Monthly Performance Report
(HWT-NG100-MPR-09-R0)

April 2017
(From 01/04/2017 to 30/04/2017)

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

Prepared By

Hindustan Waste Treatment Pvt. Ltd.
(HWT)

Submitted To

Department of Science & Technology
(DS&T)
Goa State Infrastructural Development
Corporation Limited (GSIDC)

Table – 1
Summary of Overall Average Results for April 2017
As compared to Schedule – 7: Performance Standards, Volume – I of RFP

Sr. No.	Parameter	Performance Standard As per Schedule – 7	Actual Performace 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 **96.04 TPD**. Quantum of Inert is **6.29 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 **0.57 MW/100 tons** of Input Biodegradable Waste as received in the Facility (in TPD).

<table>
<tr><th>Sr. No.</th><th>Parameter</th><th>Performance Standard
As per Schedule – 7</th><th>Actual Performace at Plant
(Monthly Average)</th></tr>
<tr><td>4.</td><td>Biogas Flaring System</td><td>The Biogas Flaring System shall strictly be used only in case of emergency and not as a routine practice.</td><td>Biogas is being flared strictly, only under emergency and not as a routine practice. The average running time of Biogas Flaring System is <u>3.12</u> hours/day.</td></tr>
<tr><td>5.</td><td>Discharge of treated effluent conforming to regulatory norms</td><td>Effluent Treatment Plant shall be operated under all conditions.</td><td>Effluent Treatment Plant is being operated continuously and is meeting all statutory conditions. The Treated Effluent Characteristics are as follows:<table><tr><td>pH</td><td>7.05</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>1732 mg/l</td></tr></table></td></tr>
<tr><td>6.</td><td>General Housekeeping, hygienic conditions, cleanliness, safety norms, adequate manpower, treatment methodology for plant operation & maintenance and storage conditions in the plant.</td><td>Minimum housekeeping, safety norms and cleanliness conditions shall be maintained at all times as per the Bid Document requirement.</td><td>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.</td></tr>
</table>

#	Plant Performance Data: April 2017		
Sr. No.	**Content**	**Month**	**Signature**
1	Input Waste Composition	April 2017 From 01.04.2017 To 30.04.2017	
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-Apr	2-Apr	3-Apr	4-Apr	5-Apr	6-Apr	7-Apr	Weekly Average	
A	**Input Waste:**											
1	Dry Waste		TPD	0.63	0.45	2.07	1.94	0.60	2.44	1.92	**1.44**	**1.44%**
2	Wet Waste		TPD	5.71	10.67	6.17	3.62	10.37	7.95	5.03	**7.07**	**7.11%**
3	Mixed Waste		TPD	89.13	80.07	105.76	93.94	93.78	84.16	89.29	**90.88**	**91.38%**
4	Mulched Tree waste		TPD	0.00	0.00	0.00	0.43	0.00	0.00	0.00	**0.06**	**0.06%**
5	**Total.....1+2+3+4**		**TPD**	**95.47**	**91.19**	**114.00**	**99.93**	**104.75**	**94.55**	**96.24**	**99.45**	**100.00%**
B	**Input Waste Composition:**											
1	**Organic / Bio degradable Fraction**		**65.00%**	**47.16**	**46.94**	**55.35**	**46.93**	**53.32**	**47.00**	**45.21**	**48.84**	**49.12%**
2	**Inorganic / Non-recyclable Fraction (RDF)**			**31.02**	**23.62**	**33.90**	**34.87**	**32.64**	**28.25**	**33.21**	**31.07**	**31.25%**
3	**Recyclables**		**14.00%**	**10.93**	**14.57**	**16.59**	**10.65**	**11.41**	**11.79**	**12.23**	**12.60**	**12.67%**
	Glass	0.05-0.1%	0.50%	0.05	0.08	0.06	0.05	0.05	0.07	0.09	**0.06**	**0.06%**
	Metal	0.3-0.5%	0.50%	0.46	0.33	0.57	0.31	0.42	0.42	0.48	**0.43**	**0.43%**
	Paper / Cardboard / Tetrapack	1.5-3.0%	4.00%	2.63	2.42	2.82	2.23	1.71	2.80	1.58	**2.31**	**2.32%**
	Mixed Plastic, Bottles, Cups, Food Packets, Coated Plastics	3.5- 7.5%	6.00%	3.70	6.33	7.24	3.53	3.87	3.62	4.94	**4.75**	**4.77%**
	Thermocoal / Styrofoam	0.05-0.1%	1.00%	0.09	0.06	0.11	0.07	0.09	0.06	0.05	**0.08**	**0.08%**
	Cloth / Rags / Textiles	1.0-2.5%	1.50%	1.49	2.17	2.37	2.20	2.50	2.04	1.82	**2.08**	**2.10%**
	Rubber Items	0.25-0.5%	0.50%	0.47	0.34	0.47	0.36	0.47	0.31	0.28	**0.38**	**0.39%**
	Coconut	1.5-3.5%		2.05	2.85	2.95	1.91	2.29	2.48	3.00	**2.50**	**2.52%**
4	**Inert**		**10.00%**	**6.36**	**6.06**	**8.16**	**7.48**	**7.38**	**7.51**	**5.59**	**6.93**	**6.97%**
5	**Mulched Tree Waste**		**11.00%**	**0.00**	**0.00**	**0.00**	**0.43**	**0.00**	**0.00**	**0.00**		
	Total.....1+2+3+4+5		**100.00%**									**100.00%**

2 RECYCLABLES:

Sr. No.	Description		Unit	1-Apr	2-Apr	3-Apr	4-Apr	5-Apr	6-Apr	7-Apr	Weekly Average
A	**Recyclables:**										
1	Glass		Kg	48	82	57	50	52	66	87	**63**
2	Metal		Kg	458	328	570	310	419	416	481	**426**
3	Tetrapack		Kg	150	75	149	82	99	162	77	**113**
4	Paper / Cardboard		Kg	2,476	2,342	2,667	2,146	1,608	2,636	1,501	**2,197**
	Total.....3+4		**Kg**	**2,626**	**2,417**	**2,816**	**2,228**	**1,707**	**2,798**	**1,578**	**2,310**
5	Plastic Films		Kg	3,245	5,177	6,037	3,069	3,181	2,962	4,118	**3,970**
6	Hard Plastic		Kg	263	551	666	226	305	359	351	**389**
7	Pet		Kg	196	601	536	233	379	301	469	**388**
	Total.....5+6+7		**Kg**	**3,704**	**6,329**	**7,239**	**3,528**	**3,865**	**3,622**	**4,938**	**4,746**
8	Thermocal		Kg	86	64	114	70	94	57	48	**76**
9	Cloth / Rags / Textile		Kg	1,059	1,530	2,006	1,651	2,125	1,540	1,457	**1,624**
10	Jute Bags		Kg	430	640	365	547	378	502	362	**461**
	Total.....9+10		**Kg**	**1,489**	**2,170**	**2,371**	**2,198**	**2,503**	**2,042**	**1,819**	**2,085**
11	Leather / Rubber / Rexine		Kg	468	337	467	360	471	312	279	**385**
12	Coconut		Kg	2,053	2,845	2,953	1,909	2,294	2,477	3,003	**2,505**
13	**Total**		**Kg**	**10,932**	**14,572**	**16,587**	**10,653**	**11,405**	**11,790**	**12,233**	**12,596**
			TPD	**10.93**	**14.57**	**16.59**	**10.65**	**11.41**	**11.79**	**12.23**	**12.60**

