

Table 16: Manure Application Plan
Output from MMP via Michigan Template

Crop Yr	App Yr	Mon	Field	Subfield	Acres	For Crop	Storage Id	Equipment	P Test	Units	MARI	Rate/A	Unit	Amt Applied	Avail. N	P2O5	K2O
2004	2004	Apr	D	1	50.2/50	Corn	#5 ADL New	Injector	71 ppm			5800	Gal	291,000	183	87	169
2004	2004	Apr	F	N3,4	37.5/37.2	Corn silage	#5 ADL New	Injector	52 ppm			5600	Gal	210,000	177	85	163
2004	2004	Apr	F	S1,2	35.4/35	Corn silage	#5 ADL New	Injector	80 ppm			5600	Gal	198,000	178	85	164
2004	2004	Apr	LM	1	40.2/40	Corn silage	#5 ADL New	Injector	64 ppm			5600	Gal	225,000	177	84	163
2004	2004	Apr	LM	2	37/36.5	Corn silage	#5 ADL New	Injector	46 ppm			5600	Gal	207,000	178	85	164
2004	2004	Apr	W	1	20/19.7	Corn	#5 ADL New	Injector	23 ppm			4500	Gal	90,000	143	69	133
2004	2004	Apr	W	2	10.7/10	Corn	#5 ADL New	Injector	23 ppm			4500	Gal	48,000	151	73	140
2004	2004	Apr	W	3	24/23.9	Corn	#5 ADL New	Injector	24 ppm			4500	Gal	108,000	142	68	132
2004	2004	May	W	4	20.7/20.4	Corn	#5 ADL New	Injector	24 ppm			4500	Gal	93,000	143	69	133
2004	2004	May	WR	1	20/20	Corn	#5 ADL New	Injector	80 ppm			5400	Gal	108,000	170	81	157
2005	2004	Sep	BG	4	16.8/16.8	Corn	#5 ADL New	Irrigate	15 ppm			10658	Gal	179,054	85	160	309
2005	2004	Oct	CN	2	30/29.2	Corn	#5 ADL New	Liquid box	27 ppm			6400	Gal	192,000	52	99	191
2005	2004	Oct	SH	5	14.4/14	Soybean	#5 ADL New	Injector	21 ppm			4800	Gal	69,000	155	74	143
2005	2004	Nov	Bg	3	26.4/26	Corn	#5 ADL New	Injector	90 ppm			5000	Gal	132,000	159	76	147
2005	2004	Nov	BM	2	20/20	Corn silage	#5 ADL New	Liquid box	28 ppm			5700	Gal	114,000	46	86	165
2005	2004	Nov	BM	2	20/20	Rye cover	#5 ADL New	Liquid box	28 ppm			5700	Gal	114,000	46	86	165
2005	2004	Nov	SA	2	24/23.1	Corn	#5 ADL New	Liquid box	46 ppm			6000	Gal	144,000	50	94	181
2005	2004	Nov	SA	3	23.3/23.3	Corn	#5 ADL New	Injector	25 ppm			4500	Gal	105,000	141	68	131
2005	2004	Nov	SA	4	14.7/14.5	Corn	#5 ADL New	Injector	25 ppm			4500	Gal	66,000	143	69	133
For the 2004 calendar year, total amount hauled from ADL #5 =														2,693,054			
2004	2004	Apr	BM3	a	10.2/10	Corn	ADL Tank #1	Injector	13 ppm			6500	Gal	66,000	179	159	172
2004	2004	Apr	BY	1	48.5/47.4	Corn silage	ADL Tank #1	Liquid box	42 ppm			5200	Gal	252,000	47	128	138
2005	2004	Sep	BK	4	17.9/16.9	Corn	ADL Tank #1	Liquid box	17 ppm			4700	Gal	84,000	44	120	129
2005	2004	Sep	BK	5	54.9/54	Corn	ADL Tank #1	Liquid box	16 ppm			4700	Gal	258,000	43	115	124
2005	2004	Sep	BK	6	6.4/5.9	Corn	ADL Tank #1	Liquid box	16 ppm			4700	Gal	30,000	46	123	132
2005	2004	Sep	BK	7	3.8/3	Corn	ADL Tank #1	Liquid box	16 ppm			4700	Gal	18,000	53	143	155
2005	2004	Oct	NO	4	30/29.1	Corn	ADL Tank #1	Liquid box	21 ppm			5200	Gal	156,000	47	129	139
2005	2004	Nov	SA	1	18.5/23.6	Corn	ADL Tank #1	Liquid box	46 ppm			5200	Gal	96,000	36	98	106
For the 2004 calendar year, total amount hauled from ADL #1 =														960,000			
2004	2004	May	CO	S	40/40	Corn	Earthen storage #2	Irrigate	107 ppm			27000	Gal	1,080,000	24	22	124
2005	2004	Oct	CO	N	36/36.4	Tomato, processing	Earthen storage #2	Irrigate	69 ppm			27000	Gal	972,000	24	22	123
For the 2004 calendar year, total amount irrigated from Earthen storage #2 =														2,052,000			

