-Jan	9-Jan	10-Jan	11-Jan	12-Jan	13-Jan	14-Jan	Weekly Average		
A	Input Waste:																				
1	Dry Waste	TPD	0.00	0.47	0.41	0.70	0.69	0.56	0.00	0.40	0.29%	0.00	1.06	0.51	1.59	0.12	0.58	0.24	0.59	0.51%	
2	Wet Waste	TPD	35.92	26.83	30.08	33.89	32.29	30.78	30.64	31.49	22.21%	19.81	32.11	33.18	25.11	23.43	23.88	27.62	26.45	22.89%	
3	Mixed Waste	TPD	85.63	150.48	118.55	113.53	104.24	88.14	99.14	108.53	76.55%	87.56	91.97	87.58	97.02	81.59	83.02	90.20	88.42	76.51%	
4	Mulched Tree waste	TPD	1.72	0.00	1.89	0.99	1.91	2.96	0.00	1.35	0.95%	0.00	0.00	0.00	0.80	0.00	0.00	0.00	0.11	0.10%	
5	Total.....1+2+3+4	TPD	123.27	177.78	150.93	149.11	139.13	122.44	129.78	141.78	100.00%	107.37	125.14	121.27	124.52	105.14	107.48	118.06	115.57	100.00%	
B	Input Waste Composition:																				
1	Organic / Bio degradable Fraction	65.00%	63.15	79.50	68.61	68.52	65.96	58.98	65.34	67.15	47.36%	46.95	62.46	62.87	58.19	51.17	49.28	59.10	55.72	48.21%	
2	Inorganic / Non-recyclable Fraction (RDF)		33.20	59.60	51.08	50.05	41.66	36.66	38.59	44.40	31.32%	43.53	40.87	32.88	40.99	31.07	39.75	33.98	37.58	32.52%	
3	Recyclables	14.00%	18.82	25.62	23.27	22.37	20.41	16.79	18.03	20.76	14.64%	10.87	13.75	17.55	17.38	14.88	12.54	16.20	14.74	12.75%	
	Glass	0.50%	0.11	0.16	0.14	0.13	0.14	0.10	0.12	0.13	0.09%	0.10	0.10	0.12	0.09	0.07	0.10	0.09	0.10	0.08%	
	Metal	0.50%	0.53	0.78	0.63	0.60	0.58	0.50	0.57	0.60	0.42%	0.45	0.45	0.50	0.59	0.39	0.37	0.46	0.46	0.40%	
	Paper / Cardboard / Tetrapack	4.00%	3.27	4.52	4.42	3.97	4.08	3.44	3.31	3.86	2.72%	1.95	2.24	2.39	2.61	2.81	2.59	2.23	2.40	2.08%	
	Mixed Plastic, Bottles, Cups, Food Packets, Coated Plastics	6.00%	8.63	12.16	9.98	9.78	9.14	8.02	7.93	9.38	6.61%	4.85	5.06	7.23	8.08	7.30	5.81	7.72	6.58	5.69%	
	Thermocoal / Styrofoam	1.00%	0.12	0.16	0.15	0.07	0.11	0.07	0.09	0.11	0.08%	0.09	0.08	0.11	0.10	0.09	0.11	0.09	0.10	0.08%	
	Cloth / Rags / Textiles	1.50%	2.93	3.70	2.87	2.10	3.14	2.28	2.91	2.85	2.01%	1.36	1.89	3.00	1.58	1.17	1.13	2.95	1.87	1.62%	
	Rubber Items	0.50%	0.46	0.82	0.60	0.75	0.50	0.33	0.52	0.57	0.40%	0.40	0.50	0.51	0.47	0.41	0.54	0.44	0.47	0.40%	
	Coconut		2.77	3.32	4.48	4.97	2.71	2.04	2.58	3.27	2.31%	1.66	3.44	3.70	3.86	2.64	1.90	2.21	2.77	2.40%	
4	Inert	10.00%	8.10	13.07	7.97	8.17	11.10	10.02	7.83	9.46	6.68%	6.02	8.06	7.97	7.96	8.02	5.91	8.78	7.53	6.52%	
5	Mulched Tree Waste	11.00%	1.72	0.00	1.89	0.99	1.91	2.96	0.00			0.00	0.00	0.00	0.80	0.00	0.00	0.00			
	Total.....1+2+3+4+5	100.00%									100.00%									100.00%	