3 ELECTRICITY GENERATION:

Sr. No.	Description		Unit	1-Apr	2-Apr	3-Apr	4-Apr	5-Apr	6-Apr	7-Apr	Weekly Average
A	**Biogas Gensets:**										
1	Biogas Genset-I: Running Time		hr	22.55	20.50	21.65	11.20	14.85	18.45	9.75	**16.99**
2	Biogas Genset-I: Energy Generation		kW.hr	2,680	2,400	2,650	1,440	1,840	2,170	1,190	**2,053**
3	Biogas Genset-II: Running Time		hr	10.65	4.80	14.60	22.10	20.10	16.10	22.85	**15.89**
4	Biogas Genset-II: Energy Generation		kW.hr	890	550	1,910	2,680	2,350	1,830	3,170	**1,911**
5	**Total.....2+4**		**kW.hr**	**3,570**	**2,950**	**4,560**	**4,120**	**4,190**	**4,000**	**4,360**	**3,964**
B	**Electricty 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	47.16	46.94	55.35	46.93	53.32	47.00	45.21	**48.84**
3	Electricity Generation required as per Tender.....0.4 x 1000 x B2/100		kWH	189	188	221	188	213	188	181	**195**
4	Electricity generated..... (A2/A1) + (A4/A3)		kWH	202	232	253	250	241	231	261	**239**

4 BIOGAS FLARE:

Sr. No.	Parameter		Unit	1-Apr	2-Apr	3-Apr	4-Apr	5-Apr	6-Apr	7-Apr	Weekly Average
2	Operation Time		hr/day	4.90	4.82	4.65	5.58	4.05	4.00	2.82	**4.40**

5 EFFLUENT TREATMENT PLANT:

Sr. No.	Parameter		Unit	1-Apr	2-Apr	3-Apr	4-Apr	5-Apr	6-Apr	7-Apr	Weekly Average
A	**Raw Effluent Quality:**										
1	Flow		m^3/day	60.73	61.95	65.90	58.10	64.53	69.28	69.91	**64.34**
2	pH		---	6.07	6.47	6.03	7.48	6.28	7.54	6.5	**6.62**
3	Biochemical Oxygen Demand (BOD5)		mg/l	1,812	1,566	2,356	2,473	2,318	2,078	1,509	**2,016**
4	Chemical Oxygen Demand (COD)		mg/l	4,693	5,434	7,256	6,108	5,957	5,278	4,195	**5,560**
5	Total Suspended Solids (TSS)		mg/l	4,240	2,600	3,746	4,773	5,610	3,720	3,124	**3,973**
6	Total Dissolve Solids (TDS)		mg/l	1,687	1,751	1,777	1,794	1,737	1,654	1,640	**1,720**
B	**Treated Effluent Quality:**										
1	pH		---	6.89	7.08	7.45	6.68	6.97	6.71	7.06	**6.98**
2	Biochemical Oxygen Demand (BOD5)		mg/l	8	5	9	6	6	9	7	**7**
3	Chemical Oxygen Demand (COD)		mg/l	70	62	89	86	77	63	56	**72**
4	Total Suspended Solids (TSS)		mg/l	9	6	10	7	7	10	8	**8**
5	Total Dissolve Solids (TDS)		mg/l	1,788	1,856	1,866	1,938	1,876	1,687	1,640	**1,807**

6 DISPOSAL OF INERT:

Sr. No.	Description		Unit	1-Apr	2-Apr	3-Apr	4-Apr	5-Apr	6-Apr	7-Apr	Weekly Average
1	**As per Tender:** Maximum 10% of Inerts of the Total Input Waste (excluding Mulched Tree Waste) as received in the Facility.										
2	**Input Waste**		**TPD**	**95.47**	**91.19**	**114.00**	**99.93**	**104.75**	**94.55**	**96.24**	**99.45**
3	Inert Fraction		Kg	6,360	6,060	8,160	7,480	7,380	7,510	5,590	**6,934**
			TPD	**6.36**	**6.06**	**8.16**	**7.48**	**7.38**	**7.51**	**5.59**	**6.93**
4	**% of Total Input Waste…..3/2**		**%**	**6.66%**	**6.65%**	**7.16%**	**7.49%**	**7.05%**	**7.94%**	**5.81%**	**6.96%**

7 HOUSEKEEPING:

Sr. No.	Description		Unit	1-Apr	2-Apr	3-Apr	4-Apr	5-Apr	6-Apr	7-Apr	Weekly Average
1	Hygenic Conditions		---	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	**Accepted**
2	Cleanliness		---	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	**Accepted**
3	Manpower Deployed		---	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	**Accepted**
4	Safety Norms		---	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	**Accepted**
5	Treatment Methodology		---	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	**Accepted**
6	Storage Conditions		---	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	**Accepted**

1 INPUT WASTE COMPOSITION:

Sr. No.	Description		Unit	8-Apr	9-Apr	10-Apr	11-Apr	12-Apr	13-Apr	14-Apr	Weekly Average	
A	**Input Waste:**											
1	Dry Waste		TPD	0.28	0.53	2.62	0.39	1.09	1.17	1.51	**1.08**	**1.12%**
2	Wet Waste		TPD	5.36	10.96	10.22	5.71	10.44	12.19	10.00	**9.27**	**9.59%**
3	Mixed Waste		TPD	90.59	76.75	100.13	90.80	82.81	81.66	78.99	**85.96**	**88.98%**
4	Mulched Tree waste		TPD	0.00	0.00	0.00	0.13	0.00	1.14	0.77	**0.29**	**0.30%**
5	**Total.....1+2+3+4**		**TPD**	**96.23**	**88.24**	**112.97**	**97.03**	**94.34**	**96.16**	**91.27**	**96.61**	**100.00%**
B	**Input Waste Composition:**											
1	**Organic / Bio degradable Fraction**		**65.00%**	**46.49**	**46.03**	**55.48**	**47.57**	**48.28**	**49.10**	**46.73**	**48.53**	**50.23%**
2	**Inorganic / Non-recyclable Fraction (RDF)**			**33.17**	**25.16**	**33.62**	**29.28**	**28.16**	**31.62**	**29.73**	**30.11**	**31.16%**
3	**Recyclables**		**14.00%**	**12.03**	**12.07**	**17.28**	**14.05**	**12.91**	**11.63**	**9.67**	**12.80**	**13.25%**
	Glass	0.05-0.1%	0.50%	0.09	0.06	0.11	0.05	0.09	0.05	0.09	**0.08**	**0.08%**
	Metal	0.3-0.5%	0.50%	0.39	0.34	0.49	0.42	0.35	0.40	0.27	**0.38**	**0.39%**
	Paper / Cardboard / Tetrapack	1.5-3.0%	4.00%	1.66	2.36	3.30	2.54	2.39	1.90	1.89	**2.29**	**2.37%**
	Mixed Plastic, Bottles, Cups, Food Packets, Coated Plastics	3.5- 7.5%	6.00%	5.39	5.71	7.83	5.64	5.38	5.69	3.47	**5.59**	**5.78%**
	Thermocoal / Styrofoam	0.05-0.1%	1.00%	0.07	0.05	0.09	0.05	0.05	0.05	0.09	**0.06**	**0.07%**
	Cloth / Rags / Textiles	1.0-2.5%	1.50%	2.24	1.50	1.78	1.97	1.58	1.83	1.80	**1.81**	**1.88%**
	Rubber Items	0.25-0.5%	0.50%	0.46	0.25	0.34	0.45	0.29	0.25	0.30	**0.33**	**0.35%**
	Coconut	1.5-3.5%		1.73	1.80	3.34	2.94	2.78	1.45	1.75	**2.26**	**2.34%**
4	**Inert**		**10.00%**	**4.54**	**4.98**	**6.59**	**6.13**	**4.99**	**3.81**	**5.14**	**5.17**	**5.35%**
5	**Mulched Tree Waste**		**11.00%**	**0.00**	**0.00**	**0.00**	**0.13**	**0.00**	**1.14**	**0.77**		
	Total.....1+2+3+4+5		**100.00%**									**100.00%**