Crop Yr	App Yr	Mon	Field	Subfield	Acres	For Crop	Storage Id	Equipment	P Test	Units	MARI	Rate/A	Unit	Amt Applied	Avail. N	P2O5	K2O
2004	2004	Apr	BK	1	5.9/21.7	Soybean	Mon.Wed. Fri. Haul	V Bottom	17 ppm			17	Ton	100	7	8	26
2004	2004	May	BK	1	5/21.7	Soybean	Mon.Wed. Fri. Haul	V Bottom	17 ppm			20	Ton	100	6	8	26
2004	2004	May	D 10		2.4/4.5	Corn	Mon.Wed. Fri. Haul	V Bottom	66 ppm			50	Ton	120	37	48	152
2004	2004	Jul	BM	2	2.5/20	Rye cover	Mon.Wed. Fri. Haul	V Bottom	28 ppm			20	Ton	50	4	5	14
2004	2004	Jul	BM	2	2.5/20	Corn silage	Mon.Wed. Fri. Haul	V Bottom	28 ppm			20	Ton	50	4	5	14
2004	2004	Aug	BM	2	2.5/20	Corn silage	Mon.Wed. Fri. Haul	V Bottom	28 ppm			20	Ton	50	4	5	14
2004	2004	Aug	BM	2	2.5/20	Rye cover	Mon.Wed. Fri. Haul	V Bottom	28 ppm			20	Ton	50	4	5	14
2005	2004	Sep	BM	2	2.5/20	Rye cover	Mon.Wed. Fri. Haul	V Bottom	28 ppm			20	Ton	50	4	5	14
2005	2004	Sep	BM	2	2.5/20	Corn silage	Mon.Wed. Fri. Haul	V Bottom	28 ppm			20	Ton	50	4	5	14
2005	2004	Oct	HM	2	5/39.1	Corn	Mon.Wed. Fri. Haul	V Bottom	69 ppm			20	Ton	100	4	5	15
2005	2004	Nov	HM	2	5/39.1	Corn	Mon.Wed. Fri. Haul	V Bottom	69 ppm			20	Ton	100	4	5	15
2005	2004	Dec	HM	2	5/39.1	Corn	Mon.Wed. Fri. Haul	V Bottom	69 ppm			20	Ton	100	4	5	15
For the 2004 calendar year, total amount hauled on Mon. Wed. and Friday's =														920			
2004	2004	Apr	BK	1	5.9/21.7	Soybean	Weekly Haul	V Bottom	17 ppm			17	Ton	100	5	8	16
2004	2004	May	BK	1	5/21.7	Soybean	Weekly Haul	V Bottom	17 ppm			20	Ton	100	5	8	16
2004	2004	May	D 10		2.3/4.5	Corn	Weekly Haul	V Bottom	66 ppm			51.5	Ton	120	27	48	89
2004	2004	Jun	D 11		3/3.2	Alfalfa	Weekly Haul	V Bottom	66 ppm			20	Ton	60	19	34	64
2004	2004	Jun	D 12		2.5/2.3	Alfalfa	Weekly Haul	V Bottom	66 ppm			20	Ton	50	22	39	74
2004	2004	Jul	BM	2	2.5/20	Corn silage	Weekly Haul	V Bottom	28 ppm			20	Ton	50	3	5	9
2004	2004	Jul	BM	2	2.5/20	Rye cover	Weekly Haul	V Bottom	28 ppm			20	Ton	50	3	5	9
2004	2004	Aug	BM	2	2.5/20	Rye cover	Weekly Haul	V Bottom	28 ppm			20	Ton	50	3	5	9
2004	2004	Aug	BM	2	2.5/20	Corn silage	Weekly Haul	V Bottom	28 ppm			20	Ton	50	3	5	9
2005	2004	Sep	BM	2	2.5/20	Rye cover	Weekly Haul	V Bottom	28 ppm			20	Ton	50	3	5	9
2005	2004	Sep	BM	2	2.5/20	Corn silage	Weekly Haul	V Bottom	28 ppm			20	Ton	50	3	5	9
2005	2004	Oct	HM	2	5/39.1	Corn	Weekly Haul	V Bottom	69 ppm			20	Ton	100	3	5	9
2005	2004	Nov	HM	2	5/39.1	Corn	Weekly Haul	V Bottom	69 ppm			20	Ton	100	3	5	9
2005	2004	Dec	HM	2	5/39.1	Corn	Weekly Haul	V Bottom	69 ppm			20	Ton	100	3	5	9
For the 2004 calendar year, total amount hauled weekly =														1030			

Crop year = crop year that manure nutrients are credited to.
Available N includes storage and application losses.
Acres = acres applied/total acres in field
Available N, P₂O₅ and K₂O are pounds per acre

Table 17: Summary of Total Annual Acres and Nutrients Spread
Summarizes by crop year not by calendar year.