2 RECYCLABLES:

Sr. No.	Description	Unit	1-Jan	2-Jan	3-Jan	4-Jan	5-Jan	6-Jan	7-Jan	Weekly Average		8-Jan	9-Jan	10-Jan	11-Jan	12-Jan	13-Jan	14-Jan	Weekly Average	
A	Recyclables:																			
1	Glass	Kg	111	160	136	134	139	98	117	128		97	100	121	87	74	97	94	96	
2	Metal	Kg	530	782	634	596	584	502	571	600		451	451	497	585	389	365	460	457	
3	Tetrapack	Kg	127	208	142	206	143	151	182	166		78	83	91	86	143	117	109	101	
4	Paper / Cardboard	Kg	3,139	4,308	4,281	3,760	3,934	3,289	3,127	3,691		1,876	2,157	2,298	2,529	2,664	2,474	2,122	2,303	
	Total.....3+4	Kg	3,266	4,516	4,423	3,966	4,077	3,440	3,309	3,857		1,954	2,240	2,389	2,615	2,807	2,591	2,231	2,404	
5	Plastic Films	Kg	7,550	10,056	8,709	8,393	7,870	7,186	7,295	8,151		4,208	4,434	6,288	6,926	6,377	5,001	6,501	5,676	
6	Hard Plastic	Kg	337	1,204	519	528	676	513	333	587		398	177	723	606	533	442	471	479	
7	Pet	Kg	742	900	748	861	594	321	301	638		248	445	217	550	387	372	749	424	
	Total.....5+6+7	Kg	8,629	12,160	9,976	9,782	9,140	8,020	7,929	9,377		4,854	5,056	7,228	8,082	7,297	5,815	7,721	6,579	
8	Thermocal	Kg	123	160	151	75	111	73	91	112		86	75	109	100	95	107	94	95	
9	Cloth / Rags / Textile	Kg	2,186	2,951	2,042	1,659	2,277	1,790	2,294	2,171		991	1,336	2,474	1,161	916	959	2,211	1,435	
10	Jute Bags	Kg	748	747	826	444	868	487	613	676		372	554	521	421	251	169	741	433	
	Total.....9+10	Kg	2,934	3,698	2,868	2,103	3,145	2,277	2,907	2,847		1,363	1,890	2,995	1,582	1,167	1,128	2,952	1,868	
11	Leather / Rubber / Rexine	Kg	456	818	604	746	501	331	519	568		397	501	509	473	410	537	437	466	
12	Coconut	Kg	2,774	3,324	4,483	4,965	2,713	2,045	2,583	3,270		1,664	3,441	3,699	3,860	2,639	1,902	2,208	2,773	
13	Total	Kg	18,823	25,618	23,275	22,367	20,410	16,786	18,026	20,758		10,866	13,754	17,547	17,384	14,878	12,542	16,197	14,738	
		TPD	18.82	25.62	23.28	22.37	20.41	16.79	18.03	20.76		10.87	13.75	17.55	17.38	14.88	12.54	16.20	14.74	

3 ELECTRICITY GENERATION:

Sr. No.	Description	Unit	1-Jan	2-Jan	3-Jan	4-Jan	5-Jan	6-Jan	7-Jan	Weekly Average		8-Jan	9-Jan	10-Jan	11-Jan	12-Jan	13-Jan	14-Jan	Weekly Average	
A	Biogas Gensets:																			
1	Biogas Genset-I: Running Time	hr	19.19	10.35	10.99	12.83	16.37	19.49	9.50	14.10		18.52	11.77	13.32	16.79	8.98	20.14	18.31	15.40	
2	Biogas Genset-I: Energy Generation	kW.hr	2,661	1,417	1,342	2,171	2,283	2,541	1,177	1,942		2,940	1,598	1,776	2,317	1,211	2,440	2,642	2,132	
3	Biogas Genset-II: Running Time	hr	11.08	19.51	22.95	18.18	11.53	8.25	19.87	15.91		12.57	22.54	13.45	8.41	17.01	8.24	6.66	12.70	
4	Biogas Genset-II: Energy Generation	kW.hr	1,741	2,979	3,102	2,560	1,509	1,321	3,092	2,329		1,414	3,126	1,959	1,187	2,379	1,255	967	1,755	
5	Total.....2+4	kW.hr	4,402	4,396	4,444	4,731	3,792	3,862	4,269	4,271		4,354	4,724	3,735	3,504	3,590	3,695	3,609	3,887	