2 RECYCLABLES:

Sr. No.	Description		Unit	8-Apr	9-Apr	10-Apr	11-Apr	12-Apr	13-Apr	14-Apr	Weekly Average
A	**Recyclables:**										
1	Glass		Kg	87	62	113	49	94	48	91	**78**
2	Metal		Kg	395	344	486	417	349	404	274	**381**
3	Tetrapack		Kg	83	85	188	104	117	84	108	**110**
4	Paper / Cardboard		Kg	1,572	2,271	3,111	2,438	2,270	1,820	1,782	**2,181**
	Total.....3+4		**Kg**	**1,655**	**2,356**	**3,299**	**2,542**	**2,387**	**1,904**	**1,890**	**2,290**
5	Plastic Films		Kg	4,500	4,950	6,975	4,696	4,565	4,879	3,062	**4,804**
6	Hard Plastic		Kg	447	337	407	519	317	347	201	**368**
7	Pet		Kg	442	422	446	423	495	467	205	**414**
	Total.....5+6+7		**Kg**	**5,389**	**5,709**	**7,828**	**5,638**	**5,377**	**5,693**	**3,468**	**5,586**
8	Thermocal		Kg	67	53	90	49	47	48	91	**64**
9	Cloth / Rags / Textile		Kg	1,637	1,067	1,444	1,402	1,189	1,487	1,365	**1,370**
10	Jute Bags		Kg	605	434	341	567	386	340	433	**444**
	Total.....9+10		**Kg**	**2,242**	**1,501**	**1,785**	**1,969**	**1,575**	**1,827**	**1,798**	**1,814**
11	Leather / Rubber / Rexine		Kg	462	247	339	446	292	250	301	**334**
12	Coconut		Kg	1,732	1,800	3,344	2,940	2,783	1,452	1,752	**2,258**
13	**Total**		**Kg**	**12,029**	**12,072**	**17,284**	**14,050**	**12,904**	**11,626**	**9,665**	**12,804**
			TPD	**12.03**	**12.07**	**17.28**	**14.05**	**12.90**	**11.63**	**9.67**	**12.80**

3 ELECTRICITY GENERATION:

Sr. No.	Description		Unit	8-Apr	9-Apr	10-Apr	11-Apr	12-Apr	13-Apr	14-Apr	Weekly Average
A	**Biogas Gensets:**										
1	Biogas Genset-I: Running Time		hr	11.25	11.70	17.95	21.15	14.15	23.00	19.70	**16.99**
2	Biogas Genset-I: Energy Generation		kW.hr	1,300	940	2,000	2,870	1,980	3,590	2,710	**2,199**
3	Biogas Genset-II: Running Time		hr	22.05	23.50	23.20	14.00	21.70	22.90	3.30	**18.66**
4	Biogas Genset-II: Energy Generation		kW.hr	2,440	2,960	2,840	1,690	0	3,520	0	**1,921**
5	**Total.....2+4**		**kW.hr**	**3,740**	**3,900**	**4,840**	**4,560**	**1,980**	**7,110**	**2,710**	**4,120**
B	**Electricty Generation:**										
1	**As per Tender:** 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	46.49	46.03	55.48	47.57	48.28	49.10	46.73	**48.53**
3	Electricity Generation required as per Tender.....0.4 x 1000 x B2/100		kWH	186	184	222	190	193	196	187	**194**
4	Electricity generated..... (A2/A1) + (A4/A3)		kWH	226	206	234	256	140	310	138	**216**

4 BIOGAS FLARE:

Sr. No.	Parameter		Unit	8-Apr	9-Apr	10-Apr	11-Apr	12-Apr	13-Apr	14-Apr	Weekly Average
2	Operation Time		hr/day	4.42	5.25	6.12	8.08	5.52	0.25	7.20	**5.26**

5 EFFLUENT TREATMENT PLANT:

Sr. No.	Parameter		Unit	8-Apr	9-Apr	10-Apr	11-Apr	12-Apr	13-Apr	14-Apr	Weekly Average
A	**Raw Effluent Quality:**										
1	Flow		m^3/day	54.21	52.13	63.54	64.83	52.54	52.71	57.38	**56.76**
2	pH		---	7.48	6.63	6.83	6.99	6.97	7.06	6.97	**6.99**
3	Biochemical Oxygen Demand (BOD5)		mg/l	2,330	1,727	1,748	1,882	1,641	2,099	2,343	**1,967**
4	Chemical Oxygen Demand (COD)		mg/l	5,429	4,767	5,926	6,455	4,053	6,255	8,060	**5,849**
5	Total Suspended Solids (TSS)		mg/l	4,264	4,248	2,779	3,820	2,757	4,324	3,913	**3,729**
6	Total Dissolve Solids (TDS)		mg/l	1,532	1,505	1,625	1,670	1,787	1,621	1,710	**1,636**
B	**Treated Effluent Quality:**										
1	pH		---	7.19	7.2	6.91	6.51	7.01	6.57	6.82	**6.89**
2	Biochemical Oxygen Demand (BOD5)		mg/l	8	7	5	9	6	5	8	**7**
3	Chemical Oxygen Demand (COD)		mg/l	55	57	79	87	83	68	74	**72**
4	Total Suspended Solids (TSS)		mg/l	9	8	6	10	7	6	9	**8**
5	Total Dissolve Solids (TDS)		mg/l	1,624	1,535	1,755	1,703	1,930	1,702	1,864	**1,730**

