

Animal Inventory and Mortality Record¹

Operation Name: _____
Location of Permanent Records: _____

Mortality Disposal Method A:

[illegible]

1. NPDES NMP requirements do not include records of animal purchases & sales.
2. Since last report.

Year

Checked by:

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
---	---	---	---	---	---	---	---	---	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	-----

Inspection Results¹

Depth remaining to sidewall low point (ft.)²

Is liquid level marker available & visible?

Does sufficient freeboard exist? ³

Other:

Maintenance Log

Interior Liner Erosion Observed:

Due to wave action?

In vicinity of inlets?

In vicinity of outlets?

Due to erosion from rainfall?

Near agitation equipment access points?

Signs of berm damage due to:

Burrowing animals?

Presence of trees?

Presence of large weeds?

Erosion or gullies?

Poorly established sod?

Are there indications of:

Damp, soft, or slumping areas on berms?

Seepage near toe of berm?

Seepage around pipes through the berm?

Other:

Other:

If synthetic lined:

Any tare, holes, bubbles in liner?

1. Check in gray box indicates concern that may require additional attention.
2. Measured from liquid surface to lowest point on top of dam, berm, or spillway (nearest one foot interval).
3. Runoff holding pond should maintain sufficient volume for freeboard and volume for runoff from 25-year, 24-hour storm.

Concrete/Steel Tanks**Inspection Results ¹****Maintenance Log**

Date:	Inspection Results ¹								Date	Maintenance Performed & Initials
	Yes	No	Yes	No	Yes	No	Yes	No		
Signs of cracks or structural damage?										
Signs of leakage or overflow?										
Signs of wet spots around base of tank?										
Other: _____										

Dry Storage (Long term or permanent storage)

Is clean water diverted away from stockpile?										
Is the stockpile under roof or cover?										
If no, is runoff from stock pile collected?										
Other: _____										

Clean Water Diversion

Are perimeter drains plugged or blocked?										
Is roof water entering storage?										
Is field runoff entering storage?										
Are diversions/waterways maintained?										
Other: _____										

Storm Water

Is the storm water drainage to storage functioning properly?										
Other: _____										

Pumping and Transfer Equipment

Security: Are gravity drains or pump power supplies locked/secure from tampering?										
Are transfer pipes/pumps functioning properly?										
Recycle pumps/transfer pumps functioning?										
Are backflow/well protection valves in place and functioning properly?										
Other: _____										

1. Check in gray box indicates concern that may require additional attention.

Monthly Storage Volume and Level Record

Month : _____ Structure / Basin ID: _____ Maintained By: _____

Day	Precepitation Inches	Land Application or Discharge to Waterers of the State							Pond Liquid Level - Ft.	
		Time - Pumping Events		Level - Pumping Events		Pump Flow Rate (gpm)	Field Used for Application	Total Gallons Pumped		Check if Discharge
		Start	Stop	Start	Stop					
1										
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										
21										
22										
23										
24										
25										
26										
27										
28										
29										
30										
31										

Liquid level is measured from: _____ Low point at top of berm, dam, or spillway; _____ Bottom of storage;

Internal Inspections of Manure System Components

[illegible]

Calibration Log

Inspection and Maintenance Log

[illegible]

Record will be stored permanently at

Slurry/Liquid Manure Applicator Calibration

From chart below, select

- Spread Capacity: _____ lbs. or gallons
- Distance traveled (length) to empty spreader: _____ feet
- Spread pattern width or distance between individual passes: _____ feet
- Intersection indicates application rate: _____

If appropriate values cannot be found in table below:

Rate per acre = Spreader Capacity X 43,560 / (Spread Pattern Width X Travel Length to Empty).

Example (circled numbers):

3000 gallon tank spreader that makes a pass every 4 - 30" corn rows (10 feet) and empties spread in 1200 feet is applying 11,000 gallons per Acre.