Crop Yr	Acres Spread	Avail.N	P2O5	K2O
2004	446.4	55,921	34,330	64,104
2005	698.6	61,220	54,998	101,194
2006	552.3	59,365	42,132	72,681

Table 18: Summary of Manure Hauled for each storage system

Crop Yr	Storage	Annual Volume or Wt.	Amount Hauled	Units	Acres Spread	N	Annual P2O5	P2O5	K2O
2004	#5 ADL New	2,547,463	1,578,000	Gal	295.7	49,585	38,212	23,723	45,767
2004	ADL Tank #1	1,080,182	318,000	Gal	58.7	4,016	25,924	7,654	8,271
2004	Earthen storage #2	1,955,356	1,080,000	Gal	40.0	960	1,564	880	4,960
2004	Mon.Wed. Fri. Haul	1,700	520	Ton	23.3	730	3,060	939	2,966
2004	Weekly Haul	1,900	630	Ton	28.7	630	3,420	1,135	2,139
2005	#5 ADL New	2,547,463	2,279,054	Gal	391.1	51,299	38,212	34,284	66,112
2005	ADL Tank #1	1,080,182	642,000	Gal	131.5	5,717	25,924	15,442	16,674
2005	Earthen storage #2	1,955,356	2,052,000	Gal	76.0	1,824	1,564	1,672	9,424
2005	Mon.Wed. Fri. Haul	1,700	950	Ton	47.5	1,330	3,060	1,710	5,415
2005	Weekly Haul	1,900	1,050	Ton	52.5	1,050	3,420	1,890	3,570
2006	#5 ADL New	2,547,463	1,494,000	Gal	282.8	46,911	38,212	22,473	43,331
2006	ADL Tank #1	1,080,182	720,000	Gal	175.7	10,250	25,924	17,288	18,721
2006	Earthen storage #2	1,955,356	1,940,000	Gal	71.8	1,723	1,564	1,580	8,903
2006	Mon.Wed. Fri. Haul	1,700	100	Ton	5.0	140	3,060	180	570
2006	Weekly Haul	1,900	340	Ton	17.0	340	3,420	612	1,156

Annual volume and annual P₂O₅ are calculated values from this plan. Amount hauled is based on actual (from records) or projected values. N, P₂O₅ and K₂O are total pounds per year, per storage system.

Field Nutrient Status Details

Output from MMP by Selecting "Field Nutrient Status Details" from Tools, then Reports

Plan File: S:\Sample Dairy CNMP\Example Dairy Use Aug 11.mmp

Operation: Michigan Sample Dairy CNMP

State: Michigan

Last Saved: 11/3/2004

Init. File Rev: 3/4/2004

Year	Field ID	Sub ID	Nutrient Needs	Crop	Yield Goal	Acres	N	P ₂ O ₅	K ₂ O	
2004	BK	1	Crop Fertilizer Recs	Soybean	35 Bu	21.7	0	30	75	
2004	BK	1	Crop Nutrient Removal	Soybean	35 Bu	21.7	133	28	49	
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Date	Field ID	Sub ID	Nutrient Activity	Source	Equipment/Method	Rate	Acres	N	P ₂ O ₅	K ₂ O
Apr 04	BK	1	Manure App (1-yr P)	Weekly Haul	V Bottom	17 Ton	5.9	17	31	58
Apr 04	BK	1	Manure App (1-yr P)	Mon.Wed. Fri. Haul	V Bottom	17 Ton	5.9	24	31	97
May 04	BK	1	Manure App	Weekly Haul	V Bottom	20 Ton	5.0	20	36	68
May 04	BK	1	Manure App	Mon.Wed. Fri. Haul	V Bottom	20 Ton	5.0	28	36	114
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2004	BK	1	Total Nutrients Applied	Spreadable Area			21.7	22	33	84
2004	BK	1	Balance After Recs	Spreadable Area			21.7	0 ^a	3	9
2004	BK	1	Balance After Removal	Spreadable Area			21.7	-111	5	35
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Year	Field ID	Sub ID	Nutrient Needs	Crop	Yield Goal	Acres	N	P ₂ O ₅	K ₂ O	
2005	BK	1	Crop Fertilizer Recs	Wheat	50 Bu	21.7	40	70	45	
2005	BK	1	Crop Nutrient Removal	Wheat	50 Bu	21.7	60	32	19	
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Date	Field ID	Sub ID	Nutrient Activity	Source	Equipment/Method	Rate	Acres	N	P ₂ O ₅	K ₂ O
2005	BK	1	Residual Manure N				21.7	10		
Mar 05	BK	1	Fertilizer App (1-yr P)	18-46-0	Surface broadcast/incorporate	145 Lb	21.7	26	67	0
Mar 05	BK	1	Fertilizer App (1-yr K)	0-0-60	Surface broadcast	60 Lb	21.7	0	0	36
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2005	BK	1	Total Nutrients Applied	Spreadable Area			21.7	36	67	36
2005	BK	1	Balance After Recs	Spreadable Area			21.7	-4	0	0
2005	BK	1	Balance After Removal	Spreadable Area			21.7	-24	41	53
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Year	Field ID	Sub ID	Nutrient Needs	Crop	Yield Goal	Acres	N	P ₂ O ₅	K ₂ O	
2006	BK	1	Crop Fertilizer Recs	Corn	135 Bu	21.7	155	50	65	
2006	BK	1	Crop Nutrient Removal	Corn	135 Bu	21.7	122	50	36	
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Date	Field ID	Sub ID	Nutrient Activity	Source	Equipment/Method	Rate	Acres	N	P ₂ O ₅	K ₂ O
2006	BK	1	Residual Manure N				21.7	4		
Apr 06	BK	1	Fertilizer App (1-yr N)	28-0-0	Row starter 2x2 placement	46 Gal	21.7	137	0	0
Apr 06	BK	1	Fertilizer App (1-yr P)	10-34-0	Row starter 2x2 placement	13 Gal	21.7	15	51	0
Apr 06	BK	1	Fertilizer App (1-yr K)	0-0-60	Surface broadcast	108 Lb	21.7	0	0	65
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2006	BK	1	Total Nutrients Applied	Spreadable Area			21.7	156	51	65
2006	BK	1	Balance After Recs	Spreadable Area			21.7	1	1	0
2006	BK	1	Balance After Removal	Spreadable Area			21.7	35	42	81