Sr. No.	Description	Unit	1-Jan	2-Jan	3-Jan	4-Jan	5-Jan	6-Jan	7-Jan	Weekly Average	8-Jan	9-Jan	10-Jan	11-Jan	12-Jan	13-Jan	14-Jan	Weekly Average
B Electricity Generation:																		
1	<u>As per Tender:</u> Minimum electricity to be generated in the plant shall be 0.4 MW per per 100 tons of Input Biodegradable Waste as received in the Facility.																	
2	Biodegradable Waste.....1.B4	Tons	63.15	79.50	68.61	68.52	65.96	58.98	65.34	67.15	46.95	62.46	62.87	58.19	51.17	49.28	59.10	55.72
3	Electricity Generation required as per Tender.....0.4 x 1000 x B2/100	kWH	240	240	240	240	240	236	240	239	188	240	240	233	205	197	236	220
4	Electricity generated..... (A2/A1) + (A4/A3)	kWH	296	290	257	310	270	290	280	285	271	274	279	279	275	273	289	277

4 BIOGAS FLARE:

Sr. No.	Description	Unit	1-Jan	2-Jan	3-Jan	4-Jan	5-Jan	6-Jan	7-Jan	Weekly Average	8-Jan	9-Jan	10-Jan	11-Jan	12-Jan	13-Jan	14-Jan	Weekly Average
2	Operation Time	hr/day	5.09	7.15	6.61	7.13	7.14	5.03	5.32	6.21	6.82	7.55	7.36	6.31	6.91	7.87	6.90	7.10

5 EFFLUENT TREATMENT PLANT:

Sr. No.	Parameter	Unit	1-Jan	2-Jan	3-Jan	4-Jan	5-Jan	6-Jan	7-Jan	Weekly Average	8-Jan	9-Jan	10-Jan	11-Jan	12-Jan	13-Jan	14-Jan	Weekly Average
A Raw Effluent Quality:																		
1	Flow	m ³ /day	46.66	53.43	57.81	61.52	62.09	59.46	59.78	57.25	44.67	64.93	47.60	63.16	47.28	68.75	45.67	54.58
2	pH	---	6.10	6.09	6.37	7.09	6.01	6.96	7.99	6.66	6.93	6.49	7.92	6.62	6.69	7.21	7.27	7.02
3	Biochemical Oxygen Demand (BOD5)	mg/l	1,544	1,857	1,048	2,354	1,215	1,864	1,532	1,631	1,290	1,680	1,201	1,734	1,236	1,750	1,250	1,449
4	Chemical Oxygen Demand (COD)	mg/l	4,138	6,332	3,092	5,320	3,718	4,697	5,209	4,644	3,341	5,578	3,711	5,341	2,546	3,658	3,025	3,886
5	Total Suspended Solids (TSS)	mg/l	2,748	3,491	2,065	4,520	2,017	2,945	2,834	2,946	2,025	3,108	2,222	3,000	1,916	3,483	2,450	2,601
6	Total Dissolve Solids (TDS)	mg/l	1,536	1,542	1,727	1,715	1,657	1,624	1,586	1,627	1,592	1,616	1,755	1,545	1,739	1,659	1,577	1,640
B Treated Effluent Quality:																		
1	pH	---	6.86	6.88	7.1	7.33	7.21	7.34	7.48	7.17	7.43	6.82	6.9	6.78	7.39	7.24	7.21	7.11
2	Biochemical Oxygen Demand (BOD5)	mg/l	9	7	6	6	7	9	8	7	9	9	8	6	7	7	8	8
3	Chemical Oxygen Demand (COD)	mg/l	74	73	72	72	72	73	58	71	66	90	53	66	53	68	57	65
1	Total Suspended Solids (TSS)	mg/l	10	8	7	7	8	10	9	8	10	10	9	7	8	8	9	9
2	Total Dissolve Solids (TDS)	mg/l	1,659	1,665	1,744	1,732	1,723	1,640	1,586	1,678	1,624	1,681	1,843	1,545	1,739	1,659	1,640	1,676

6 DISPOSAL OF INERT:

Sr. No.	Description	Unit	1-Jan	2-Jan	3-Jan	4-Jan	5-Jan	6-Jan	7-Jan	Weekly Average	8-Jan	9-Jan	10-Jan	11-Jan	12-Jan	13-Jan	14-Jan	Weekly Average
1	<u>As per Tender:</u> Maximum 10% of Inerts of the Total Input Waste (excluding Mulched Tree Waste) as received in the Facility.																	
2	Input Waste	TPD	123.27	177.78	150.93	149.11	139.13	122.44	129.78	141.78	107.37	125.14	121.27	124.52	105.14	107.48	118.06	115.57
3	Inert Fraction	Kg	8,099	13,067	7,969	8,171	11,103	10,016	7,826	9,464	6,023	8,059	7,967	7,957	8,022	5,911	8,784	7,532
		TPD	8.10	13.07	7.97	8.17	11.10	10.02	7.83	9.46	6.02	8.06	7.97	7.96	8.02	5.91	8.78	7.53
4	% of Total Input Waste.....3/2	%	6.57%	7.35%	5.28%	5.48%	7.98%	8.18%	6.03%	6.70%	5.61%	6.44%	6.57%	6.39%	7.63%	5.50%	7.44%	6.51%