Spread Width Length	2000 Gallon Tank						2500 Gallon Tank						3000 Gallon Tank						3500 Gallon Tank						4000 Gallon Tank						
	10'	15'	20'	25'	30'	35'	10'	15'	20'	25'	30'	35'	10'	15'	20'	30'	40'	50'	10'	15'	20'	30'	40'	50'	10'	15'	20'	30'	40'	50'	
Liquid manure application rate (1000's of gallons per acre)																															
600'	15	10	7	6	5	4	18	12	9	7	6	5	22	15	11	7	5	4	25	17	13	8	6	5	29	19	15	10	7	6	
800'	11	7	5	4	4	3	14	9	7	5	5	4	16	11	8	5	4	3	19	13	10	6	5	4	22	15	11	7	5	4	
1000'	9	6	4	3	3	2	11	7	5	4	4	3	13	9	7	4	3	3	15	10	8	5	4	3	17	12	9	6	4	3	
1200'	7	5	4	3	2	2	9	6	5	4	3	3	11	7	5	4	3	2	13	8	6	4	3	3	15	10	7	5	4	3	
1400'	6	4	3	2	2	2	8	5	4	3	3	2	9	6	5	3	2	2	11	7	5	4	3	2	12	8	6	4	3	2	
1600'	5	4	3	2	2	2	7	5	3	3	2	2	8	5	4	3	2	2	10	6	5	3	2	2	11	7	5	4	3	2	
1800'	5	3	2	2	2	1	6	4	3	2	2	2	7	5	4	2	2	1	8	6	4	3	2	2	10	6	5	3	2	2	
2000'	4	3	2	2	1	1	5	4	3	2	2	2	7	4	3	2	2	1	8	5	4	3	2	2	9	6	4	3	2	2	
2500'	3	2	2	1	1	1	4	3	2	2	1	1	5	3	3	2	1	1	6	4	3	2	2	1	7	5	3	2	2	1	
3000'	3	2	1	1	1	1	4	2	2	1	1	1	4	3	2	1	1	1	5	3	3	2	1	1	6	4	3	2	1	1	

Liquid manure application rate (1000's of gallons per acre)

Spread Width Length	4500 Gallon Tank						5000 Gallon Tank						5500 Gallon Tank						6000 Gallon Tank						7200 Gallon Tank							
	10'	15'	20'	25'	30'	35'	10'	15'	20'	30'	40'	50'	10'	15'	20'	30'	40'	50'	10'	15'	20'	30'	40'	50'	10'	15'	20'	30'	40'	50'		
Liquid manure application rate (1000's of gallons per acre)																																
600'	33	22	16	13	11	9	36	24	18	12	9	7	40	27	20	13	10	8	44	29	22	15	11	9	52	35	26	17	13	10		
800'	25	16	12	10	8	7	27	18	14	9	7	5	30	20	15	10	7	6	33	22	16	11	8	7	39	26	20	13	10	8		
1000'	20	13	10	8	7	6	22	15	11	7	5	4	24	16	12	8	6	5	26	17	13	9	7	5	31	21	16	10	8	6		
1200'	16	11	8	7	5	5	18	12	9	6	5	4	20	13	10	7	5	4	22	15	11	7	5	4	26	17	13	9	7	5		
1400'	14	9	7	6	5	4	16	10	8	5	4	3	17	11	9	6	4	3	19	12	9	6	5	4	22	15	11	7	6	4		
1600'	12	8	6	5	4	4	14	9	7	5	3	3	15	10	7	5	4	3	16	11	8	5	4	3	20	13	10	7	5	4		
1800'	11	7	5	4	4	3	12	8	6	4	3	2	13	9	7	4	3	3	15	10	7	5	4	3	17	12	9	6	4	3		
2000'	10	7	5	4	3	3	11	7	5	4	3	2	12	8	6	4	3	2	13	9	7	4	3	3	16	10	8	5	4	3		
2500'	8	5	4	3	3	2	9	6	4	3	2	2	10	6	5	3	2	2	10	7	5	3	3	2	13	8	6	4	3	3		
3000'	7	4	3	3	2	2	7	5	4	2	2	1	8	5	4	3	2	2	9	6	4	3	2	2	10	7	5	3	3	2		

Liquid manure application rate (1000's of gallons per acre)

