

Animal Data

Animal	Type	Quantity	Weight	Manure	VS	TS	Manure	VS	TS
			lbs	cu.ft/day/AU	lbs/day/AU	lbs/day/AU	cu.ft/day	lbs/day	lbs/day
Calf	Dairy	0	0	0.56	0.56	1.28	0.00	0.00	0.00
Dry Cow	Dairy	0	0	1.30	8.10	9.50	0.00	0.00	0.00
Heifer	Dairy	0	0	1.33	9.06	9.10	0.00	0.00	0.00
Lactating Cow	Dairy	500	1400	1.70	8.50	10.00	1190.00	5950.00	7000.00
Totals		500	N/A	N/A	N/A	N/A	1190.00	5950.00	7000.00

Location Data

Percent of Manure Deposited in Each Location:

Period 1

lactating cows	Animal Name	Percent Manure
	Lactating Cow	65
Totals	Animal Name	Percent Manure
	Lactating Cow	65

Additions Data

Waste Water VS Loading: 12.9

Operating Period: 1

Location	Wash Water	Flush Water	Bedding	Amount
	gal/day	gal/day		lbs/day
lactating cows	0.00	0.00	Sand	9000.00

Runoff Data

Runoff Volume Method: Calculate Monthly Runoff Volumes with AWM

Pervious Watershed Area: acres

Pervious Curve Number Storm: 90

Pervious Curve Number Monthly: 90 (1 day), 77 (30 day)

Impervious Area: 5000 sq. ft

25 Year Pervious: 0.00 cu. ft

25 Year Impervious: 1670.00 cu. ft

25 Year Total: 1670.00 cu. ft

Runoff Volumes (1000 cu. ft.)

Month	Pervious	Impervious	Month Total
January	0.00	0.50	0.50
February	0.00	0.44	0.44
March	0.00	0.74	0.74
April	0.00	1.10	1.10
May	0.00	1.04	1.04
June	0.00	1.26	1.26
July	0.00	1.14	1.14
August	0.00	1.17	1.17
September	0.00	1.12	1.12
October	0.00	0.83	0.83
November	0.00	0.85	0.85
December	0.00	0.70	0.70
Total	0.00	10.91	10.91

Management Train



Facility Volume Data

Operating Period 1

cubic feet per day

Facility	Manure	Wash Water	Flush Water	Bedding	Total Vol
Storage Tank #1	773.50	0.00	0.00	85.71	859.21