7 HOUSEKEEPING:

Sr. No.	Parameter	Unit	1-Jan	2-Jan	3-Jan	4-Jan	5-Jan	6-Jan	7-Jan	Weekly Average	8-Jan	9-Jan	10-Jan	11-Jan	12-Jan	13-Jan	14-Jan	Weekly Average
1	Hygienic Conditions	---	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
3	Manpower Deployed	---	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
5	Treatment Methodology	---	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

1 INPUT WASTE COMPOSITION:

Sr. No.	Description	Unit	15-Jan	16-Jan	17-Jan	18-Jan	19-Jan	20-Jan	21-Jan	Weekly Average		22-Jan	23-Jan	24-Jan	25-Jan	26-Jan	27-Jan	28-Jan	Weekly Average		
A Input Waste:																					
1	Dry Waste	TPD	0.00	1.14	1.04	0.60	1.55	0.00	0.57	0.70	0.62%	0.00	0.89	1.00	0.66	0.00	1.36	0.32	0.60	0.50%	
2	Wet Waste	TPD	19.24	32.67	26.15	27.97	25.88	29.09	34.77	27.97	24.58%	33.86	30.27	33.45	36.00	18.40	31.21	35.84	31.29	25.82%	
3	Mixed Waste	TPD	81.23	93.26	86.72	81.86	80.53	91.83	80.25	85.10	74.80%	73.69	100.57	89.16	80.97	89.76	96.93	91.83	88.99	73.42%	
4	Mulched Tree waste	TPD	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.59	0.83	0.80	0.00	0.00	0.00	0.32	0.26%	
5	Total.....1+2+3+4	TPD	100.47	127.07	113.91	110.43	107.96	120.92	115.59	113.76	100.00%	107.55	132.32	124.44	118.43	108.16	129.50	127.99	121.20	100.00%	
B Input Waste Composition:																					
1	Organic / Bio degradable Fraction	65.00%	45.80	62.14	55.89	54.08	52.45	59.30	61.17	55.83	49.08%	59.21	61.75	61.00	63.93	49.10	60.48	63.48	59.85	49.38%	
2	Inorganic / Non-recyclable Fraction (RDF)		38.62	39.11	33.97	34.09	35.17	37.32	27.56	35.12	30.87%	28.95	44.81	38.08	28.73	37.63	42.96	36.21	36.77	30.34%	
3	Recyclables	14.00%	10.94	14.49	14.73	14.93	13.24	14.41	16.62	14.19	12.48%	13.50	15.67	17.17	17.33	13.65	17.24	16.82	15.91	13.13%	
	Glass	0.50%	0.06	0.11	0.10	0.11	0.10	0.07	0.12	0.10	0.08%	0.10	0.13	0.11	0.12	0.08	0.13	0.13	0.11	0.09%	
	Metal	0.50%	0.39	0.39	0.35	0.54	0.35	0.54	0.45	0.43	0.38%	0.41	0.50	0.50	0.58	0.54	0.65	0.47	0.52	0.43%	
	Paper / Cardboard / Tetrapack	4.00%	2.81	2.13	2.75	2.94	1.79	3.30	1.97	2.53	2.22%	2.03	3.10	2.51	3.17	1.70	3.76	2.66	2.70	2.23%	
	Mixed Plastic, Bottles, Cups, Food Packets, Coated Plastics	6.00%	3.87	5.53	7.77	5.79	5.24	4.30	7.65	5.73	5.04%	4.28	7.21	8.37	8.16	5.60	6.53	8.18	6.90	5.70%	
	Thermocoal / Styrofoam	1.00%	0.08	0.10	0.09	0.06	0.08	0.10	0.12	0.09	0.08%	0.08	0.08	0.09	0.11	0.11	0.13	0.09	0.10	0.08%	
	Cloth / Rags / Textiles	1.50%	1.17	1.66	1.18	1.20	2.53	2.19	2.09	1.72	1.51%	2.51	1.51	2.45	1.47	2.67	3.17	2.89	2.38	1.97%	
	Rubber Items	0.50%	0.41	0.47	0.56	0.51	0.35	0.50	0.46	0.46	0.41%	0.46	0.54	0.36	0.56	0.44	0.63	0.32	0.47	0.39%	
	Coconut		2.15	4.08	1.93	3.79	2.82	3.41	3.77	3.13	2.75%	3.64	2.59	2.78	3.16	2.51	2.24	2.07	2.71	2.24%	
4	Inert	10.00%	5.10	11.33	9.32	7.33	7.10	9.89	10.24	8.62	7.58%	5.89	10.10	8.19	8.44	7.78	8.82	11.48	8.67	7.15%	
5	Mulched Tree Waste	11.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00			0.00	0.59	0.83	0.80	0.00	0.00	0.00			
	Total.....1+2+3+4+5	100.00%									100.00%									100.00%	