Travel Speeds to Achieve Proper Application Rate

Injector Size		12' Wide		16' Wide		20' Wide		23' Wide		30' Wide		34' Wide		46' Wide	
	Pumping	Travel Speed		Travel Speed		Travel Speed		Travel Speed		Travel Speed		Travel Speed		Travel Speed	
	GPM	Ft/Min	MPH	Ft/Min	MPH	Ft/Min	MPH	Ft/Min	MPH	Ft/Min	MPH	Ft/Min	MPH	Ft/Min	MPH
4,000 Gallons Per Acre	500	454	5.2	340	3.9	272	3.1	237	2.7	182	2.1	160	1.8	118	1.3
	600	545	6.2	408	4.6	327	3.7	284	3.2	218	2.5	192	2.2	142	1.6
	700	635	7.2	476	5.4	381	4.3	331	3.8	254	2.9	224	2.5	166	1.9
	800	726	8.3	545	6.2	436	5.0	379	4.3	290	3.3	256	2.9	189	2.2
0.147 Inch/Acre Coverage	900	817	9.3	613	7.0	490	5.6	426	4.8	327	3.7	288	3.3	213	2.4
	1000	908	10.3	681	7.7	545	6.2	473	5.4	363	4.1	320	3.6	237	2.7
	1100	998	11.3	749	8.5	599	6.8	521	5.9	399	4.5	352	4.0	260	3.0
	1200	1089	12.4	817	9.3	653	7.4	568	6.5	436	5.0	384	4.4	284	3.2
6,000 Gallons Per Acre	500	303	3.4	227	2.6	182	2.1	158	1.8	121	1.4	107	1.2	79	0.9
	600	363	4.1	272	3.1	218	2.5	189	2.2	145	1.7	128	1.5	95	1.1
	700	424	4.8	318	3.6	254	2.9	221	2.5	169	1.9	149	1.7	110	1.3
	800	484	5.5	363	4.1	290	3.3	253	2.9	194	2.2	171	1.9	126	1.4
0.221 Inch/Acre Coverage	900	545	6.2	408	4.6	327	3.7	284	3.2	218	2.5	192	2.2	142	1.6
	1000	605	6.9	454	5.2	363	4.1	316	3.6	242	2.8	214	2.4	158	1.8
	1100	666	7.6	499	5.7	399	4.5	347	3.9	266	3.0	235	2.7	174	2.0
	1200	726	8.3	545	6.2	436	5.0	379	4.3	290	3.3	256	2.9	189	2.2
8,000 Gallons Per Acre	500	227	2.6	170	1.9	136	1.5	118	1.3	91	1.0	80	0.9	59	0.7
	600	272	3.1	204	2.3	163	1.9	142	1.6	109	1.2	96	1.1	71	0.8
	700	318	3.6	238	2.7	191	2.2	166	1.9	127	1.4	112	1.3	83	0.9
	800	363	4.1	272	3.1	218	2.5	189	2.2	145	1.7	128	1.5	95	1.1
0.295 Inch/Acre Coverage	900	408	4.6	306	3.5	245	2.8	213	2.4	163	1.9	144	1.6	107	1.2
	1000	454	5.2	340	3.9	272	3.1	237	2.7	182	2.1	160	1.8	118	1.3
	1100	499	5.7	374	4.3	299	3.4	260	3.0	200	2.3	176	2.0	130	1.5
	1200	545	6.2	408	4.6	327	3.7	284	3.2	218	2.5	192	2.2	142	1.6
10,000 Gallons Per Acre	500	182	2.1	136	1.5	109	1.2	95	1.1	73	0.8	64	0.7	47	0.5
	600	218	2.5	163	1.9	131	1.5	114	1.3	87	1.0	77	0.9	57	0.6
	700	254	2.9	191	2.2	152	1.7	133	1.5	102	1.2	90	1.0	66	0.8
	800	290	3.3	218	2.5	174	2.0	152	1.7	116	1.3	102	1.2	76	0.9
0.368 Inch/Acre Coverage	900	327	3.7	245	2.8	196	2.2	170	1.9	131	1.5	115	1.3	85	1.0
	1000	363	4.1	272	3.1	218	2.5	189	2.2	145	1.7	128	1.5	95	1.1
	1100	399	4.5	299	3.4	240	2.7	208	2.4	160	1.8	141	1.6	104	1.2
	1200	436	5.0	327	3.7	261	3.0	227	2.6	174	2.0	154	1.7	114	1.3
12,000 Gallons Per Acre	500	151	1.7	113	1.3	91	1.0	79	0.9	61	0.7	53	0.6	39	0.4
	600	182	2.1	136	1.5	109	1.2	95	1.1	73	0.8	64	0.7	47	0.5
	700	212	2.4	159	1.8	127	1.4	110	1.3	85	1.0	75	0.8	55	0.6
	800	242	2.8	182	2.1	145	1.7	126	1.4	97	1.1	85	1.0	63	0.7
0.442 Inch/Acre Coverage	900	272	3.1	204	2.3	163	1.9	142	1.6	109	1.2	96	1.1	71	0.8
	1000	303	3.4	227	2.6	182	2.1	158	1.8	121	1.4	107	1.2	79	0.9
	1100	333	3.8	250	2.8	200	2.3	174	2.0	133	1.5	117	1.3	87	1.0
	1200	363	4.1	272	3.1	218	2.5	189	2.2	145	1.7	128	1.5	95	1.1
14,000 Gallons Per Acre	500	130	1.5	97	1.1	78	0.9	68	0.8	52	0.6	46	0.5	34	0.4
	600	156	1.8	117	1.3	93	1.1	81	0.9	62	0.7	55	0.6	41	0.5
	700	182	2.1	136	1.5	109	1.2	95	1.1	73	0.8	64	0.7	47	0.5
	800	207	2.4	156	1.8	124	1.4	108	1.2	83	0.9	73	0.8	54	0.6
0.516 Inch/Acre Coverage	900	233	2.7	175	2.0	140	1.6	122	1.4	93	1.1	82	0.9	61	0.7
	1000	259	2.9	194	2.2	156	1.8	135	1.5	104	1.2	92	1.0	68	0.8
	1100	285	3.2	214	2.4	171	1.9	149	1.7	114	1.3	101	1.1	74	0.8
	1200	311	3.5	233	2.7	187	2.1	162	1.8	124	1.4	110	1.2	81	0.9