Waste Facilities

Storage Tank #1

Max. Storage Vol. Method: Storage Volume

Covered: No

Storage Months: 2 months

Critical Months: Dec - Jan

Design Dimensions

Shape: Rectangle

Storage Depth: 7.5

Final Depth: 8.0 ft

Freeboard: 0.5 ft

Top Length: 112.6 ft

Bottom Length: 112.6 ft

Top Width: 80.0 ft

Bottom Width: 80.0 ft

Bot Dimensions: 80.0 x 112.6 ft

Top Dimensions: 80.0 x 112.6 ft

Design Quantities

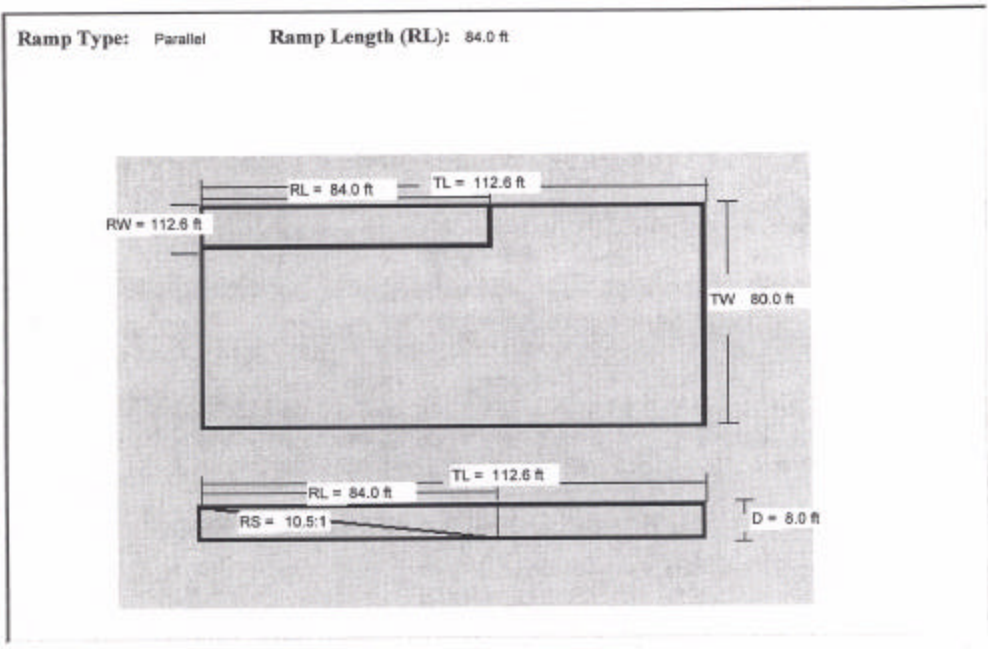
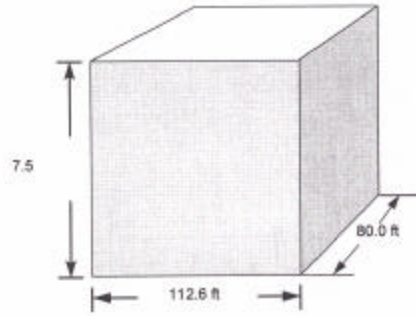
25Yr24Hr Storm Depth: 4.3 in

Prec Minus Evap Depth: 3.30 in

Waste Volume: 54471 cu. ft

*Includes rain
runoff*

Storage Tank #1



4 of 5

Water Budget (1000 cu. ft.)

Month	Runoff	Withdrawal	Waste	Prec - Evap	Ext Prec	CumStorageVol
January	0.50	<input type="checkbox"/>	26.64	1.06	0.00	28.19
February	0.44	<input type="checkbox"/>	24.92	0.72	0.00	26.07
March	0.74	<input type="checkbox"/>	26.64	0.43	0.00	27.80
April	1.10	<input type="checkbox"/>	25.78	0.44	0.00	27.32
May	1.04	<input type="checkbox"/>	26.64	-0.11	0.00	27.57
June	1.26	<input type="checkbox"/>	25.78	-0.35	0.00	26.69
July	1.14	<input type="checkbox"/>	26.64	-1.66	0.00	26.12
August	1.17	<input type="checkbox"/>	26.64	-1.36	0.00	26.43
September	1.12	<input type="checkbox"/>	25.78	-0.17	0.00	26.73
October	0.83	<input type="checkbox"/>	26.64	0.81	0.00	28.28
November	0.85	<input type="checkbox"/>	25.78	1.50	0.00	28.13
December	0.70	<input type="checkbox"/>	26.64	1.43	0.00	28.77

Animal Waste Management Plan prepared for Sample Dairy-earthen #2

Designed By: SR
Date: 11/1/2004

Checked By: _____
Date: _____

Farm Information

of Operating Periods: 1 State: MI Data Source: MWPS
Operating Period: January - December

Climate Data

County: SAND
Station:
25 Yr - 24 Hr Storm Event: 4.25 inches

Lagoon Loadings:

Rational Design Method:

Barth KVAL: 0
Load Rate for Odor, OCV: 0 lbs VS/cu. ft/day
LRV Max: 0.00625 lbs VS/cu. ft/day

NRCS Design Method:

Anaerobic Load Rate: 0 lbs VS/1000 cu. ft/day

Month	Prec. (in)	Evap. (in)
January	1.70	0.30
February	1.53	0.59
March	2.30	1.77
April	3.19	2.66
May	3.04	3.25
June	3.58	4.13
July	3.28	5.61
August	3.36	5.31
September	3.24	3.54
October	2.53	1.48
November	2.58	0.59
December	2.20	0.30
Total	32.53	29.51

Animal Data

Animal	Type	Quantity	Weight	Manure	VS	TS	Manure	VS	TS
			lbs	cu.ft/day/AU	lbs/day/AU	lbs/day/AU	cu.ft/day	lbs/day	lbs/day
Lactating Cow	Dairy	0	100	1.70	8.50	10.00	0.00	0.00	0.00
Totals		0	N/A	N/A	N/A	N/A	0.00	0.00	0.00