6 DISPOSAL OF INERT:

Sr. No.	Description		Unit	8-Apr	9-Apr	10-Apr	11-Apr	12-Apr	13-Apr	14-Apr	Weekly Average
1	**As per Tender:** Maximum 10% of Inerts of the Total Input Waste (excluding Mulched Tree Waste) as received in the Facility.										
2	**Input Waste**		**TPD**	**96.23**	**88.24**	**112.97**	**97.03**	**94.34**	**96.16**	**91.27**	**96.61**
3	Inert Fraction		Kg	4,540	4,980	6,590	6,130	4,990	3,810	5,140	**5,169**
			TPD	**4.54**	**4.98**	**6.59**	**6.13**	**4.99**	**3.81**	**5.14**	**5.17**
4	**% of Total Input Waste…..3/2**		**%**	**4.72%**	**5.64%**	**5.83%**	**6.32%**	**5.29%**	**3.96%**	**5.63%**	**5.34%**

7 HOUSEKEEPING:

Sr. No.	Description		Unit	8-Apr	9-Apr	10-Apr	11-Apr	12-Apr	13-Apr	14-Apr	Weekly Average
1	Hygenic Conditions		---	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	**Accepted**
2	Cleanliness		---	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	**Accepted**
3	Manpower Deployed		---	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	**Accepted**
4	Safety Norms		---	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	**Accepted**
5	Treatment Methodology		---	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	**Accepted**
6	Storage Conditions		---	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	**Accepted**

1 INPUT WASTE COMPOSITION:

Sr. No.	Description		Unit	15-Apr	16-Apr	17-Apr	18-Apr	19-Apr	20-Apr	21-Apr	Weekly Average	
A	**Input Waste:**											
1	Dry Waste		TPD	0.38	1.66	2.49	1.33	2.23	1.00	1.69	**1.54**	**1.56%**
2	Wet Waste		TPD	11.10	14.71	10.90	8.31	10.62	5.85	9.34	**10.12**	**10.26%**
3	Mixed Waste		TPD	85.06	79.80	100.55	90.25	80.25	89.30	79.97	**86.45**	**87.68%**
4	Mulched Tree waste		TPD	1.60	1.42	0.00	0.00	0.00	0.00	0.39	**0.49**	**0.49%**
5	**Total.....1+2+3+4**		**TPD**	**98.14**	**97.59**	**113.94**	**99.89**	**93.10**	**96.15**	**91.39**	**98.60**	**100.00%**
B	**Input Waste Composition:**											
1	**Organic / Bio degradable Fraction**		**65.00%**	**52.01**	**53.65**	**59.57**	**52.08**	**49.46**	**49.43**	**47.97**	**52.02**	**52.76%**
2	**Inorganic / Non-recyclable Fraction (RDF)**			**28.70**	**25.31**	**31.62**	**30.78**	**24.83**	**30.98**	**24.60**	**28.12**	**28.52%**
3	**Recyclables**		**14.00%**	**11.64**	**12.92**	**15.99**	**10.99**	**12.88**	**9.97**	**13.17**	**12.51**	**12.68%**
	Glass	0.05-0.1%	0.50%	0.09	0.06	0.11	0.05	0.05	0.10	0.08	**0.08**	**0.08%**
	Metal	0.3-0.5%	0.50%	0.39	0.39	0.38	0.36	0.44	0.34	0.46	**0.39**	**0.40%**
	Paper / Cardboard / Tetrapack	1.5-3.0%	4.00%	2.78	1.47	2.38	1.90	2.15	1.58	2.16	**2.06**	**2.09%**
	Mixed Plastic, Bottles, Cups, Food Packets, Coated Plastics	3.5- 7.5%	6.00%	4.10	6.28	7.21	4.79	5.86	4.38	5.71	**5.48**	**5.55%**
	Thermocoal / Styrofoam	0.05-0.1%	1.00%	0.06	0.07	0.06	0.08	0.05	0.06	0.07	**0.06**	**0.06%**
	Cloth / Rags / Textiles	1.0-2.5%	1.50%	1.75	1.70	2.67	1.50	2.09	1.49	2.19	**1.91**	**1.94%**
	Rubber Items	0.25-0.5%	0.50%	0.46	0.49	0.51	0.49	0.25	0.40	0.26	**0.41**	**0.41%**
	Coconut	1.5-3.5%		2.01	2.47	2.67	1.82	2.00	1.62	2.24	**2.12**	**2.15%**
4	**Inert**		**10.00%**	**5.79**	**5.71**	**6.76**	**6.04**	**5.93**	**5.77**	**5.65**	**5.95**	**6.03%**
5	**Mulched Tree Waste**		**11.00%**	**1.60**	**1.42**	**0.00**	**0.00**	**0.00**	**0.00**	**0.39**		
	Total.....1+2+3+4+5		**100.00%**									**100.00%**

2 RECYCLABLES:

Sr. No.	Description		Unit	15-Apr	16-Apr	17-Apr	18-Apr	19-Apr	20-Apr	21-Apr	Weekly Average
A	**Recyclables:**										
1	Glass		Kg	88	59	114	50	47	96	82	**77**
2	Metal		Kg	393	390	376	360	438	337	457	**393**
3	Tetrapack		Kg	158	72	143	84	82	52	125	**102**
4	Paper / Cardboard		Kg	2,619	1,401	2,238	1,814	2,069	1,525	2,032	**1,957**
	Total.....3+4		**Kg**	**2,777**	**1,473**	**2,381**	**1,898**	**2,151**	**1,577**	**2,157**	**2,059**
5	Plastic Films		Kg	3,507	5,440	5,878	4,052	4,878	3,775	4,958	**4,641**
6	Hard Plastic		Kg	382	452	707	302	404	373	411	**433**
7	Pet		Kg	213	383	627	441	574	237	343	**403**
	Total.....5+6+7		**Kg**	**4,102**	**6,275**	**7,212**	**4,795**	**5,856**	**4,385**	**5,712**	**5,477**
8	Thermocal		Kg	59	68	57	80	47	58	73	**63**
9	Cloth / Rags / Textile		Kg	1,418	1,214	2,210	1,187	1,698	1,180	1,827	**1,533**
10	Jute Bags		Kg	328	484	456	312	388	310	366	**378**
	Total.....9+10		**Kg**	**1,746**	**1,698**	**2,666**	**1,499**	**2,086**	**1,490**	**2,193**	**1,911**
11	Leather / Rubber / Rexine		Kg	461	488	513	489	251	404	256	**409**
12	Coconut		Kg	2,012	2,469	2,666	1,818	2,002	1,625	2,239	**2,119**
13	**Total**		**Kg**	**11,638**	**12,920**	**15,985**	**10,989**	**12,878**	**9,972**	**13,169**	**12,507**
			TPD	**11.64**	**12.92**	**15.99**	**10.99**	**12.88**	**9.97**	**13.17**	**12.51**