Equipment

Calibration Completed by:

Tractor Gear/RPM	Spreader Setting	Spreader Capacity is Unknown:	Spreader Capacity is Known	Calculated Application Rate (tons/acre)
		Area of plastic sheet: _____ ft ²	Net Manure Weight on Spreader: _____ Tons	
		Net Manure Weight on: _____	Width of Spread Pattern: _____ ft	
		Sheet 1: lbs Sheet 2: lbs Sheet 3: lbs	Travel Distance to Empty Spread: ft	
		Area of plastic sheet: _____ ft ²	Net Manure Weight on Spreader: _____ Tons	
		Net Manure Weight on: _____	Width of Spread Pattern: _____ ft	
		Sheet 1: lbs Sheet 2: lbs Sheet 3: lbs	Travel Distance to Empty Spread: ft	
		Area of plastic sheet: _____ ft ²	Net Manure Weight on Spreader: _____ Tons	
		Net Manure Weight on: _____	Width of Spread Pattern: _____ ft	
		Sheet 1: lbs Sheet 2: lbs Sheet 3: lbs	Travel Distance to Empty Spread: ft	

Inspection and Maintenance Log

[illegible]

Record will be stored permanently at

Solid Manure Spreader Calibration

1. Spreader Capacity is Known.

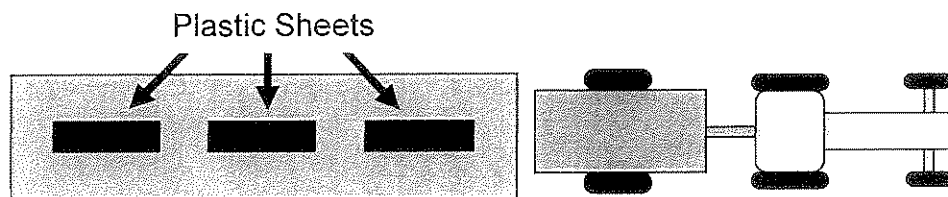
$$\text{Rate per acre} = \frac{\text{Spreader Capacity} \times 43,560}{\text{Width} \times \text{Travel Distance}}$$

Example: 20 ton manure solids spreader makes a pass every 6 30" corn rows (15 feet) and empties spreader in 2,400 feet is applying 24 tons per acre

$$\text{Rate per acre} = \frac{20 \text{ ton} \times 43,560}{15 \text{ feet} \times 2,400 \text{ feet}} = 24 \text{ ton / acre}$$

