

Waste Application Worksheet

Westridge Dairy

Operation ID: 55078

Field # 13

Field Name Wood Bridge

Field Acres 15.70

Application Acres 10.47

Crop Year 2010

Crop Soybeans

Yield Goal 41

Planned Application Acres 10.47

Nitrogen

Phosphorus

Potassium

N

P₂O₅

K₂O

Crop Removal per bushel
Crop Removal(needs) /acre

3.75

0.85

1.30

154

35

53

LMFA 900.803 m) (6)

Nitrogen Credits

Commercial Fertilizer

0

0

0

LMFA 900.803 m) (7)

Legume

0

Corn Silage

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

9

Mineralization Rate = 50 %

LMFA 900.803 m) (7)

Total Nitrogen Credits

9

LMFA 900.803 m) (7)

Nitrogen

Phosphorus

Potassium

Crop Needs after Credits

145

35

53

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

Plant Ammonia Nitrogen / ton

2.5

Manure Application Method

Broadcast Solid, incorporated within 12 hours

Ammonia Loss During Application

3 %

Source: MWPS 18 Table 10-2

LMFA 900.803 m) (4)

Mineralization Rate - Application Year

0.25

Source: MWPS 18 Table 10-5

Plant Available Nitrogen / ton

3.60

Application Rate Based on

Tons/Acre

Nitrogen

40.2

LMFA 900.803 m) (8)

Phosphorus

14.2

Current Bray P1 Soil Test lbs/Acre

99

LMFA 900.803 m)

At Nitrogen Rate P1 Buildup Equals

7.1

of Apps at N rate to reach 300 P1

28

Target Application Rate Per Acre

40.2

Tons

Nitrogen Rate

Target Application Rate Entire Field

421

Tons

Nitrogen

Phosphorus

Potassium

Available Manure Nutrients Applied

145

99

197

Available Nutrients from all sources

154

99

197

Over (Under) application of nutrients

0

64

144

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: 55078

Field # 14 Field Name Ruez Park South 30 Field Acres 28.82 Application Acres 23.38
Crop Year 2010 Crop Corn Grain Yield Goal 133 Planned Application Acres 21.30

Nitrogen Phosphorus Potassium

N	P ₂ O ₅	K ₂ O
1.20	0.43	0.28
160	57	37

Crop Removal per bushel
Crop Removal(needs) /acre

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 %

LMFA 900.803 m) (7)

Mineralization Rate = 25 %

LMFA 900.803 m) (7)

Mineralization Rate = 50 %

LMFA 900.803 m) (7)

Total Nitrogen Credits

68

LMFA 900.803 m) (7)

Nitrogen Phosphorus Potassium

92	57	37
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LMFA 900.803 m) (6)

Sample Results From:

Manure Source: Lagoon

If Book: Source MWPS 18

4.0	3.0	4.0
2.0		

Plant Ammonia Nitrogen / 1000 gallons

Manure Application Method

Broadcast Solid, incorporated within 12 hours

Ammonia Loss During Application

3 %

Source: MWPS 18 Table 10-2

LMFA 900.803 m) (4)

Mineralization Rate - Application Year

0.30

Source: MWPS 18 Table 10-5

Plant Available Nitrogen / 1000 gallons

2.54

Application Rate Based on

Gallons/Acre

LMFA 900.803 m) (8)

Nitrogen

36,063.0

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

36,063.0

Gallons

Nitrogen Rate

Target Application Rate Entire Field

768,142

Gallons

Nitrogen Phosphorus Potassium

92	108	144
160	108	144
0	51	107

Available Manure Nutrients Applied

Available Nutrients from all sources

Over (Under) application of nutrients

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: 55078

Field # 14

Field Name Ruez Park South 30

Field Acres 28.82

Application Acres 23.38

Crop Year 2010

Crop Corn Grain

Yield Goal 133

Planned Application Acres 2.08

Crop Removal per bushel
Crop Removal(needs) /acre

Nitrogen

Phosphorus

Potassium

N

P₂O₅

K₂O

1.20

0.43

0.28

160

57

37

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

28

Mineralization Rate = 50 %

LMFA 900.803 m) (7)

Total Nitrogen Credits

68

LMFA 900.803 m) (7)

Nitrogen

Phosphorus

Potassium

92

57

37

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

Plant Ammonia Nitrogen / ton

2.5

Manure Application Method

Broadcast Solid, incorporated within 12 hours

Ammonia Loss During Application

3 %

Source: MWPS 18 Table 10-2

LMFA 900.803 m) (4)

Mineralization Rate - Application Year

0.30

Source: MWPS 18 Table 10-5

Plant Available Nitrogen / ton

3.84

Application Rate Based on

Tons/Acre

Nitrogen

23.8

LMFA 900.803 m) (8)

Phosphorus

23.3

Current Bray P1 Soil Test lbs/Acre

194

LMFA 900.803 l)

