

Waste Application Worksheet

Westridge Dairy

Operation ID:

Field # Field Name Field Acres Application Acres

Crop Year Crop Yield Goal Planned Application Acres

	Nitrogen	Phosphorus	Potassium
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	N	P ₂ O ₅	K ₂ O
Crop Removal per bushel	3.75	0.85	1.30
Crop Removal(needs) /acre	154	35	53

LMFA 900.803 m) (6)

Nitrogen Credits

Commercial Fertilizer

	0	0	0
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LMFA 900.803 m) (7)

Legume

	0	<input type="text" value="Corn Silage"/>	
		Previous Crop	

LMFA 900.803 m) (7)

Manure Applications 2007

	0	Mineralization Rate = 12.5 %	
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LMFA 900.803 m) (7)

2008

	0	Mineralization Rate = 25 %	
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LMFA 900.803 m) (7)

2009

	9	Mineralization Rate = 50 %	
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LMFA 900.803 m) (7)

Total Nitrogen Credits

	9		
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LMFA 900.803 m) (7)

	Nitrogen	Phosphorus	Potassium
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	145	35	53
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LMFA 900.803 m) (6)

Crop Needs after Credits

Sample Results From:

If Book: Source MWPS 18

Manure Source: Solid w/sand Bedding

	7.3	2.5	4.9
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Plant Ammonia Nitrogen / ton

	2.5		
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Manure Application Method

Ammonia Loss During Application

% Source: MWPS 18 Table 10-2

LMFA 900.803 m) (4)

Mineralization Rate - Application Year

Source: MWPS 18 Table 10-5

Plant Available Nitrogen / ton

	3.60		
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Application Rate Based on

Tons/Acre

LMFA 900.803 m) (8)

Nitrogen

	40.2		
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Phosphorus

	14.2		
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Current Bray P1 Soil Test lbs/Acre

	99		
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LMFA 900.803 m) (1)

At Nitrogen Rate P1 Buildup Equals

	7.1		
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of Apps at N rate to reach 300 P1

	28		
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Target Application Rate Per Acre

	40.2	Tons	Nitrogen Rate
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Target Application Rate Entire Field

	421	Tons	
--	-----	------	--

	Nitrogen	Phosphorus	Potassium
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Available Manure Nutrients Applied

	145	99	197
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Available Nutrients from all sources

	154	99	197
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Over (Under) application of nutrients

	0	64	144
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Nitrogen Mineralization Credit for Future Years

Mineralized Nitrogen / Crop Year	Nitrogen Credit/Acre	Crop Year	Mineralization Rate
Second Year Following Application	25	2011	50% of 1.22 / ton
Third Year Following Application	12	2012	25% of 1.22 / ton
Fourth Year Following Application	6	2013	12.5% of 1.22 / ton

Waste Application Worksheet

Westridge Dairy

Operation ID:

Field # Field Name Field Acres Application Acres
 Crop Year Crop Yield Goal Planned Application Acres

	Nitrogen	Phosphorus	Potassium
	N	P ₂ O ₅	K ₂ O

Crop Removal per bushel	1.20	0.43	0.28	
Crop Removal(needs) /acre	160	57	37	LMFA 900.803 m) (6)

Nitrogen Credits

Commercial Fertilizer	0	0	0	LMFA 900.803 m) (7)
Legume	40	<input type="text" value="Soybeans"/>		LMFA 900.803 m) (7)
		Previous Crop		
Manure Applications 2007	0	Mineralization Rate = 12.5 %		LMFA 900.803 m) (7)
2008	0	Mineralization Rate = 25 %		LMFA 900.803 m) (7)
2009	28	Mineralization Rate = 50 %		LMFA 900.803 m) (7)
Total Nitrogen Credits	68			LMFA 900.803 m) (7)

Crop Needs after Credits

	Nitrogen	Phosphorus	Potassium
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	92	57	37	LMFA 900.803 m) (6)
Sample Results From:	<small>If Book: Source MWPS 18</small>			
Manure Source: Lagoon	4.0	3.0	4.0	
Plant Ammonia Nitrogen / 1000 gallons	2.0			