Additions Data

Waste Water VS Loading: 12.9

Operating Period: 1

Location	Wash Water	Flush Water	Bedding	Amount
	gal/day	gal/day		lbs/day
parlor	3900.00	1264.00		0.00

Runoff Data

Runoff Volume Method: Calculate Monthly Runoff Volumes with AWM

Pervious Watershed Area: acres

Pervious Curve Number Storm: 90

Pervious Curve Number Monthly: 90 (1 day), 77 (30 day)

Impervious Area: sq. ft

25 Year Pervious: 0.00 cu. ft

25 Year Impervious: 0.00 cu. ft

25 Year Total: 0.00 cu. ft

Runoff Volumes (1000 cu. ft.)

Month	Pervious	Impervious	Month Total
January	0.00	0.00	0.00
February	0.00	0.00	0.00
March	0.00	0.00	0.00
April	0.00	0.00	0.00
May	0.00	0.00	0.00
June	0.00	0.00	0.00
July	0.00	0.00	0.00
August	0.00	0.00	0.00
September	0.00	0.00	0.00
October	0.00	0.00	0.00
November	0.00	0.00	0.00
December	0.00	0.00	0.00
Total	0.00	0.00	0.00

Management Train



Facility Volume Data

Operating Period 1

Facility	Manure	Wash Water	Flush Water	Bedding	Total Vol
Storage Pond #1	0.00	521.35	168.97	0.00	690.33

Waste Facilities

Storage Pond #1

Max. Storage Vol. Method: Cum. Storage Vol

Storage Months: 7 months

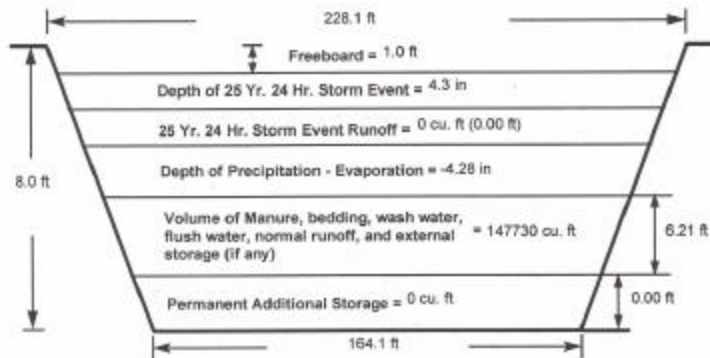
Critical Months: Mar - Sep

Design Dimensions

Shape:	Rectangle	Top Length:	228.1 ft
Sideslope:	4:1	Bottom Length:	164.1 ft
Storage Depth:	7.0 ft	Top Width:	164.0 ft
Final Depth:	8.0 ft	Bottom Width:	100.0 ft
Freeboard:	1.0 ft	Bot Dimensions	100.0 x 164.1 ft
		TopDimensions:	164.0 x 228.1 ft

Design Quantities

25Yr24Hr Storm Depth:	4.3 in
Prec Minus Evap Depth:	-4.28 in for critical months
Waste Volume:	147730 cu. ft



Water Budget (1000 cu. ft.)

Month	Runoff	Withdrawal	Waste	Prec - Evap	Ext Prec	CumStorageVol
January	0.00	<input type="checkbox"/>	21.40	4.67	0.00	26.07
February	0.00	<input checked="" type="checkbox"/>	20.02	3.52	0.00	49.61
March	0.00	<input type="checkbox"/>	21.40	3.43	0.00	24.83
April	0.00	<input type="checkbox"/>	20.71	4.32	0.00	49.86
May	0.00	<input type="checkbox"/>	21.40	2.61	0.00	73.86
June	0.00	<input type="checkbox"/>	20.71	2.43	0.00	97.00
July	0.00	<input type="checkbox"/>	21.40	-1.64	0.00	116.78
August	0.00	<input type="checkbox"/>	21.40	-0.75	0.00	137.41
September	0.00	<input checked="" type="checkbox"/>	20.71	2.62	0.00	160.74
October	0.00	<input checked="" type="checkbox"/>	21.40	4.76	0.00	26.18
November	0.00	<input checked="" type="checkbox"/>	20.71	6.80	0.00	27.51
December	0.00	<input checked="" type="checkbox"/>	21.40	6.22	0.00	27.63