3 ELECTRICITY GENERATION:

Sr. No.	Description		Unit	15-Apr	16-Apr	17-Apr	18-Apr	19-Apr	20-Apr	21-Apr	Weekly Average
A	**Biogas Gensets:**										
1	Biogas Genset-I: Running Time		hr	21.00	23.70	22.75	23.75	23.60	23.85	23.40	**23.15**
2	Biogas Genset-I: Energy Generation		kW.hr	3,190	3,580	3,430	3,800	3,810	3,830	3,570	**3,601**
3	Biogas Genset-II: Running Time		hr	3.15	23.75	22.95	23.70	23.45	23.85	23.40	**20.61**
4	Biogas Genset-II: Energy Generation		kW.hr	410	3,570	3,640	3,790	3,830	3,860	3,710	**3,259**
5	**Total.....2+4**		**kW.hr**	**3,600**	**7,150**	**7,070**	**7,590**	**7,640**	**7,690**	**7,280**	**6,860**
B	**Electricty Generation:**										
1	**As per Tender:** 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	52.01	53.65	59.57	52.08	49.46	49.43	47.97	**52.02**
3	Electricity Generation required as per Tender.....0.4 x 1000 x B2/100		kWH	208	215	238	208	198	198	192	**208**
4	Electricity generated..... (A2/A1) + (A4/A3)		kWH	282	301	309	320	325	322	311	**310**

4 BIOGAS FLARE:

Sr. No.	Parameter		Unit	15-Apr	16-Apr	17-Apr	18-Apr	19-Apr	20-Apr	21-Apr	Weekly Average
2	Operation Time		hr/day	8.70	3.00	3.67	3.50	1.38	1.27	3.00	**3.50**

5 EFFLUENT TREATMENT PLANT:

Sr. No.	Parameter		Unit	15-Apr	16-Apr	17-Apr	18-Apr	19-Apr	20-Apr	21-Apr	Weekly Average
A	**Raw Effluent Quality:**										
1	Flow		m^3/day	50.91	58.62	51.20	68.37	64.81	55.28	57.79	**58.14**
2	pH		---	6.04	7.55	7.52	7.27	6.11	7.02	7.03	**6.93**
3	Biochemical Oxygen Demand (BOD5)		mg/l	1,671	2,148	1,881	2,156	2,178	1,606	1,952	**1,942**
4	Chemical Oxygen Demand (COD)		mg/l	3,476	6,702	5,831	7,050	7,579	3,340	4,451	**5,490**
5	Total Suspended Solids (TSS)		mg/l	3,242	4,382	3,160	4,937	3,899	3,035	4,119	**3,825**
6	Total Dissolve Solids (TDS)		mg/l	1,675	1,587	1,547	1,567	1,735	1,722	1,500	**1,619**
B	**Treated Effluent Quality:**										
1	pH		---	7.29	6.99	7.38	7.26	6.72	7.14	6.93	**7.10**
2	Biochemical Oxygen Demand (BOD5)		mg/l	8	8	8	5	6	5	8	**7**
3	Chemical Oxygen Demand (COD)		mg/l	70	61	57	59	81	52	85	**66**
4	Total Suspended Solids (TSS)		mg/l	9	9	9	6	7	6	9	**8**
5	Total Dissolve Solids (TDS)		mg/l	1,709	1,682	1,609	1,598	1,804	1,808	1,605	**1,688**

6 DISPOSAL OF INERT:

Sr. No.	Description		Unit	15-Apr	16-Apr	17-Apr	18-Apr	19-Apr	20-Apr	21-Apr	Weekly Average
1	**As per Tender:** Maximum 10% of Inerts of the Total Input Waste (excluding Mulched Tree Waste) as received in the Facility.										
2	**Input Waste**		**TPD**	**98.14**	**97.59**	**113.94**	**99.89**	**93.10**	**96.15**	**91.39**	**98.60**
3	Inert Fraction		Kg	5,790	5,710	6,760	6,040	5,930	5,770	5,650	**5,950**
			TPD	**5.79**	**5.71**	**6.76**	**6.04**	**5.93**	**5.77**	**5.65**	**5.95**
4	**% of Total Input Waste.....3/2**		**%**	**5.90%**	**5.85%**	**5.93%**	**6.05%**	**6.37%**	**6.00%**	**6.18%**	**6.04%**

7 HOUSEKEEPING:

Sr. No.	Description		Unit	15-Apr	16-Apr	17-Apr	18-Apr	19-Apr	20-Apr	21-Apr	Weekly Average
1	Hygenic Conditions		---	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	**Accepted**
2	Cleanliness		---	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	**Accepted**
3	Manpower Deployed		---	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	**Accepted**
4	Safety Norms		---	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	**Accepted**
5	Treatment Methodology		---	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	**Accepted**
6	Storage Conditions		---	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	**Accepted**

1 INPUT WASTE COMPOSITION:

Sr. No.	Description		Unit	22-Apr	23-Apr	24-Apr	25-Apr	26-Apr	27-Apr	28-Apr	Weekly Average	
A	**Input Waste:**											
1	Dry Waste		TPD	0.36	0.23	1.06	0.69	2.12	0.87	1.83	**1.02**	**1.09%**
2	Wet Waste		TPD	6.66	10.29	12.31	7.96	5.36	5.57	1.07	**7.03**	**7.49%**
3	Mixed Waste		TPD	89.51	77.40	92.14	86.42	81.49	88.90	83.20	**85.58**	**91.16%**
4	Mulched Tree waste		TPD	0.00	0.09	0.00	0.00	1.63	0.00	0.00	**0.25**	**0.26%**
5	**Total.....1+2+3+4**		**TPD**	**96.53**	**88.01**	**105.51**	**95.07**	**90.60**	**95.34**	**86.10**	**93.88**	**100.00%**
B	**Input Waste Composition:**											
1	**Organic / Bio degradable Fraction**		**65.00%**	**49.45**	**47.21**	**56.54**	**49.01**	**44.23**	**47.62**	**40.51**	**47.80**	**50.91%**
2	**Inorganic / Non-recyclable Fraction (RDF)**			**28.70**	**25.14**	**30.29**	**28.16**	**28.20**	**31.90**	**22.82**	**27.89**	**29.71%**
3	**Recyclables**		**14.00%**	**12.57**	**10.00**	**10.90**	**11.60**	**12.64**	**11.07**	**10.75**	**11.36**	**12.10%**
	Glass	0.05-0.1%	0.50%	0.05	0.04	0.11	0.07	0.05	0.05	0.04	**0.06**	**0.06%**
	Metal	0.3-0.5%	0.50%	0.43	0.30	0.47	0.35	0.35	0.31	0.41	**0.38**	**0.40%**
	Paper / Cardboard / Tetrapack	1.5-3.0%	4.00%	1.76	1.56	2.48	2.84	2.09	1.82	2.07	**2.09**	**2.22%**
	Mixed Plastic, Bottles, Cups, Food Packets, Coated Plastics	3.5- 7.5%	6.00%	5.27	4.07	3.96	4.40	5.57	4.56	4.02	**4.55**	**4.85%**
	Thermocoal / Styrofoam	0.05-0.1%	1.00%	0.08	0.09	0.11	0.06	0.08	0.07	0.05	**0.08**	**0.08%**
	Cloth / Rags / Textiles	1.0-2.5%	1.50%	2.29	1.42	1.64	1.45	2.01	2.35	2.08	**1.89**	**2.01%**
	Rubber Items	0.25-0.5%	0.50%	0.43	0.41	0.30	0.48	0.28	0.43	0.34	**0.38**	**0.41%**
	Coconut	1.5-3.5%		2.26	2.11	1.85	1.96	2.20	1.50	1.73	**1.94**	**2.07%**
4	**Inert**		**10.00%**	**5.81**	**5.66**	**7.78**	**6.30**	**5.53**	**4.75**	**12.02**	**6.84**	**7.28%**
5	**Mulched Tree Waste**		**11.00%**	**0.00**	**0.09**	**0.00**	**0.00**	**1.63**	**0.00**	**0.00**		
	Total.....1+2+3+4+5		**100.00%**									**100.00%**