Year	Field ID	Sub ID	Nutrient Needs	Crop	Yield Goal	Acres	N	P ₂ O ₅	K ₂ O
2004	BK	4	Crop Fertilizer Recs	Soybean	35 Bu	16.9	0	30	105
2004	BK	4	Crop Nutrient Removal	Soybean	35 Bu	16.9	133	28	49

Date	Field ID	Sub ID	Nutrient Activity	Source	Equipment/Method	Rate	Acres	N	P ₂ O ₅	K ₂ O
Apr 04	BK	4	Manure App (1-yr P)	Mon.Wed. Fri. Haul	V Bottom	17 Ton	17.1	29	31	97
2004	BK	4	Total Nutrients Applied	Spreadable Area			16.9	29	31	98
2004	BK	4	Balance After Recs	Spreadable Area			16.9	0 ^a	1	-7
2004	BK	4	Balance After Removal	Spreadable Area			16.9	-104	3	49

Year	Field ID	Sub ID	Nutrient Needs	Crop	Yield Goal	Acres	N	P ₂ O ₅	K ₂ O
2005	BK	4	Crop Fertilizer Recs	Corn	135 Bu	16.9	125	50	95
2005	BK	4	Crop Nutrient Removal	Corn	135 Bu	16.9	122	50	36

Date	Field ID	Sub ID	Nutrient Activity	Source	Equipment/Method	Rate	Acres	N	P ₂ O ₅	K ₂ O
2005	BK	4	Residual Manure N				16.9	10		
Apr 05	BK	4	Manure App	Weekly Haul	V Bottom	27 Ton	17.0	27	49	92
Apr 05	BK	4	Fertilizer App (1-yr N)	28-0-0	Row starter 2x2 placement	34 Gal	16.9	101	0	0
2005	BK	4	Total Nutrients Applied	Spreadable Area			16.9	138	49	93
2005	BK	4	Balance After Recs	Spreadable Area			16.9	13	0	-2
2005	BK	4	Balance After Removal	Spreadable Area			16.9	17	2	106

Year	Field ID	Sub ID	Nutrient Needs	Crop	Yield Goal	Acres	N	P ₂ O ₅	K ₂ O
2006	BK	4	Crop Fertilizer Recs	Soybean	35 Bu	16.9	0	30	105
2006	BK	4	Crop Nutrient Removal	Soybean	35 Bu	16.9	133	28	49

Date	Field ID	Sub ID	Nutrient Activity	Source	Equipment/Method	Rate	Acres	N	P ₂ O ₅	K ₂ O
2006	BK	4	Residual Manure N				16.9	19		
Apr 06	BK	4	Fertilizer App (1-yr P)	18-46-0	Surface broadcast/incorporate	65 Lb	16.9	12	30	0
Apr 06	BK	4	Fertilizer App (1-yr K)	0-0-60	Surface broadcast/incorporate	175 Lb	16.9	0	0	105
2006	BK	4	Total Nutrients Applied	Spreadable Area			16.9	31	30	105
2006	BK	4	Balance After Recs	Spreadable Area			16.9	0 ^a	0	0
2006	BK	4	Balance After Removal	Spreadable Area			16.9	-102	4	162

