

Plant Parameters Sheet (PPS) Summary Report Wooster OARDC



PPS Form Version 1.8

Document Rev Date: 27-May-09

Project Number: 0038-WOO-OH-09

PLANT INPUTS

Biomass Inputs		Per Day Basis							
		Wet Tons	Total Solids %	Volatile Solids %	Dry Tons	Gallons	Cubic Yards (wet)	Cubic Meters	Tons VS
a	Food Waste	6.3	30.0%	90.0%	1.9	1,513	7.9	5.7	1.7
b	Food Waste	0	54.8%	93.0%	0.0	0	0.0	0.0	0.0
c	Food Waste	2.1	15.6%	69.0%	0.3	504	2.6	1.9	0.2
d	Food Waste	1.1	40.0%	90.0%	0.4	264	1.4	1.0	0.4
e	Corn Silage	12	30.0%	90.0%	3.6	2,881	15.0	10.9	3.2
f	Grass	2	30.0%	90.0%	0.6	480	2.5	1.8	0.5
g	Food Waste	11	5.0%	80.0%	0.6	2,641	13.8	10.0	0.4
h	Manure	1.8	20.0%	80.0%	0.4	432	2.3	1.6	0.3
i		0	0.0%	0.0%	0.0	0	0.0	0.0	0.0
j		0	0.0%	0.0%	0.0	0	0.0	0.0	0.0
k		0	0.0%	0.0%	0.0	0	0.0	0.0	0.0
M	Total Blended Biomass	36.3	21.4%	87.9%	7.8	8,715	45.4	33.0	6.8

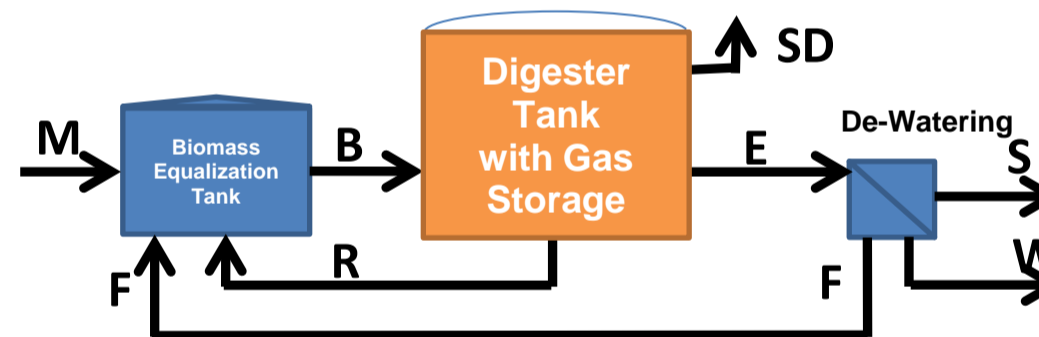
Inputs a-g Represent: 95% of the total biomass inputs based on wet tons
 Inputs h-k Represent: 5% of the total biomass inputs based on wet tons

Per Year Basis					
Wet Tons	Dry Tons	Gallons	Cubic Yards (wet)	Cubic Meters	Tons VS
2,300	690	552,101	2,874	2,090	621
0	0	0	0	0	0
767	120	184,034	958	697	83
402	161	96,399	502	365	145
4,380	1,314	1,051,621	5,475	3,981	1,183
730	219	175,270	913	664	197
4,015	201	963,986	5,019	3,649	161
657	131	157,743	821	597	105
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
13,250	2,835	3,181,152	16,562	12,043	2,493

PLANT MASS BALANCE

Variable List

- M** = Total Combined Biomass Entering Plant
- E** = Effluent Exiting Digester (Prior to De-Watering)
- S** = Effluent Solids out of the Plant after De-Watering
- W** = Effluent Liquid out of the Plant after De-Watering



TANK VOLUME (Gallons):	50,000	500,000
NUMBER OF TANKS:	1	1

	Per Day Basis							
	Wet Tons	Total Solids %	Volatile Solids %	Dry Tons	Gallons	Cubic Yards (wet)	Cubic Meters	Tons VS
M	36.3	21.4%	87.9%	7.8	8,715	45.4	33.0	6.8
E	42.5	7.7%	62.4%	3.3	10,208	53.1	38.6	2.0
S	12.3	20.0%	62.4%	2.5	2,958	15.4	11.2	1.5
W	19.2	2.7%	n/a	0.52	4,610	24.0	17.5	0.3

	Per Year Basis					
	Wet Tons	Dry Tons	Gallons	Cubic Yards (wet)	Cubic Meters	Tons VS
	13,250	2,835	3,181,152	16,562	12,043	2,493
	15,519	1,199	3,726,091	19,399	14,106	748
	4,496	899	1,079,556	5,620	4,087	561
	7,008	191	1,682,549	8,760	6,370	119

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PLANT GAS OUTPUT

	ft ³ /Year	ft ³ /Day	ft ³ /Hour	ft ³ /Min (SCFM)
BioGas	57,350,422	157,124	6,547	109
Methane	32,637,181	89,417	3,726	62

PLANT ENERGY OUTPUT (Prior to Parasitic Load)

	MMBTU/Year	MMBTU/Day	MMBTU/hour
Gas Energy Potential*	31,430	86	3.6

*Based on Methane Energy Value of 963 BTU/ft³

	kWh/Year	kWh/Day	kWh
Electric Generation Potential**	2,837,021	7,773	324

**Based on 35.0% Generator Efficiency