2 RECYCLABLES:

Sr. No.	Description		Unit	22-Apr	23-Apr	24-Apr	25-Apr	26-Apr	27-Apr	28-Apr	Weekly Average
A	**Recyclables:**										
1	Glass		Kg	48	44	106	67	45	48	43	**57**
2	Metal		Kg	434	299	475	352	353	305	413	**376**
3	Tetrapack		Kg	83	65	141	151	71	98	120	**104**
4	Paper / Cardboard		Kg	1,674	1,492	2,338	2,692	2,022	1,723	1,947	**1,984**
	Total.....3+4		**Kg**	**1,757**	**1,557**	**2,479**	**2,843**	**2,093**	**1,821**	**2,067**	**2,088**
5	Plastic Films		Kg	4,317	3,472	3,438	3,711	4,848	3,828	3,478	**3,870**
6	Hard Plastic		Kg	432	236	285	299	334	447	221	**322**
7	Pet		Kg	522	358	233	392	390	283	322	**357**
	Total.....5+6+7		**Kg**	**5,271**	**4,066**	**3,956**	**4,402**	**5,572**	**4,558**	**4,021**	**4,549**
8	Thermocal		Kg	77	88	106	57	82	67	52	**76**
9	Cloth / Rags / Textile		Kg	1,830	1,177	1,254	1,061	1,677	1,672	1,706	**1,482**
10	Jute Bags		Kg	458	239	381	384	334	673	369	**405**
	Total.....9+10		**Kg**	**2,288**	**1,416**	**1,635**	**1,445**	**2,011**	**2,345**	**2,075**	**1,888**
11	Leather / Rubber / Rexine		Kg	434	414	295	475	281	429	344	**382**
12	Coconut		Kg	2,259	2,112	1,846	1,958	2,202	1,497	1,731	**1,944**
13	**Total**		**Kg**	**12,568**	**9,996**	**10,898**	**11,599**	**12,639**	**11,070**	**10,746**	**11,359**
			TPD	**12.57**	**10.00**	**10.90**	**11.60**	**12.64**	**11.07**	**10.75**	**11.36**

3 ELECTRICITY GENERATION:

Sr. No.	Description		Unit	22-Apr	23-Apr	24-Apr	25-Apr	26-Apr	27-Apr	28-Apr	Weekly Average
A	**Biogas Gensets:**										
1	Biogas Genset-I: Running Time		hr	23.50	23.35	23.40	23.70	20.00	18.15	23.80	**22.27**
2	Biogas Genset-I: Energy Generation		kW.hr	3,680	3,660	3,720	3,830	3,140	2,860	3,780	**3,524**
3	Biogas Genset-II: Running Time		hr	23.70	23.35	23.50	23.70	18.70	18.00	23.80	**22.11**
4	Biogas Genset-II: Energy Generation		kW.hr	3,780	3,710	3,800	3,900	3,100	2,900	3,840	**3,576**
5	**Total.....2+4**		**kW.hr**	**7,460**	**7,370**	**7,520**	**7,730**	**6,240**	**5,760**	**7,620**	**7,100**
B	**Electricty 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	49.45	47.21	56.54	49.01	44.23	47.62	40.51	**47.80**
3	Electricity Generation required as per Tender.....0.4 x 1000 x B2/100		kWH	198	189	226	196	177	190	162	**191**
4	Electricity generated..... (A2/A1) + (A4/A3)		kWH	316	316	321	326	323	319	320	**320**

4 BIOGAS FLARE:

Sr. No.	Parameter		Unit	22-Apr	23-Apr	24-Apr	25-Apr	26-Apr	27-Apr	28-Apr	Weekly Average
2	Operation Time		hr/day	0.65	1.63	2.58	2.00	0.35	1.22	1.62	**1.44**

5 EFFLUENT TREATMENT PLANT:

Sr. No.	Parameter		Unit	22-Apr	23-Apr	24-Apr	25-Apr	26-Apr	27-Apr	28-Apr	Weekly Average
A	**Raw Effluent Quality:**										
1	Flow		m^3/day	54.74	58.28	63.99	53.96	50.90	63.43	59.62	**57.85**
2	pH		---	6.18	6.29	7.89	7.97	6.44	7.75	6.92	**7.06**
3	Biochemical Oxygen Demand (BOD5)		mg/l	1,697	1,799	1,904	1,660	1,913	2,046	2,249	**1,895**
4	Chemical Oxygen Demand (COD)		mg/l	5,600	5,469	4,855	3,453	4,438	6,097	7,287	**5,314**
5	Total Suspended Solids (TSS)		mg/l	2,970	3,886	4,246	4,017	4,649	4,951	3,598	**4,045**
6	Total Dissolve Solids (TDS)		mg/l	1,779	1,650	1,524	1,523	1,714	1,714	1,573	**1,640**
B	**Treated Effluent Quality:**										
1	pH		---	7.09	6.74	6.92	6.82	7.44	7.18	7.18	**7.05**
2	Biochemical Oxygen Demand (BOD5)		mg/l	5	7	8	9	9	7	7	**7**
3	Chemical Oxygen Demand (COD)		mg/l	58	87	62	69	58	68	78	**69**
4	Total Suspended Solids (TSS)		mg/l	6	8	9	10	10	8	8	**8**
5	Total Dissolve Solids (TDS)		mg/l	1,868	1,700	1,676	1,523	1,765	1,800	1,667	**1,714**

6 DISPOSAL OF INERT:

Sr. No.	Description		Unit	22-Apr	23-Apr	24-Apr	25-Apr	26-Apr	27-Apr	28-Apr	Weekly Average
1	**As per Tender:** Maximum 10% of Inerts of the Total Input Waste (excluding Mulched Tree Waste) as received in the Facility.										
2	**Input Waste**		**TPD**	**96.53**	**88.01**	**105.51**	**95.07**	**90.60**	**95.34**	**86.10**	**93.88**
3	Inert Fraction		Kg	5,810	5,660	7,780	6,300	5,530	4,750	12,020	**6,836**
			TPD	**5.81**	**5.66**	**7.78**	**6.30**	**5.53**	**4.75**	**12.02**	**6.84**
4	**% of Total Input Waste…..3/2**		**%**	**6.02%**	**6.43%**	**7.37%**	**6.63%**	**6.10%**	**4.98%**	**13.96%**	**7.36%**