Year	Field ID	Sub ID	Nutrient Needs	Crop	Yield Goal	Acres	N	P ₂ O ₅	K ₂ O	
2004	BY	1	Crop Fertilizer Recs	Corn silage	25 Ton	47.4	175	0	270	
2004	BY	1	Crop Nutrient Removal	Corn silage	25 Ton	47.4	235	83	200	
Date	Field ID	Sub ID	Nutrient Activity	Source	Equipment/Method	Rate	Acres	N	P ₂ O ₅	K ₂ O
Apr 04	BY	1	Fertilizer App (1-yr K)	0-0-60	Surface broadcast/incorporate	450 Lb	47.4	0	0	270
Apr 04	BY	1	Fertilizer App (1-yr N)	28-0-0	Row starter 2x2 placement	59 Gal	47.4	176	0	0
2004	BY	1	Total Nutrients Applied	Spreadable Area		47.4	176	0	270	
2004	BY	1	Balance After Recs	Spreadable Area		47.4	1	0	0	
2004	BY	1	Balance After Removal	Spreadable Area		47.4	-59	-83	70	
Year	Field ID	Sub ID	Nutrient Needs	Crop	Yield Goal	Acres	N	P ₂ O ₅	K ₂ O	
2005	BY	1	Crop Fertilizer Recs	Soybean	50 Bu	47.4	0	0	140	
2005	BY	1	Crop Nutrient Removal	Soybean	50 Bu	47.4	190	40	70	
Date	Field ID	Sub ID	Nutrient Activity	Source	Equipment/Method	Rate	Acres	N	P ₂ O ₅	K ₂ O
Apr 05	BY	1	Fertilizer App (1-yr K)	0-0-60	Surface broadcast/incorporate	233 Lb	47.4	0	0	140
2005	BY	1	Total Nutrients Applied	Spreadable Area		47.4	0	0	140	
2005	BY	1	Balance After Recs	Spreadable Area		47.4	0	0	0	
2005	BY	1	Balance After Removal	Spreadable Area		47.4	-190	-40	140	
Year	Field ID	Sub ID	Nutrient Needs	Crop	Yield Goal	Acres	N	P ₂ O ₅	K ₂ O	
2006	BY	1	Crop Fertilizer Recs	Corn	145 Bu	47.4	140	0	105	
2006	BY	1	Crop Nutrient Removal	Corn	145 Bu	47.4	131	54	39	
Date	Field ID	Sub ID	Nutrient Activity	Source	Equipment/Method	Rate	Acres	N	P ₂ O ₅	K ₂ O
Apr 06	BY	1	Fertilizer App (1-yr N)	28-0-0	Row starter 2x2 placement	47 Gal	47.4	140	0	0
Apr 06	BY	1	Fertilizer App (1-yr K)	0-0-60	Surface broadcast/incorporate	175 Lb	47.4	0	0	105
2006	BY	1	Total Nutrients Applied	Spreadable Area		47.4	140	0	105	
2006	BY	1	Balance After Recs	Spreadable Area		47.4	0	0	0	
2006	BY	1	Balance After Removal	Spreadable Area		47.4	10	-54	206	

Year	Field ID	Sub ID	Nutrient Needs	Crop	Yield Goal	Acres	N	P ₂ O ₅	K ₂ O
2004	CN	2	Crop Fertilizer Recs	Alfalfa	6 Ton	29.2	0	80	300
2004	CN	2	Crop Nutrient Removal	Alfalfa	6 Ton	29.2	270	78	300

Date	Field ID	Sub ID	Nutrient Activity	Source	Equipment/Method	Rate	Acres	N	P ₂ O ₅	K ₂ O
May 04	CN	2	Fertilizer App (1-yr P)	18-46-0	Surface broadcast	173 Lb	29.2	31	80	0
May 04	CN	2	Fertilizer App (1-yr K)	0-0-60	Surface broadcast	500 Lb	29.2	0	0	300
2004	CN	2	Total Nutrients Applied	Spreadable Area			29.2	31	80	300
2004	CN	2	Balance After Recs	Spreadable Area			29.2	0 ^a	0	0
2004	CN	2	Balance After Removal	Spreadable Area			29.2	-239	2	0

Year	Field ID	Sub ID	Nutrient Needs	Crop	Yield Goal	Acres	N	P ₂ O ₅	K ₂ O
2005	CN	2	Crop Fertilizer Recs	Corn	145 Bu	29.2	70	55	60
2005	CN	2	Crop Nutrient Removal	Corn	145 Bu	29.2	131	54	39

Date	Field ID	Sub ID	Nutrient Activity	Source	Equipment/Method	Rate	Acres	N	P ₂ O ₅	K ₂ O
Oct 04	CN	2	Manure App	#5 ADL New	Liquid box	4,000 Gal	37.5	32	60	116
Apr 05	CN	2	Fertilizer App (1-yr N)	28-0-0	Row starter 2x2 placement	10 Gal	29.2	30	0	0
2005	CN	2	Total Nutrients Applied	Spreadable Area			29.2	71	77	149
2005	CN	2	Balance After Recs	Spreadable Area			29.2	1	22	89
2005	CN	2	Balance After Removal	Spreadable Area			29.2	-60	25	110

Year	Field ID	Sub ID	Nutrient Needs	Crop	Yield Goal	Acres	N	P ₂ O ₅	K ₂ O
2006	CN	2	Crop Fertilizer Recs	Alfalfa seeding	3 Ton	29.2	0	40	165
2006	CN	2	Crop Nutrient Removal	Alfalfa seeding	3 Ton	29.2	135	39	150