2 RECYCLABLES:

Sr. No.	Description	Unit	15-Jan	16-Jan	17-Jan	18-Jan	19-Jan	20-Jan	21-Jan	Weekly Average		22-Jan	23-Jan	24-Jan	25-Jan	26-Jan	27-Jan	28-Jan	Weekly Average		
A Recyclables:																					
1	Glass	Kg	60	114	103	110	97	73	116	96		97	132	112	118	76	130	128	113		
2	Metal	Kg	392	394	353	541	345	544	451	431		409	503	498	580	541	648	474	522		
3	Tetrapack	Kg	160	79	165	147	72	158	112	128		67	186	75	108	54	218	99	115		
4	Paper / Cardboard	Kg	2,653	2,056	2,581	2,791	1,720	3,143	1,853	2,400		1,966	2,911	2,438	3,066	1,644	3,538	2,564	2,590		
	Total.....3+4	Kg	2,813	2,135	2,746	2,938	1,792	3,301	1,965	2,527		2,033	3,097	2,513	3,174	1,698	3,756	2,663	2,705		
5	Plastic Films	Kg	3,203	4,792	6,953	5,098	4,571	3,874	7,009	5,071		3,805	6,079	7,789	7,148	4,645	5,261	7,508	6,034		
6	Hard Plastic	Kg	282	381	451	324	209	232	306	312		163	562	293	759	510	627	352	467		
7	Pet	Kg	383	354	365	365	456	198	337	351		312	570	293	253	448	640	319	405		
	Total.....5+6+7	Kg	3,868	5,527	7,769	5,787	5,236	4,304	7,652	5,735		4,280	7,211	8,375	8,160	5,603	6,528	8,179	6,905		
8	Thermocoal	Kg	80	102	91	55	76	97	116	88		75	79	87	107	108	130	90	97		
9	Cloth / Rags / Textile	Kg	959	1,413	918	902	1,824	1,613	1,755	1,341		1,917	1,235	2,013	1,206	2,129	2,322	2,054	1,839		
10	Jute Bags	Kg	206	251	267	302	702	576	337	377		589	273	439	263	542	850	839	542		
	Total.....9+10	Kg	1,165	1,664	1,185	1,204	2,526	2,189	2,092	1,718		2,506	1,508	2,452	1,469	2,671	3,172	2,893	2,382		
11	Leather / Rubber / Rexine	Kg	412	470	558	508	345	496	462	464		462	543	361	557	443	635	320	474		
12	Coconut	Kg	2,150	4,079	1,925	3,788	2,818	3,410	3,768	3,134		3,635	2,593	2,775	3,162	2,509	2,240	2,073	2,712		
13	Total	Kg	10,940	14,485	14,730	14,931	13,235	14,414	16,622	14,194		13,497	15,666	17,173	17,327	13,649	17,239	16,820	15,910		
		TPD	10.94	14.49	14.73	14.93	13.24	14.41	16.62	14.19		13.50	15.67	17.17	17.33	13.65	17.24	16.82	15.91		

3 ELECTRICITY GENERATION:

Sr. No.	Description	Unit	15-Jan	16-Jan	17-Jan	18-Jan	19-Jan	20-Jan	21-Jan	Weekly Average		22-Jan	23-Jan	24-Jan	25-Jan	26-Jan	27-Jan	28-Jan	Weekly Average		
A Biogas Gensets:																					
1	Biogas Genset-I: Running Time	hr	13.46	8.74	21.52	13.06	23.87	20.90	21.27	17.55		16.12	19.70	16.53	11.93	13.76	14.70	20.94	16.24		
2	Biogas Genset-I: Energy Generation	kW.hr	2,162	1,169	2,644	2,158	2,836	2,820	2,927	2,388		2,399	2,681	1,916	1,915	1,807	1,564	2,866	2,164		
3	Biogas Genset-II: Running Time	hr	12.05	18.52	12.83	11.40	15.05	7.13	7.37	12.05		16.86	15.00	10.68	17.80	12.11	20.88	11.93	15.04		
4	Biogas Genset-II: Energy Generation	kW.hr	1,771	2,598	1,904	1,423	2,049	1,054	995	1,685		2,422	2,218	1,614	2,807	1,787	3,116	1,731	2,242		
5	Total.....2+4	kW.hr	3,933	3,767	4,548	3,581	4,885	3,874	3,922	4,073		4,821	4,899	3,530	4,722	3,594	4,680	4,597	4,406		