7 HOUSEKEEPING:

Sr. No.	Description		Unit	22-Apr	23-Apr	24-Apr	25-Apr	26-Apr	27-Apr	28-Apr	Weekly Average
1	Hygenic Conditions		---	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	**Accepted**
2	Cleanliness		---	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	**Accepted**
3	Manpower Deployed		---	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	**Accepted**
4	Safety Norms		---	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	**Accepted**
5	Treatment Methodology		---	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	**Accepted**
6	Storage Conditions		---	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	Accepted	**Accepted**

1 INPUT WASTE COMPOSITION:

Sr. No.	Description		Unit	29-Apr	30-Apr	Weekly Average		Monthly Average	
A	**Input Waste:**								
1	Dry Waste		TPD	0.00	0.00	**0.00**	**0.00**	**1.02**	**1.04%**
2	Wet Waste		TPD	5.36	9.62	**7.49**	**0.08**	**8.20**	**8.53%**
3	Mixed Waste		TPD	87.32	79.72	**83.52**	**0.91**	**86.48**	**90.06%**
4	Mulched Tree waste		TPD	0.75	0.58	**0.67**	**0.01**	**0.35**	**0.37%**
5	**Total.....1+2+3+4**		**TPD**	**93.43**	**89.92**	**91.68**	**100.00%**	**96.04**	**100.00%**
B	**Input Waste Composition:**								
1	**Organic / Bio degradable Fraction**		**65.00%**	**47.36**	**47.73**	**47.55**	**51.86%**	**48.95**	**50.98%**
2	**Inorganic / Non-recyclable Fraction (RDF)**			**24.99**	**23.25**	**24.12**	**26.31%**	**28.26**	**29.39%**
3	**Recyclables**		**14.00%**	**14.38**	**12.47**	**13.43**	**14.64%**	**12.54**	**13.07%**
	Glass	0.05-0.1%	0.50%	0.07	0.07	**0.07**	**0.07%**	**0.07**	**0.07%**
	Metal	0.3-0.5%	0.50%	0.35	0.38	**0.36**	**0.39%**	**0.39**	**0.40%**
	Paper / Cardboard / Tetrapack	1.5-3.0%	4.00%	2.46	2.43	**2.44**	**2.66%**	**2.24**	**2.33%**
	Mixed Plastic, Bottles, Cups, Food Packets, Coated Plastics	3.5- 7.5%	6.00%	6.25	5.37	**5.81**	**6.34%**	**5.23**	**5.46%**
	Thermocoal / Styrofoam	0.05-0.1%	1.00%	0.09	0.06	**0.08**	**0.09%**	**0.07**	**0.07%**
	Cloth / Rags / Textiles	1.0-2.5%	1.50%	1.57	1.80	**1.68**	**1.84%**	**1.88**	**1.95%**
	Rubber Items	0.25-0.5%	0.50%	0.38	0.24	**0.31**	**0.34%**	**0.36**	**0.38%**
	Coconut	1.5-3.5%		3.21	2.12	**2.67**	**2.91%**	**2.30**	**2.40%**
4	**Inert**		**10.00%**	**6.70**	**6.47**	**6.59**	**7.18%**	**6.29**	**6.56%**
5	**Mulched Tree Waste**		**11.00%**	**0.75**	**0.58**				
	Total.....1+2+3+4+5		**100.00%**				**100.00%**		**100.00%**

2 RECYCLABLES:

Sr. No.	Description		Unit	29-Apr	30-Apr	Weekly Average	Monthly Average
A	**Recyclables:**						
1	Glass		Kg	65	72	**69**	**69**
2	Metal		Kg	346	378	**362**	**388**
3	Tetrapack		Kg	76	143	**110**	**108**
4	Paper / Cardboard		Kg	2,381	2,285	**2,333**	**2,130**
	Total.....3+4		**Kg**	**2,457**	**2,428**	**2,443**	**2,238**
5	Plastic Films		Kg	5,607	4,563	**5,085**	**4,474**
6	Hard Plastic		Kg	313	462	**388**	**380**
7	Pet		Kg	331	344	**338**	**380**
	Total.....5+6+7		**Kg**	**6,251**	**5,369**	**5,810**	**5,234**
8	Thermocal		Kg	93	63	**78**	**71**
9	Cloth / Rags / Textile		Kg	1,251	1,394	**1,323**	**1,467**
10	Jute Bags		Kg	319	405	**362**	**410**
	Total.....9+10		**Kg**	**1,570**	**1,799**	**1,685**	**1,876**
11	Leather / Rubber / Rexine		Kg	383	243	**313**	**364**
12	Coconut		Kg	3,214	2,122	**2,668**	**2,299**
13	**Total**		**Kg**	**14,379**	**12,474**	**13,427**	**12,539**
			TPD	**14.38**	**12.47**	**13.43**	**12.54**

3 ELECTRICITY GENERATION:

Sr. No.	Description		Unit	29-Apr	30-Apr	Weekly Average	Monthly Average
A	**Biogas Gensets:**						
1	Biogas Genset-I: Running Time		hr	23.35	23.85	**23.60**	**20.60**
2	Biogas Genset-I: Energy Generation		kW.hr	3,640	3,710	**3,675**	**3,010**
3	Biogas Genset-II: Running Time		hr	22.55	22.45	**22.50**	**19.95**
4	Biogas Genset-II: Energy Generation		kW.hr	3,550	3,540	**3,545**	**2,842**
5	**Total.....2+4**		**kW.hr**	**7,190**	**7,250**	**7,220**	**5,853**
B	**Electricty Generation:**						
1	**As per Tender:** 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	47.36	47.73	**47.55**	**48.95**
3	Electricity Generation required as per Tender.....0.4 x 1000 x B2/100		kWH	189	191	**190**	**196**
4	Electricity generated..... (A2/A1) + (A4/A3)		kWH	313	313	**313**	**280**

4 BIOGAS FLARE:

Sr. No.	Parameter		Unit	29-Apr	30-Apr	Weekly Average	Monthly Average
2	Operation Time		hr/day	0.57	1.40	**0.99**	**3.12**

5 EFFLUENT TREATMENT PLANT:

Sr. No.	Parameter		Unit	29-Apr	30-Apr	Weekly Average	Monthly Average
A	**Raw Effluent Quality:**						
1	Flow		m^3/day	57.80	61.47	**59.64**	**59.35**
2	pH		---	6.89	6.21	**6.55**	**6.83**
3	Biochemical Oxygen Demand (BOD5)		mg/l	2,163	2,458	**2,311**	**2,026**
4	Chemical Oxygen Demand (COD)		mg/l	6,943	7,694	**7,319**	**5,906**
5	Total Suspended Solids (TSS)		mg/l	5,213	4,572	**4,893**	**4,093**
6	Total Dissolve Solids (TDS)		mg/l	1,592	1,688	**1,640**	**1,651**
B	**Treated Effluent Quality:**						
1	pH		---	7.45	7.02	**7.24**	**7.05**
2	Biochemical Oxygen Demand (BOD5)		mg/l	5	6	**6**	**7**
3	Chemical Oxygen Demand (COD)		mg/l	72	65	**69**	**69**
4	Total Suspended Solids (TSS)		mg/l	6	7	**7**	**8**
5	Total Dissolve Solids (TDS)		mg/l	1,735	1,705	**1,720**	**1,732**