Date	Field ID	Sub ID	Nutrient Activity	Source	Equipment/Method	Rate	Acres	N	P ₂ O ₅	K ₂ O
2006	CN	2	Residual Manure N				29.2	14		
Apr 06	CN	2	Fertilizer App (1-yr P)	18-46-0	Surface broadcast/incorporate	39 Lb	29.2	7	18	0
Apr 06	CN	2	Fertilizer App (1-yr K)	0-0-60	Surface broadcast/incorporate	126 Lb	29.2	0	0	76
2006	CN	2	Total Nutrients Applied	Spreadable Area			29.2	21	18	76
2006	CN	2	Balance After Recs	Spreadable Area			29.2	0 ^a	0	0
2006	CN	2	Balance After Removal	Spreadable Area			29.2	-114	4	36

Year	Field ID	Sub ID	Nutrient Needs	Crop	Yield Goal	Acres	N	P ₂ O ₅	K ₂ O
2004	CN	5	Crop Fertilizer Recs	Soybean	50 Bu	5.2	0	40	130
2004	CN	5	Crop Nutrient Removal	Soybean	50 Bu	5.2	190	40	70

Date	Field ID	Sub ID	Nutrient Activity	Source	Equipment/Method	Rate	Acres	N	P ₂ O ₅	K ₂ O
Apr 04	CN	5	Manure App (1-yr P)	Weekly Haul	V Bottom	22.5 Ton	5.3	27	41	77
Apr 04	CN	5	Fertilizer App (1-yr K)	0-0-60	Surface broadcast/incorporate	86 Lb	5.2	0	0	52
2004	CN	5	Total Nutrients Applied	Spreadable Area			5.2	28	42	130
2004	CN	5	Balance After Recs	Spreadable Area			5.2	0 ^a	2	0
2004	CN	5	Balance After Removal	Spreadable Area			5.2	-162	2	60

Year	Field ID	Sub ID	Nutrient Needs	Crop	Yield Goal	Acres	N	P ₂ O ₅	K ₂ O
2005	CN	5	Crop Fertilizer Recs	Corn	145 Bu	5.2	140	55	100
2005	CN	5	Crop Nutrient Removal	Corn	145 Bu	5.2	131	54	39

Date	Field ID	Sub ID	Nutrient Activity	Source	Equipment/Method	Rate	Acres	N	P ₂ O ₅	K ₂ O
2005	CN	5	Residual Manure N				5.2	11		
Feb 05	CN	5	Manure App	Weekly Haul	V Bottom	20 Ton	2.5	20	36	68
Feb 05	CN	5	Manure App	Mon.Wed. Fri. Haul	V Bottom	20 Ton	2.5	28	36	114
May 05	CN	5	Manure App	Weekly Haul	V Bottom	20 Ton	5.0	20	36	68
May 05	CN	5	Fertilizer App (1-yr N)	28-0-0	Row starter 2x2 placement	29 Gal	5.2	87	0	0
2005	CN	5	Total Nutrients Applied	Spreadable Area			5.2	140	69	153
2005	CN	5	Balance After Recs	Spreadable Area			5.2	0	16	53
2005	CN	5	Balance After Removal	Spreadable Area			5.2	10	17	174

Year	Field ID	Sub ID	Nutrient Needs	Crop	Yield Goal	Acres	N	P ₂ O ₅	K ₂ O
2006	CN	5	Crop Fertilizer Recs	Alfalfa seeding	3 Ton	5.2	0	40	210
2006	CN	5	Crop Nutrient Removal	Alfalfa seeding	3 Ton	5.2	135	39	150

Date	Field ID	Sub ID	Nutrient Activity	Source	Equipment/Method	Rate	Acres	N	P ₂ O ₅	K ₂ O
2006	CN	5	Residual Manure N				5.2	24		
Mar 06	CN	5	Manure App (1-yr P)	Weekly Haul	V Bottom	22.5 Ton	5.3	27	41	77
Mar 06	CN	5	Fertilizer App (1-yr K)	0-0-60	Surface broadcast/incorporate	131 Lb	5.2	0	0	79
2006	CN	5	Total Nutrients Applied	Spreadable Area			5.2	52	42	157
2006	CN	5	Balance After Recs	Spreadable Area			5.2	0 ^a	18	0
2006	CN	5	Balance After Removal	Spreadable Area			5.2	-83	20	181

