	Assumptions		
1	Waste water generated	m3/day	400
2	Plant running hours	hrs/day	24
3	Run days	days/annum	270
4	GWP_CH4	tCO2e/ tCH4	21
5	Grid emission factor	tCO2e/MWh	0.845
6	Density of methane	kg/ m3	0.80
7	Biogas flow metered into boiler	m3/h	700

			Apr 06-March07
	Baseline Emissions	**tCO2e/ annum**	**46615**
A	**Due to methane gen - IIIH**	tCO2e/ annum	**42525**
	Methane generated	tonnes/ annum	2025
	Flow of waste water	m3/ annum	108000
	COD-Untreated water	kg/ m3	150
	Bo	kg CH4/ kg COD	0.25
	MCF		0.5
B	**Due to grid power consumption - IA**	tCO2e/ annum	**4090**
	Power generated in unit	MWh/ y	5499.9
	Auxiliary consumption @ 12%	MWh/ y	660.0
	Net generation in unit	MWh/ y	4839.9

	Project Emissions	**tCO2e/ annum**	**4608**
A	**Due to power consumption in equipments in digester plant**	**tCO2e/ annum**	**356**
	Power consumed @ 65 kW	MWh/annum	421
B	**Due to emissions in treated water**	**tCO2e/ annum**	7144
	Volume of waste water treated	m3/day	400
	COD-treated waste water	kg/ m3	30
	B-Methane generation capapcity	kg CH4/ kg COD	0.21
	MCF		0.50
C	**Due to anaerobic decay of sludge generated**	**tCO2e/ annum**	**0**
	Amount of final sludge generated		0
	DOC-sludge		0.30
	DCOf-sludge		0.77
	F		0.50
D	**Fugitive emissions**	**tCO2e/ annum**	**4253**
a	Wastewater fugitive	tCO2e/ annum	4253
	CFE	Capture eff.	0.9
	Methane emission potential of untreated ww	tCH4/ annum	2025
b	Sludge fugitive	tCO2e/ annum	0
	CFE	Capture eff.	0.9
	Methane emthane emission potential of untreated sludge	tCH4/ annum	0

E	**Due to methane dissolved in treated water**	**tCO2e/ annum**	**10.8**
	Volume of waste water treated	m3/ annum	108000
	CH4- WW treated	tonnes/ m3	0.0001
F	**Due to fossil fuel cosumption-ID**		**0**
	Quantity of coal consumed	Tonnes / annum	0
	Emission Factor for coal	tCO2e/ TJ	96.1
	NCV of coal	kcal/kg	4300
	Oxidation factor		0.98

Emission Reduction	**tCO2e/ annum**	**42006**

400	400	400	400	400	400
24	24	24	24	24	24
270	270	270	270	270	270
21	21	21	21	21	21
0.845	0.845	0.845	0.845	0.845	0.845
0.80	0.80	0.80	0.80	0.80	0.80
700	700	700	700	700	700
Apr 07-March 08	Apr 08-March 09	Apr 09-March 10	Apr 10-March 11	Apr 11-March 12	Apr 12-March 13
46615	**46615**	**46615**	**46615**	**46615**	**46615**
42525	**42525**	**42525**	**42525**	**42525**	**42525**
2025	2025	2025	2025	2025	2025
108000	108000	108000	108000	108000	108000
150	150	150	150	150	150
0.25	0.25	0.25	0.25	0.25	0.25
0.5	0.5	0.5	0.5	0.5	0.5
4090	**4090**	**4090**	**4090**	**4090**	**4090**
5499.9	5499.9	5499.9	5499.9	5499.9	5499.9
660.0	660.0	660.0	660.0	660.0	660.0
4839.9	4839.9	4839.9	4839.9	4839.9	4839.9

4608	**4608**	**4608**	**4608**	**4608**	**4608**
356	**356**	**356**	**356**	**356**	**356**
421	421	421	421	421	421
7144	7144	7144	7144	7144	7144
400	400	400	400	400	400
30	30	30	30	30	30
0.21	0.21	0.21	0.21	0.21	0.21
0.50	0.50	0.50	0.50	0.50	0.50
0	**0**	**0**	**0**	**0**	**0**
0	0	0	0	0	0
0.30	0.30	0.30	0.30	0.30	0.30
0.77	0.77	0.77	0.77	0.77	0.77
0.50	0.50	0.50	0.50	0.50	0.50
4253	**4253**	**4253**	**4253**	**4253**	**4253**
4253	4253	4253	4253	4253	4253
0.9	0.9	0.9	0.9	0.9	0.9
2025	2025	2025	2025	2025	2025
0	0	0	0	0	0
0.9	0.9	0.9	0.9	0.9	0.9
0	0	0	0	0	0

10.8	**10.8**	**10.8**	**10.8**	**10.8**	**10.8**		
108000	108000	108000	108000	108000	108000		
0.0001	0.0001	0.0001	0.0001	0.0001	0.0001		
0	**0**	**0**	**0**	**0**	**0**		
0	0	0	0	0	0		
96.1	96.1	96.1	96.1	96.1	96.1		
4300	4300	4300	4300	4300	4300		
0.98	0.98	0.98	0.98	0.98	0.98		
						Avg	Total
42006	**42006**	**42006**	**42006**	**42006**	**42006**	42006	305931