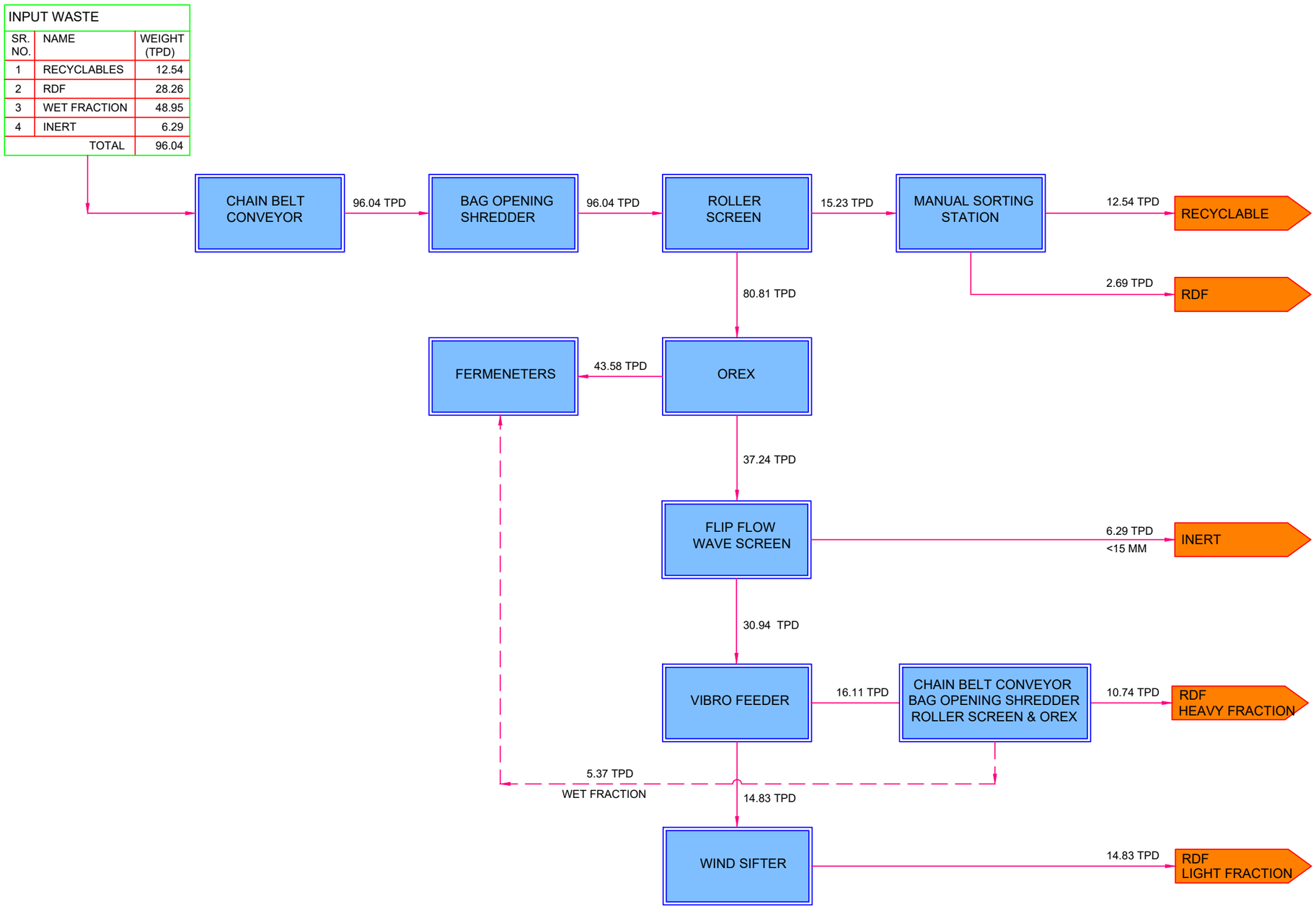
6 DISPOSAL OF INERT:

Sr. No.	Description		Unit	29-Apr	30-Apr	Weekly Average	Monthly Average
1	**As per Tender:** Maximum 10% of Inerts of the Total Input Waste (excluding Mulched Tree Waste) as received in the Facility.						
2	**Input Waste**		**TPD**	**93.43**	**89.92**	**91.68**	**96.04**
3	Inert Fraction		Kg	6,700	6,470	**6,585**	**6,295**
			TPD	**6.70**	**6.47**	**6.59**	**6.29**
4	**% of Total Input Waste.....3/2**		**%**	**7.17%**	**7.20%**	**7.18%**	**6.58%**

7 HOUSEKEEPING:

Sr. No.	Description		Unit	29-Apr	30-Apr	Weekly Average	Monthly Average
1	Hygenic Conditions		---	Accepted	Accepted	**Accepted**	**Accepted**
2	Cleanliness		---	Accepted	Accepted	**Accepted**	**Accepted**
3	Manpower Deployed		---	Accepted	Accepted	**Accepted**	**Accepted**
4	Safety Norms		---	Accepted	Accepted	**Accepted**	**Accepted**
5	Treatment Methodology		---	Accepted	Accepted	**Accepted**	**Accepted**
6	Storage Conditions		---	Accepted	Accepted	**Accepted**	**Accepted**

INPUT WASTE		
SR. NO.	NAME	WEIGHT (TPD)
1	RECYCLABLES	12.54
2	RDF	28.26
3	WET FRACTION	48.95
4	INERT	6.29
	TOTAL	96.04



NUMBER OF RECYCLABLE FRACTIONS		
SR. NO.	NAME	WEIGHT (KG)
01	GLASS	69
02	METALS	388
03	TETRAPACK	108
04	PAPER/CARDBOARD	2130
05	PLASTIC FILM	4474
06	HARD PLASTIC	380
07	PET	380
08	THERMOCAL	71
09	CLOTH/RAGS/TEXTILE	1467
10	JUTE BAGS	410
11	LEATHER/RUBBER/REXINE	364
12	COCONUT	2299
	TOTAL	12539

OWNER: .
DEPARTMENT OF SCIENCE, TECHNOLOGY & ENVIRONMENT.
THE MANAGING ASSOCIATE:
GOA STATE INFRASTRUCTURE DEVELOPMENT LTD.
CONTRACTOR:
M/s HINDUSTAN WASTE TREATMENT PVT. LTD.

	NAME	SIGN	DATE
DRWN	CS		02/05/17
DSGN	SG		02/05/17
CHKD	SG		02/05/17
APPD	GK		02/05/17

TITLE :
ANNEXURE -1:
MASS BALANCE
APRIL 2017 (01-04-2017 TO 30-04-2017)

SCALE NTS

SIZE A3 | REV. R0