Sr. No.	Description	Unit	15-Jan	16-Jan	17-Jan	18-Jan	19-Jan	20-Jan	21-Jan	Weekly Average	22-Jan	23-Jan	24-Jan	25-Jan	26-Jan	27-Jan	28-Jan	Weekly Average
B Electricity Generation:																		
1	<u>As per Tender:</u> Minimum electricity to be generated in the plant shall be 0.4 MW per per 100 tons of Input Biodegradable Waste as received in the Facility.																	
2	Biodegradable Waste.....1.B4	Tons	45.80	62.14	55.89	54.08	52.45	59.30	61.17	55.83	59.21	61.75	61.00	63.93	49.10	60.48	63.48	59.85
3	Electricity Generation required as per Tender.....0.4 x 1000 x B2/100	kWH	183	240	224	216	210	237	240	221	237	240	240	240	196	240	240	233
4	Electricity generated..... (A2/A1) + (A4/A3)	kWH	308	274	271	290	255	283	273	279	292	284	267	318	279	256	282	283

4 BIOGAS FLARE:

Sr. No.	Description	Unit	15-Jan	16-Jan	17-Jan	18-Jan	19-Jan	20-Jan	21-Jan	Weekly Average	22-Jan	23-Jan	24-Jan	25-Jan	26-Jan	27-Jan	28-Jan	Weekly Average
2	Operation Time	hr/day	6.42	7.50	5.61	5.65	6.28	5.85	6.89	6.31	6.23	7.65	7.27	5.68	5.76	5.69	5.63	6.27

5 EFFLUENT TREATMENT PLANT:

Sr. No.	Parameter	Unit	15-Jan	16-Jan	17-Jan	18-Jan	19-Jan	20-Jan	21-Jan	Weekly Average	22-Jan	23-Jan	24-Jan	25-Jan	26-Jan	27-Jan	28-Jan	Weekly Average
A Raw Effluent Quality:																		
1	Flow	m ³ /day	54.05	49.28	69.31	67.15	47.15	67.31	60.89	59.31	57.08	43.60	50.66	44.20	53.59	67.56	69.15	55.12
2	pH	---	6.33	7.49	6.19	7.29	6.08	6.38	6.55	6.62	7.51	6.17	6.94	6.9	6.11	6.6	6.18	6.63
3	Biochemical Oxygen Demand (BOD5)	mg/l	2,469	2,198	2,123	1,476	1,908	1,539	2,074	1,970	1,683	1,014	1,140	1,140	1,532	2,306	1,122	1,420
4	Chemical Oxygen Demand (COD)	mg/l	5,111	6,154	5,435	4,133	5,610	4,663	5,558	5,238	5,840	3,285	3,306	3,021	4,719	5,857	2,614	4,092
5	Total Suspended Solids (TSS)	mg/l	4,938	3,693	3,376	2,731	3,759	2,370	3,235	3,443	3,332	1,947	1,824	2,269	3,064	4,174	1,717	2,618
6	Total Dissolve Solids (TDS)	mg/l	1,512	1,750	1,583	1,615	1,524	1,752	1,535	1,610	1,594	1,527	1,534	1,666	1,607	1,526	1,762	1,602
B Treated Effluent Quality:																		
1	pH	---	6.96	7.42	7.36	6.53	7.45	6.59	7.27	7.08	6.89	6.88	6.92	7.08	6.58	6.61	6.67	6.80
2	Biochemical Oxygen Demand (BOD5)	mg/l	7	6	5	9	9	5	9	7	8	8	5	5	7	6	8	7
3	Chemical Oxygen Demand (COD)	mg/l	76	55	63	88	68	54	77	69	53	67	88	68	65	74	71	69
1	Total Suspended Solids (TSS)	mg/l	8	7	6	10	10	6	10	8	9	9	6	6	8	7	9	8
2	Total Dissolve Solids (TDS)	mg/l	1,527	1,873	1,646	1,680	1,646	1,910	1,627	1,701	1,658	1,680	1,565	1,833	1,687	1,663	1,797	1,698