Year	Field ID	Sub ID	Nutrient Needs	Crop	Yield Goal	Acres	N	P ₂ O ₅	K ₂ O	
2004	CO	N	Crop Fertilizer Recs	Soybean	55 Bu	36.4	0	0	100	
2004	CO	N	Crop Nutrient Removal	Soybean	55 Bu	36.4	209	44	77	
Date	Field ID	Sub ID	Nutrient Activity	Source	Equipment/Method	Rate	Acres	N	P ₂ O ₅	K ₂ O
Apr 04	CO	N	Fertilizer App (1-yr K)	0-0-60	Surface broadcast/incorporate	166 Lb	36.4	0	0	100
2004	CO	N	Total Nutrients Applied	Spreadable Area			36.4	0	0	100
2004	CO	N	Balance After Recs	Spreadable Area			36.4	0	0	0
2004	CO	N	Balance After Removal	Spreadable Area			36.4	-209	-44	23
Year	Field ID	Sub ID	Nutrient Needs	Crop	Yield Goal	Acres	N	P ₂ O ₅	K ₂ O	
2005	CO	N	Crop Fertilizer Recs	Tomato, processing	30 Ton	36.4	80	90	205	
2005	CO	N	Crop Nutrient Removal	Tomato, processing	30 Ton	36.4	120	24	210	
Date	Field ID	Sub ID	Nutrient Activity	Source	Equipment/Method	Rate	Acres	N	P ₂ O ₅	K ₂ O
Apr 05	CO	N	Manure App	Weekly Haul	V Bottom	60 Ton	19.2	72	108	204
Apr 05	CO	N	Manure App	Mon.Wed. Fri. Haul	V Bottom	60 Ton	17.3	102	108	342
2005	CO	N	Total Nutrients Applied	Spreadable Area			36.4	86	108	270
2005	CO	N	Balance After Recs	Spreadable Area			36.4	6	18	65
2005	CO	N	Balance After Removal	Spreadable Area			36.4	-34	84	83
Year	Field ID	Sub ID	Nutrient Needs	Crop	Yield Goal	Acres	N	P ₂ O ₅	K ₂ O	
2006	CO	N	Crop Fertilizer Recs	Corn silage	27 Ton	36.4	195	0	240	
2006	CO	N	Crop Nutrient Removal	Corn silage	27 Ton	36.4	254	89	216	
Date	Field ID	Sub ID	Nutrient Activity	Source	Equipment/Method	Rate	Acres	N	P ₂ O ₅	K ₂ O
2006	CO	N	Residual Manure N				36.4	33		
Nov 05	CO	N	Manure App	Earthen storage #2	Irrigate	27,000 Gal	33.3	24	22	124
Apr 06	CO	N	Fertilizer App (1-yr N)	28-0-0	Row starter 2x2 placement	47 Gal	36.4	140	0	0
Apr 06	CO	N	Fertilizer App (1-yr K)	0-0-60	Surface broadcast/incorporate	103 Lb	36.4	0	0	62
2006	CO	N	Total Nutrients Applied	Spreadable Area			36.4	195	20	175
2006	CO	N	Balance After Recs	Spreadable Area			36.4	0	38	0
2006	CO	N	Balance After Removal	Spreadable Area			36.4	-59	15	42

Field Nutrient Balance

Output from MMP by Selecting "Field Nutrient Balance" under Tools, then Reports

Plan File: S:\Sample Dairy CNMP\Example Dairy Use Aug 11.mmp

Operation: Michigan Sample Dairy CNMP

State: Michigan

Last Saved: 11/3/2004

Init. File Rev: 3/4/2004

Year	Field ID	Sub ID	Size Acres ¹	Crop	Yield Goal /Acre	Fertilizer Recs ²			Nutrients Applied ³			Balance After Recs ⁴			After Removal ⁵	
						N Lb/A	P ₂ O ₅ Lb/A	K ₂ O Lb/A	N Lb/A	P ₂ O ₅ Lb/A	K ₂ O Lb/A	N Lb/A	P ₂ O ₅ Lb/A	K ₂ O Lb/A	P ₂ O ₅ Lb/A	K ₂ O Lb/A
2004	BK	1	21.7	Soybean	35	0	30	75	22	33	84	0 ^a	3	9	5	35
2005	BK	1	21.7	Wheat	50	40	70	45	26	67	36	-4†	0	0	41	53
2006	BK	1	21.7	Corn	135	155	50	65	152	51	65	1†	1	0	42	81
Total	BK	1	21.7			195	150	185	200	151	185					
2004	BK	4	16.9	Soybean	35	0	30	105	29	31	98	0 ^a	1	-7	3	49
2005	BK	4	16.9	Corn	135	125	50	95	128	49	93	13†	0	-2	2	106
2006	BK	4	16.9	Soybean	35	0	30	105	12	30	105	0 ^a	0	0	4	162
Total	BK	4	16.9			125	110	305	169	110	296					
2004	BY	1	47.4	Corn silage	25	175	0	270	176	0	270	1	0	0	-83	70
2005	BY	1	47.4	Soybean	50	0	0	140	0	0	140	0	0	0	-40	140
2006	BY	1	47.4	Corn	145	140	0	105	140	0	105	0	0	0	-54	206
Total	BY	1	47.4			315	0	515	316	0	515					
2004	CN	2	29.2	Alfalfa	6	0	80	300	31	80	300	0 ^a	0	0	2	0
2005	CN	2	29.2	Corn	145	70	55	60	71	77	149	1	22	89	25	110
2006	CN	2	29.2	Alfalfa seeding	3	0	40	165	7	18	76	0 ^a	0	0	4	36
Total	CN	2	29.2			70	175	525	109	175	525					
2004	CN	5	5.2	Soybean	50	0	40	130	28	42	130	0 ^a	2	0	2	60
2005	CN	5	5.2	Corn	145	140	55	100	129	69	153	0†	16	53	17	174
2006	CN	5	5.2	Alfalfa seeding	3	0	40	210	28	42	157	0 ^a	18	0	20	181
Total	CN	5	5.2			140	135	440	185	153	440					
2004	CO	N	36.4	Soybean	55	0	0	100	0	0	100	0	0	0	-44	23
2005	CO	N	36.4	Tomato, processing	30	80	90	205	86	108	270	6	18	65	84	83
2006	CO	N	36.4	Corn silage	27	195	0	240	162	20	175	0†	38	0	15	42
Total	CO	N	36.4			275	90	545	248	128	545					

Notes

¹ If a field has a non-spreadable area, it is listed separately following the field's spreadable area.