2. Spreader Capacity is Unknown.

- Cut three or more sheets of equally sized plastic. 22 square feet is preferred size (3' x 7'4" or 4' x 5'6")
- Weigh empty 5 gallon bucket plus one plastic sheet on a scale: _____ lbs.
- Lay sheets in field with edges secured by stones or other heavy objects.
- Drive tractor at normal speeds and discharge manure at typical rate over plastic sheets.
tractor gear: _____, engine RPM: _____, spreader settings: _____



- Check the sheet. Did a reasonably representative application rate fall on the plastic sheet?
- Carefully fold individual sheets without losing manure and place each sheet in separate buckets. Weigh each bucket.
Bucket 1: _____ lbs. Bucket 2: _____ lbs. Bucket 3: _____ lbs.
- Subtract weight of empty bucket and plastic (step b.) to determine net manure weight in each bucket. Net manure weight for
Bucket 1: _____ lbs. Bucket 2: _____ lbs. Bucket 3: _____ lbs.
- Calculate average weight of buckets. Average Net Manure Weight: _____ lbs.
- Calculate application rate.

$$\text{Tons per acre} = \frac{\text{net manure weight} \times 22}{\text{area of plastic sheet (ft}^2\text{)}}$$

If plastic sheet = 22 ft², then Tons per Acre = Net Manure Weight

Calibration Log

Date: _____

Calibration Completed by: _____

Inspection and Maintenance Log

Record will be stored permanently at

Irrigation Equipment or Towed Hose Applicator Calibration

A. If flow Rate is Known:

- Estimate pumping time: _____ hours
- Estimate water flow rate: _____ gallons per minute
- Estimate acres covered: _____ acres
- Estimate application rate:

$$\text{Inches (or acre-inch/acre)} = \frac{\text{Pumping Time X Flow Rate}}{\text{Acres X 450}} = \frac{\text{X}}{\text{X}} \times \frac{\text{X}}{450} = \text{_____ in.}$$

B. If Flow Rate is NOT Known:

- Identify Rated Pump Pressure and Flow Rate: _____ psi at _____ gpm
- Identify Actual Pump Pressure: _____ psi
- Estimate Actual Flow Rate:

$$\text{GPM}_{\text{actual}} = \text{GPM}_{\text{rated}} \sqrt[4]{\frac{\text{P}_{\text{actual}}}{\text{P}_{\text{rated}}}} = \text{_____} \sqrt[4]{\frac{\text{X}}{\text{X}}} = \text{_____ gpm}$$

* square root

- Substitute actual Flow Rate from c. into the Flow Rate space in d. of "A. If Flow Rate Is Known" and complete application rate.

C. Optional Method for Pivot or other Sprinkler Irrigation Systems

- Place 4 to 6 rain gauges (pans or straight sided plastic cups will also work) in line with the pivot center point at roughly equally spaced intervals. Placement on access road away from crop canopy is preferred.
 - Measure depth in rain gauges and calculate average.
- Gauge #1: _____ in. #2: _____ in. #3: _____ in. #4: _____ in. #5: _____ in. #6: _____ in.
- Average Depth: _____ in.

Waste Storage Structure Sample Results

Operation Responsibility

Varel Dairy, Inc.

Barn # 1 1

Date	Sample Taken By	Service Lab	Lab Number	Total Nitrogen	Ammonium Nitrogen	Total Phosphorus	Total Potassium	Unit of Measure

Barn # 2 2

Date	Sample Taken By	Service Lab	Lab Number	Total Nitrogen	Ammonium Nitrogen	Total Phosphorus	Total Potassium	Unit of Measure

Barn # 3 3

Date	Sample Taken By	Service Lab	Lab Number	Total Nitrogen	Ammonium Nitrogen	Total Phosphorus	Total Potassium	Unit of Measure

Barn # 4 4

Date	Sample Taken By	Service Lab	Lab Number	Total Nitrogen	Ammonium Nitrogen	Total Phosphorus	Total Potassium	Unit of Measure

Waste Storage Structure Sample Results

Operation Responsibility

Varel Dairy, Inc.