6 DISPOSAL OF INERT:

Sr. No.	Description	Unit	15-Jan	16-Jan	17-Jan	18-Jan	19-Jan	20-Jan	21-Jan	Weekly Average	22-Jan	23-Jan	24-Jan	25-Jan	26-Jan	27-Jan	28-Jan	Weekly Average
1	<u>As per Tender:</u> Maximum 10% of Inerts of the Total Input Waste (excluding Mulched Tree Waste) as received in the Facility.																	
2	Input Waste	TPD	100.47	127.07	113.91	110.43	107.96	120.92	115.59	113.76	107.55	132.32	124.44	118.43	108.16	129.50	127.99	121.20
3	Inert Fraction	Kg	5,104	11,335	9,318	7,333	7,104	9,891	10,241	8,618	5,894	10,096	8,188	8,444	7,777	8,819	11,481	8,671
		TPD	5.10	11.33	9.32	7.33	7.10	9.89	10.24	8.62	5.89	10.10	8.19	8.44	7.78	8.82	11.48	8.67
4	% of Total Input Waste.....3/2	%	5.08%	8.92%	8.18%	6.64%	6.58%	8.18%	8.86%	7.49%	5.48%	7.63%	6.58%	7.13%	7.19%	6.81%	8.97%	7.11%

7 HOUSEKEEPING:

Sr. No.	Parameter	Unit	15-Jan	16-Jan	17-Jan	18-Jan	19-Jan	20-Jan	21-Jan	Weekly Average	22-Jan	23-Jan	24-Jan	25-Jan	26-Jan	27-Jan	28-Jan	Weekly Average
1	Hygienic Conditions	---	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
3	Manpower Deployed	---	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
5	Treatment Methodology	---	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

1 INPUT WASTE COMPOSITION:

Sr. No.	Description	Unit	29-Jan	30-Jan	31-Jan	Weekly Average		Monthly Average	
A	Input Waste:								
1	Dry Waste	TPD	0.00	0.78	1.54	0.77	0.01	0.61	0.50%
2	Wet Waste	TPD	28.42	29.74	34.28	30.81	0.24	29.60	23.94%
3	Mixed Waste	TPD	93.71	104.48	88.75	95.65	0.75	93.34	75.29%
4	Mulched Tree waste	TPD	0.00	0.00	0.00	0.00	0.00	0.36	0.26%
5	Total.....1+2+3+4	TPD	122.13	135.00	124.57	127.23	100.00%	123.91	100.00%
B	Input Waste Composition:								
1	Organic / Bio degradable Fraction	65.00%	60.47	65.16	62.15	62.59	49.20%	60.23	48.65%
2	Inorganic / Non-recyclable Fraction (RDF)		35.51	46.32	40.84	40.89	32.14%	38.95	31.44%
3	Recyclables	14.00%	16.77	16.73	13.14	15.55	12.22%	16.23	13.04%
	Glass	0.50%	0.12	0.07	0.10	0.10	0.08%	0.11	0.09%
	Metal	0.50%	0.50	0.50	0.60	0.53	0.42%	0.51	0.41%
	Paper / Cardboard / Tetrapack	4.00%	2.02	3.67	2.42	2.70	2.12%	2.84	2.28%
	Mixed Plastic, Bottles, Cups, Food Packets, Coated Plastics	6.00%	8.11	6.55	4.80	6.48	5.10%	7.02	5.63%
	Thermocoal / Styrofoam	1.00%	0.07	0.09	0.11	0.09	0.07%	0.10	0.08%
	Cloth / Rags / Textiles	1.50%	2.21	2.35	1.79	2.12	1.66%	2.19	1.75%
	Rubber Items	0.50%	0.31	0.47	0.34	0.37	0.29%	0.47	0.38%
	Coconut		3.43	3.02	2.99	3.15	2.47%	3.01	2.43%
4	Inert	10.00%	9.38	6.79	8.43	8.20	6.45%	8.50	6.87%
5	Mulched Tree Waste	11.00%	0.00	0.00	0.00				
	Total.....1+2+3+4+5	100.00%					100.00%		100.00%

2 RECYCLABLES:

Sr. No.	Description	Unit	29-Jan	30-Jan	31-Jan	Weekly Average		Monthly Average	
A	Recyclables:								
1	Glass	Kg	122	68	100	97		106	
2	Metal	Kg	501	500	598	533		509	
3	Tetrapack	Kg	60	195	80	112		124	
4	Paper / Cardboard	Kg	1,955	3,477	2,337	2,590		2,715	
	Total.....3+4	Kg	2,015	3,672	2,417	2,701		2,839	
5	Plastic Films	Kg	6,690	5,742	4,196	5,543		6,095	
6	Hard Plastic	Kg	697	537	201	478		465	
7	Pet	Kg	722	268	398	463		456	
	Total.....5+6+7	Kg	8,109	6,547	4,795	6,484		7,016	
8	Thermocal	Kg	73	95	112	93		97	
9	Cloth / Rags / Textile	Kg	1,687	1,668	1,460	1,605		1,678	
10	Jute Bags	Kg	524	681	334	513		508	
	Total.....9+10	Kg	2,211	2,349	1,794	2,118		2,187	
11	Leather / Rubber / Rexine	Kg	305	473	336	371		469	
12	Coconut	Kg	3,432	3,024	2,990	3,149		3,008	
13	Total	Kg	16,768	16,728	13,142	15,546		16,229	
		TPD	16.77	16.73	13.14	15.55		16.23	