Year	Field ID	Sub ID	Size Acres ¹	Crop	Yield Goal /Acre	Fertilizer Recs ²			Nutrients Applied ³			Balance After Recs ⁴			After Removal ⁵	
						N	P ₂ O ₅	K ₂ O	N	P ₂ O ₅	K ₂ O	N	P ₂ O ₅	K ₂ O	P ₂ O ₅	K ₂ O

- ² Fertilizer Recs are the crop fertilizer recommendations. The N rec accounts for any N credit from previous legume crop.
- ³ Nutrients Applied are the nutrients expected to be available to the crop from that year's manure applications plus nutrients from that year's commercial fertilizer applications. With a double crop year, the total nutrients applied for both crops and the year's balances are listed on the second crop's line.
- ⁴ Nutrients Applied minus Fertilizer Recs through indicated crop year. With N, includes amount of residual N expected to become available that year from prior years' manure applications. Negative values indicate a potential need to apply additional nutrients.
- ⁵ Nutrients Applied minus amount removed by harvested portion of crop through indicated crop year.
- ☒ Indicates a custom fertilizer recommendation in the Fertilizer Recs columns.
- ^a Indicates in the Balance After Recs N column that the legume crop is assumed to utilize up to 150 pounds of the supplied N.
- † Indicates in the Balance After Recs N column that the value includes residual N expected to become available that year from prior years' manure applications.

Manure Application Planning Calendar - Output from MMP by Selecting Planning Calendar #1 from Tools, then Custom

Plan File: C:\Example Dairy Use Aug 11.mmp

Operation: Michigan Sample Dairy CNMP

Field	Subfield	Total Acres	Spread Acres	Driving Distance	Soil Type	Crop (2004)	Apr 2004	May 2004	Jun 2004	Jul 2004	Aug 2004	Sep 2004	Oct 2004	Nov 2004	Dec 2004	Jan 2005	Feb 2005	Mar 2005
BG	1	10.3	10.3	1	Branch LS (25B 1-4%)	Alfalfa												
BG	4	16.8	16.8	1	Hatmaker L (7B 1-4%)	Soybean						26						
Bg	2	14.3	14.3	1	Branch LS (25B 1-4%)	Corn												
Bg	3	26	26	1	Branch LS (25B 1-4%)	Alfalfa								44				
BK	1	21.7	21.7	4	Kidder FSL (2B 2-6%)	Soybean	20	20										
BK	2	11.3	11.3	4	Locke FSL (15B 1-4%)	Soybean												
BK	3	16.8	16.8	4	Locke FSL (15B 1-4%)	Soybean												
BK	4	16.9	16.9	4	Locke FSL (15B 1-4%)	Soybean	29											
BK	5	54	54	4	Elmdale FSL (11B 0-6%)	Soybean						43						
BK	6	5.9	5.9	4	Elmdale FSL (11B 0-6%)	Soybean						5						
BK	7	3	3	4	Hillsdale FSL (5B 2-6%)	Soybean						3						
BM	2	20	20	1.4	Locke FSL (15B 1-4%)	Corn silage				10	10	10		19				
BM	1	27.5	27.5	1	Locke FSL (15B 1-4%)	Alfalfa												
BM3	a	10	10	4	Fox SL (27A 0-2%)	Corn	22											
BY	1	47.4	47.4	1.5	Fox SL (27A 0-2%)	Corn silage												
CN	1S	19.5	19.5	4	Fox SL (27A 0-2%)	Alfalfa												
CN	1N	20	20	4	Fox SL (27A 0-2%)	Alfalfa												
CN	2	29.2	29.2	4	Ormas LS (33B 0-6%)	Alfalfa							25					
CN	3	14.1	14.1	4	Ormas LS (33B 0-6%)	Alfalfa												
CN	4	6.7	6.7	4	Fox SL (27A 0-2%)	Alfalfa												
CN	5	5.2	5.2	4	Fox SL (27B 2-6%)	Soybean	12										10	
CO	N	36.4	36.4	0.2	Oshtemo SL (4B 0-6%)	Soybean												
CO	S	40	40	0.2	Fox SL (27A 0-2%)	Corn												
CS	1	45.7	45.7	2	Locke FSL (15B 1-4%)	Wheat												
CS	2	6.8	0.1	8	Fox SL (27A 0-2%)	Alfalfa												
CS	3	3.6	0.1	2	Fox SL (27A 0-2%)	Alfalfa												
D	1	50	50	3	Teasdale FSL (12A 0-3%)	Corn	97											
D	2	36.9	36.9	3	Teasdale FSL (12A 0-3%)	Corn												
D	3	45	45	3	Teasdale FSL (12A 0-3%)	Corn												