Manure Application Method

Ammonia Loss During Application % Source: MWPS 18 Table 10-2 LMFA 900.803 m) (4)

Mineralization Rate - Application Year Source: MWPS 18 Table 10-5

Plant Available Nitrogen / 1000 gallons

Application Rate Based on

Gallons/Acre

Nitrogen	36,063.0			LMFA 900.803 m) (8)
Phosphorus	19,063.3			
Current Bray P1 Soil Test lbs/Acre	194			LMFA 900.803 l)
At Nitrogen Rate P1 Buildup Equals	5.7			
# of Apps at N rate to reach 300 P1	19			

Target Application Rate Per Acre **Gallons** Nitrogen Rate

Target Application Rate Entire Field **Gallons**

	Nitrogen	Phosphorus	Potassium
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Available Manure Nutrients Applied	92	108	144
Available Nutrients from all sources	160	108	144
Over (Under) application of nutrients	0	51	107

Nitrogen Mineralization Credit for Future Years

Mineralized Nitrogen / Crop Year	Nitrogen Credit/Acre	Crop Year	Mineralization Rate
Second Year Following Application	11	2011	50% of 0.60 /1000 gal
Third Year Following Application	5	2012	25% of 0.60 /1000 gal
Fourth Year Following Application	3	2013	12.5% of 0.60 /1000 gal

Waste Application Worksheet

Westridge Dairy

Operation ID:

Field #

Field Name

Field Acres

Application Acres

Crop Year

Crop

Yield Goal

Planned Application Acres

	Nitrogen	Phosphorus	Potassium
	N	P ₂ O ₅	K ₂ O

Crop Removal per bushel
Crop Removal(needs) /acre

1.20	0.43	0.28
160	57	37

LMFA 900.803 m) (6)

Nitrogen Credits

Commercial Fertilizer

0	0	0
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LMFA 900.803 m) (7)

Legume

40	Soybeans	
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LMFA 900.803 m) (7)

Previous Crop

Manure Applications 2007
 2008
 2009

0
0
28

Mineralization Rate = 12.5 %
Mineralization Rate = 25 %
Mineralization Rate = 50 %

LMFA 900.803 m) (7)

LMFA 900.803 m) (7)

LMFA 900.803 m) (7)

Total Nitrogen Credits

68

LMFA 900.803 m) (7)

	Nitrogen	Phosphorus	Potassium
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Crop Needs after Credits

92	57	37
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LMFA 900.803 m) (6)

Sample Results From:

If Book: Source MWPS 18

Manure Source: Solid w/sand Bedding

7.3	2.5	4.9
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Plant Ammonia Nitrogen / ton

2.5

Manure Application Method

Ammonia Loss During Application

% Source: MWPS 18 Table 10-2

LMFA 900.803 m) (4)

Mineralization Rate - Application Year

 Source: MWPS 18 Table 10-5

Plant Available Nitrogen / ton

3.84

Application Rate Based on

Tons/Acre

Nitrogen

LMFA 900.803 m) (8)

Phosphorus

LMFA 900.803 l)

Current Bray P1 Soil Test lbs/Acre

At Nitrogen Rate P1 Buildup Equals

of Apps at N rate to reach 300 P1

Target Application Rate Per Acre

Tons

Nitrogen Rate

Target Application Rate Entire Field

Tons

	Nitrogen	Phosphorus	Potassium
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Available Manure Nutrients Applied

92	58	117
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Available Nutrients from all sources

160	58	117
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Over (Under) application of nutrients

0	1	80
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Nitrogen Mineralization Credit for Future Years

Mineralized Nitrogen / Crop Year	Nitrogen Credit/Acre	Crop Year	Mineralization Rate
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Second Year Following Application

2011

50% of 1.47 / ton

Third Year Following Application

2012

25% of 1.47 / ton

Fourth Year Following Application

2013

12.5% of 1.47 / ton

Waste Application Worksheet

Westridge Dairy

Operation ID:

Field # Field Name Field Acres Application Acres
 Crop Year Crop Yield Goal Planned Application Acres

	Nitrogen	Phosphorus	Potassium
	N	P ₂ O ₅	K ₂ O

Crop Removal per bushel
 Crop Removal(needs) /acre

6.00	2.65	7.00
150	66	175

LMFA 900.803 m) (6)

Nitrogen Credits

Commercial Fertilizer

0	0	0
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LMFA 900.803 m) (7)

Legume

40	Soybeans	
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LMFA 900.803 m) (7)

Previous Crop

Manure Applications 2007

0	Mineralization Rate = 12.5 %	
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LMFA 900.803 m) (7)

2008

0	Mineralization Rate = 25 %	
---	----------------------------	--

LMFA 900.803 m) (7)

2009

27	Mineralization Rate = 50 %	
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LMFA 900.803 m) (7)

Total Nitrogen Credits

67		
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LMFA 900.803 m) (7)

	Nitrogen	Phosphorus	Potassium
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Crop Needs after Credits

83	66	175
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LMFA 900.803 m) (6)

Sample Results From:

If Book: Source MWPS 18

Manure Source: Solid w/sand Bedding

7.3	2.5	4.9
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Plant Ammonia Nitrogen / ton

2.5		
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Manure Application Method

Broadcast Solid, incorporated within 12 hours

Ammonia Loss During Application

% Source: MWPS 18 Table 10-2

LMFA 900.803 m) (4)

Mineralization Rate - Application Year

Source: MWPS 18 Table 10-5

Plant Available Nitrogen / ton

3.60		
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Application Rate Based on

Tons/Acre

Nitrogen

23.1

LMFA 900.803 m) (8)

Phosphorus

27.0

LMFA 900.803 1)

Current Bray P1 Soil Test lbs/Acre

0

At Nitrogen Rate P1 Buildup Equals

-1.1

of Apps at N rate to reach 300 P1

0

Soil Test Phosphorus Decreasing

Target Application Rate Per Acre

23.1	Tons	Nitrogen Rate
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Target Application Rate Entire Field

318	Tons
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	Nitrogen	Phosphorus	Potassium
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Available Manure Nutrients Applied

83	57	113
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Available Nutrients from all sources

150	57	113
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Over (Under) application of nutrients

0	-10	-62
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Nitrogen Mineralization Credit for Future Years

Mineralized Nitrogen / Crop Year	Nitrogen Credit/Acre	Crop Year	Mineralization Rate
Second Year Following Application	14	2011	50% of 1.22 / ton
Third Year Following Application	7	2012	25% of 1.22 / ton
Fourth Year Following Application	4	2013	12.5% of 1.22 / ton

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Operation ID:

Field # Field Name Field Acres Application Acres
 Crop Year Crop Yield Goal Planned Application Acres

	Nitrogen	Phosphorus	Potassium
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	N	P ₂ O ₅	K ₂ O
Crop Removal per bushel	1.20	0.43	0.28
Crop Removal(needs) /acre	170	61	40

LMFA 900.803 m) (6)

Nitrogen Credits

Commercial Fertilizer

	0	0	0
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LMFA 900.803 m) (7)

Legume

40		Soybeans	
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LMFA 900.803 m) (7)

Previous Crop

Manure Applications 2007

0		Mineralization Rate = 12.5 %	
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LMFA 900.803 m) (7)

2008

0		Mineralization Rate = 25 %	
---	--	----------------------------	--

LMFA 900.803 m) (7)

2009

27		Mineralization Rate = 50 %	
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LMFA 900.803 m) (7)

Total Nitrogen Credits

67			
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LMFA 900.803 m) (7)

	Nitrogen	Phosphorus	Potassium
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Crop Needs after Credits

	103	61	40
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LMFA 900.803 m) (6)

Sample Results From:

If Book: Source MWPS 18

Manure Source: Solid w/sand Bedding

7.3	2.5	4.9	
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Plant Ammonia Nitrogen / ton

2.5			
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Manure Application Method

Broadcast Solid, incorporated within 12 hours

Ammonia Loss During Application

% Source: MWPS 18 Table 10-2

LMFA 900.803 m) (4)