Barn # 5 5

Date	Sample Taken By	Service Lab	Lab Number	Total Nitrogen	Ammonium Nitrogen	Total Phosphorus	Total Potassium	Unit of Measure

Barn # 6 6

Date	Sample Taken By	Service Lab	Lab Number	Total Nitrogen	Ammonium Nitrogen	Total Phosphorus	Total Potassium	Unit of Measure

Barn # 7 7

Date	Sample Taken By	Service Lab	Lab Number	Total Nitrogen	Ammonium Nitrogen	Total Phosphorus	Total Potassium	Unit of Measure

Barn # 8 8

Date	Sample Taken By	Service Lab	Lab Number	Total Nitrogen	Ammonium Nitrogen	Total Phosphorus	Total Potassium	Unit of Measure

Waste Storage Structure Sample Results

Operation Responsibility

Varel Dairy, Inc.

Barn # 9 9 - Bulls

Date	Sample Taken By	Service Lab	Lab Number	Total Nitrogen	Ammonium Nitrogen	Total Phosphorus	Total Potassium	Unit of Measure

Barn # 10 10

Date	Sample Taken By	Service Lab	Lab Number	Total Nitrogen	Ammonium Nitrogen	Total Phosphorus	Total Potassium	Unit of Measure

Barn # 11 11

Date	Sample Taken By	Service Lab	Lab Number	Total Nitrogen	Ammonium Nitrogen	Total Phosphorus	Total Potassium	Unit of Measure

Barn # 12 Heifer Calves - Huts

Date	Sample Taken By	Service Lab	Lab Number	Total Nitrogen	Ammonium Nitrogen	Total Phosphorus	Total Potassium	Unit of Measure

Waste Storage Structure Sample Results

Operation Responsibility

Varel Dairy, Inc.

Barn # 13 Bull Calves - Huts

Date	Sample Taken By	Service Lab	Lab Number	Total Nitrogen	Ammonium Nitrogen	Total Phosphorus	Total Potassium	Unit of Measure

Barn # 101 1st Stage

Date	Sample Taken By	Service Lab	Lab Number	Total Nitrogen	Ammonium Nitrogen	Total Phosphorus	Total Potassium	Unit of Measure

Barn # 102 2nd Stage

Date	Sample Taken By	Service Lab	Lab Number	Total Nitrogen	Ammonium Nitrogen	Total Phosphorus	Total Potassium	Unit of Measure

Barn # 103 3rd Stage

Date	Sample Taken By	Service Lab	Lab Number	Total Nitrogen	Ammonium Nitrogen	Total Phosphorus	Total Potassium	Unit of Measure

Waste Storage Structure Sample Results

Operation Responsibility

Varel Dairy, Inc.

Barn # 104 4th Stage

Date	Sample Taken By	Service Lab	Lab Number	Total Nitrogen	Ammonium Nitrogen	Total Phosphorus	Total Potassium	Unit of Measure

Barn # 105 Solids Stacking Area

Date	Sample Taken By	Service Lab	Lab Number	Total Nitrogen	Ammonium Nitrogen	Total Phosphorus	Total Potassium	Unit of Measure

Waste Application Recording Log - Liquid

Crop Year

[illegible]

a.) Application Methods	
B	Broadcast w/o incorporation or incorporation >
BI	Broadcast, incorporated within 12 hours
IN	Injected
IR	Irrigated

Waste Application Recording Log - Liquid

[illegible]

a.) Application Methods	
B	Broadcast w/o incorporation or incorporation >
BI	Broadcast, incorporated within 12 hours
IN	Injected
IR	Irrigated

Waste Application Recording Log - Liquid

Crop Year _____

[illegible]

a.) Application Methods	
B	Broadcast w/o incorporation or incorporation >
BI	Broadcast, incorporated within 12 hours
IN	Injected
IR	Irrigated

Waste Application Recording Log - Solid

Spreader Make	Model	Cubic Feet Capacity
<hr/>	<hr/>	<hr/>

[illegible]

Waste Application Recording Log - Solid

[illegible]

[illegible][illegible]

Location:

Mo. Total	Year to Date
-----------	--------------

Commercial Fertilizer Application Record

[illegible]

Reviews by NRCS, Third Parties, or Regulatory Agencies

[illegible]