3 ELECTRICITY GENERATION:

Sr. No.	Description	Unit	29-Jan	30-Jan	31-Jan	Weekly Average		Monthly Average	
A	Biogas Gensets:								
1	Biogas Genset-I: Running Time	hr	16.82	19.43	14.75	17.00		16.06	
2	Biogas Genset-I: Energy Generation	kW.hr	2,387	2,271	2,552	2,403		2,206	
3	Biogas Genset-II: Running Time	hr	16.13	11.55	6.67	11.45		13.43	
4	Biogas Genset-II: Energy Generation	kW.hr	2,125	1,536	974	1,545		1,911	
5	Total.....2+4	kW.hr	4,512	3,807	3,526	3,948		4,117	

Sr. No.	Description	Unit	29-Jan	30-Jan	31-Jan	Weekly Average	Monthly Average
B Electricity Generation:							
1	<u>As per Tender:</u> Minimum electricity to be generated in the plant shall be 0.4 MW per per 100 tons of Input Biodegradable Waste as received in the Facility.						
2	Biodegradable Waste.....1.B4	Tons	60.47	65.16	62.15	62.59	60.23
3	Electricity Generation required as per Tender.....0.4 x 1000 x B2/100	kWH	240	240	240	240	231
4	Electricity generated..... (A2/A1) + (A4/A3)	kWH	274	250	319	281	281

4 BIOGAS FLARE:

Sr. No.	Description	Unit	29-Jan	30-Jan	31-Jan	Weekly Average	Monthly Average
2	Operation Time	hr/day	7.53	6.89	5.94	6.79	6.54

5 EFFLUENT TREATMENT PLANT:

Sr. No.	Parameter	Unit	29-Jan	30-Jan	31-Jan	Weekly Average	Monthly Average
A Raw Effluent Quality:							
1	Flow	m ³ /day	61.71	59.88	54.36	58.65	56.98
2	pH	---	6.79	6.77	6.63	6.73	6.73
3	Biochemical Oxygen Demand (BOD5)	mg/l	1,163	1,316	1,815	1,431	1,580
4	Chemical Oxygen Demand (COD)	mg/l	2,582	4,303	5,155	4,013	4,374
5	Total Suspended Solids (TSS)	mg/l	1,849	2,250	3,213	2,437	2,809
6	Total Dissolve Solids (TDS)	mg/l	1,620	1,618	1,792	1,677	1,631
B Treated Effluent Quality:							
1	pH	---	7.23	6.78	7.16	7.06	7.05
2	Biochemical Oxygen Demand (BOD5)	mg/l	9	7	7	8	7
3	Chemical Oxygen Demand (COD)	mg/l	74	55	76	68	68
1	Total Suspended Solids (TSS)	mg/l	10	8	8	9	8
2	Total Dissolve Solids (TDS)	mg/l	1,669	1,764	1,864	1,766	1,704

6 DISPOSAL OF INERT:

Sr. No.	Description	Unit	29-Jan	30-Jan	31-Jan	Weekly Average	Monthly Average
1	<u>As per Tender:</u> Maximum 10% of Inerts of the Total Input Waste (excluding Mulched Tree Waste) as received in the Facility.						
2	Input Waste	TPD	122.13	135.00	124.57	127.23	123.91
3	Inert Fraction	Kg	9,380	6,791	8,433	8,201	8,497
		TPD	9.38	6.79	8.43	8.20	8.50
4	% of Total Input Waste.....3/2	%	7.68%	5.03%	6.77%	6.49%	6.86%

7 HOUSEKEEPING:

Sr. No.	Parameter	Unit	29-Jan	30-Jan	31-Jan	Weekly Average	Monthly Average
1	Hygienic Conditions	---	Accepted	Accepted	Accepted	Accepted	Accepted
2	Cleanliness	---	Accepted	Accepted	Accepted	Accepted	Accepted
3	Manpower Deployed	---	Accepted	Accepted	Accepted	Accepted	Accepted
4	Safety Norms	---	Accepted	Accepted	Accepted	Accepted	Accepted
5	Treatment Methodology	---	Accepted	Accepted	Accepted	Accepted	Accepted
6	Storage Conditions	---	Accepted	Accepted	Accepted	Accepted	Accepted