At Nitrogen Rate P1 Buildup Equals

0.1

of Apps at N rate to reach 300 P1

795

Target Application Rate Per Acre

23.8

Tons

Nitrogen Rate

Target Application Rate Entire Field

50

Tons

Nitrogen

Phosphorus

Potassium

Available Manure Nutrients Applied

92

58

117

Available Nutrients from all sources

160

58

117

Over (Under) application of nutrients

0

1

80

Nitrogen Mineralization Credit for Future Years

Mineralized Nitrogen / Crop Year

Nitrogen Credit/Acre

Crop Year

Mineralization Rate

Second Year Following Application

17

2011

50% of 1.47 / ton

Third Year Following Application

9

2012

25% of 1.47 / ton

Fourth Year Following Application

4

2013

12.5% of 1.47 / ton

Waste Application Worksheet

Westridge Dairy

Operation ID: 55078

Field # 16

Field Name Sievers 13

Field Acres 13.78

Application Acres 13.78

Crop Year 2010

Crop Corn Silage

Yield Goal 25

Planned Application Acres 13.78

Nitrogen

Phosphorus

Potassium

N

P₂O₅

K₂O

Crop Removal per bushel
Crop Removal(needs) /acre

6.00
150

2.65
66

7.00
175

LMFA 900.803 m) (5)

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
2008
2009

0
0
27

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

67

LMFA 900.803 m) (7)

Nitrogen

Phosphorus

Potassium

Crop Needs after Credits

83

66

175

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

Plant Ammonia Nitrogen / ton

2.5

Manure Application Method

Broadcast Solid, incorporated within 12 hours

Ammonia Loss During Application

3%

Source: MWPS 18 Table 10-2

LMFA 900.803 m) (4)

Mineralization Rate - Application Year

0.25

Source: MWPS 18 Table 10-5

Plant Available Nitrogen / ton

3.60

Application Rate Based on

Tons/Acre

Nitrogen

23.1

Phosphorus

27.0

Current Bray P1 Soil Test lbs/Acre

0

LMFA 900.803 i)

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

Target Application Rate Entire Field

318

Tons

Nitrogen

Phosphorus

Potassium

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

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

Waste Application Worksheet

Westridge Dairy

Operation ID: 55078

Field # 17 Field Name Tower 16 Field Acres 11.59 Application Acres 9.44
Crop Year 2010 Crop Corn Grain Yield Goal 142 Planned Application Acres 9.44

Nitrogen Phosphorus Potassium

N P₂O₅ K₂O

Crop Removal per bushel
Crop Removal(needs) /acre

1.20 0.43 0.28
170 61 40

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
2008
2009

0
0
27

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

67

LMFA 900.803 m) (7)

Nitrogen Phosphorus Potassium

Crop Needs after Credits

103 61 40

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

Plant Ammonia Nitrogen / ton

2.5

Manure Application Method

Broadcast Solid, incorporated within 12 hours

Ammonia Loss During Application

3 %

Source: MWPS 18 Table 10-2

LMFA 900.803 m) (4)

Mineralization Rate - Application Year

0.25

Source: MWPS 18 Table 10-5

Plant Available Nitrogen / ton

3.60

Application Rate Based on

Tons/Acre

Nitrogen

28.7

Phosphorus

24.9

Current Bray P1 Soil Test lbs/Acre

126

LMFA 900.803 l)

At Nitrogen Rate P1 Buildup Equals

1.0

of Apps at N rate to reach 300 P1

168

Target Application Rate Per Acre

28.7

Tons

Nitrogen Rate

Target Application Rate Entire Field

271

Tons

Nitrogen Phosphorus Potassium

Available Manure Nutrients Applied

103 70 141

Available Nutrients from all sources

170 70 141

Over (Under) application of nutrients

0 9 101

Nitrogen Mineralization Credit for Future Years

Mineralized Nitrogen / Crop Year	Nitrogen Credit/Acre	Crop Year	Mineralization Rate
Second Year Following Application	18	2011	50% of 1.22 / ton
Third Year Following Application	9	2012	25% of 1.22 / ton
Fourth Year Following Application	4	2013	12.5% of 1.22 / ton

Waste Application Worksheet

Westridge Dairy

Operation ID: 55078

Field # 19 Field Name V V & McBride Field Acres 75.75 Application Acres 75.75
Crop Year 2010 Crop Corn Silage Yield Goal 25 Planned Application Acres 75.75

Nitrogen Phosphorus Potassium

N

P₂O₅

K₂O

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

LMFA 900.803 m) (7)

Legume

40

Soybeans

LMFA 900.803 m) (7)

Previous Crop

Manure Applications 2007
2008
2009

0

Mineralization Rate = 12.5 %

LMFA 900.803 m) (7)

0

Mineralization Rate = 25 %

LMFA 900.803 m) (7)

27

Mineralization Rate = 50 %

LMFA 900.803 m) (7)

Total Nitrogen Credits

67

LMFA 900.803 m) (7)

Nitrogen Phosphorus Potassium

Crop Needs after Credits

83

66

175

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

Plant Ammonia Nitrogen / ton

2.5

Manure Application Method

Broadcast Solid, incorporated within 12 hours

Ammonia Loss During Application

3 %

Source: MWPS 18 Table 10-2

LMFA 900.803 m) (4)

Mineralization Rate - Application Year

0.25

Source: MWPS 18 Table 10-5

Plant Available Nitrogen / ton

3.60

Application Rate Based on

Tons/Acre

Nitrogen

23.1

LMFA 900.803 m) (8)

Phosphorus

27.0

Current Bray P1 Soil Test lbs/Acre

70

LMFA 900.803 l)

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

Target Application Rate Entire Field

1,747

Tons

Nitrogen Phosphorus Potassium

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	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