Mineralization Rate - Application Year

Source: MWPS 18 Table 10-5

Plant Available Nitrogen / ton

3.60			
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Application Rate Based on

Tons/Acre

LMFA 900.803 m) (8)

Nitrogen

28.7			
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Phosphorus

24.9			
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Current Bray P1 Soil Test lbs/Acre

126			
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LMFA 900.803 l)

At Nitrogen Rate P1 Buildup Equals

1.0			
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of Apps at N rate to reach 300 P1

168			
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Target Application Rate Per Acre

28.7	Tons		Nitrogen Rate
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Target Application Rate Entire Field

271	Tons		
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	Nitrogen	Phosphorus	Potassium
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Available Manure Nutrients Applied

	103	70	141
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Available Nutrients from all sources

	170	70	141
--	-----	----	-----

Over (Under) application of nutrients

	0	9	101
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Nitrogen Mineralization Credit for Future Years

Mineralized Nitrogen / Crop Year	Nitrogen Credit/Acre	Crop Year	Mineralization Rate
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Second Year Following Application

18		2011	50% of 1.22 / ton
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Third Year Following Application

9		2012	25% of 1.22 / ton
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Fourth Year Following Application

4		2013	12.5% of 1.22 / ton
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Waste Application Worksheet

Westridge Dairy

Operation ID:

Field # Field Name Field Acres Application Acres
 Crop Year Crop Yield Goal Planned Application Acres

	Nitrogen	Phosphorus	Potassium
	N	P ₂ O ₅	K ₂ O

Crop Removal per bushel	6.00	2.65	7.00	
Crop Removal(needs) /acre	150	66	175	LMFA 900.803 m) (6)

Nitrogen Credits

Commercial Fertilizer	0	0	0	LMFA 900.803 m) (7)
Legume	40	Soybeans		LMFA 900.803 m) (7)
		Previous Crop		
Manure Applications 2007	0	Mineralization Rate = 12.5 %		LMFA 900.803 m) (7)
2008	0	Mineralization Rate = 25 %		LMFA 900.803 m) (7)
2009	27	Mineralization Rate = 50 %		LMFA 900.803 m) (7)
Total Nitrogen Credits	67			LMFA 900.803 m) (7)

	Nitrogen	Phosphorus	Potassium
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Crop Needs after Credits	83	66	175	LMFA 900.803 m) (6)
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Sample Results From:

Manure Source: Solid w/sand Bedding

Plant Ammonia Nitrogen / ton

Manure Application Method

Ammonia Loss During Application

Mineralization Rate - Application Year

Plant Available Nitrogen / ton

If Book: Source MWPS 18

7.3	2.5	4.9
2.5		

Broadcast Solid, incorporated within 12 hours

3% Source: MWPS 18 Table 10-2

0.25 Source: MWPS 18 Table 10-5

3.60

Application Rate Based on

Tons/Acre

Nitrogen	23.1
Phosphorus	27.0
Current Bray P1 Soil Test lbs/Acre	70
At Nitrogen Rate P1 Buildup Equals	-1.1
# of Apps at N rate to reach 300 P1	0

Soil Test Phosphorus Decreasing

Target Application Rate Per Acre

Tons Nitrogen Rate

Target Application Rate Entire Field

Tons

	Nitrogen	Phosphorus	Potassium
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Available Manure Nutrients Applied	83	57	113
Available Nutrients from all sources	150	57	113
Over (Under) application of nutrients	0	-10	-62

Nitrogen Mineralization Credit for Future Years

Mineralized Nitrogen / Crop Year	Nitrogen Credit/Acre	Crop Year	Mineralization Rate
Second Year Following Application	<input style="width: 40px;" type="text" value="14"/>	2011	50% of 1.22 / ton
Third Year Following Application	<input style="width: 40px;" type="text" value="7"/>	2012	25% of 1.22 / ton
Fourth Year Following Application	<input style="width: 40px;" type="text" value="4"/>	2013	12.5% of 1.22 / ton