The Operator, Lynn Miller of South Prairie Dairy has cancelled this permit MA# 63493 and is no longer leasing/operating this facility.

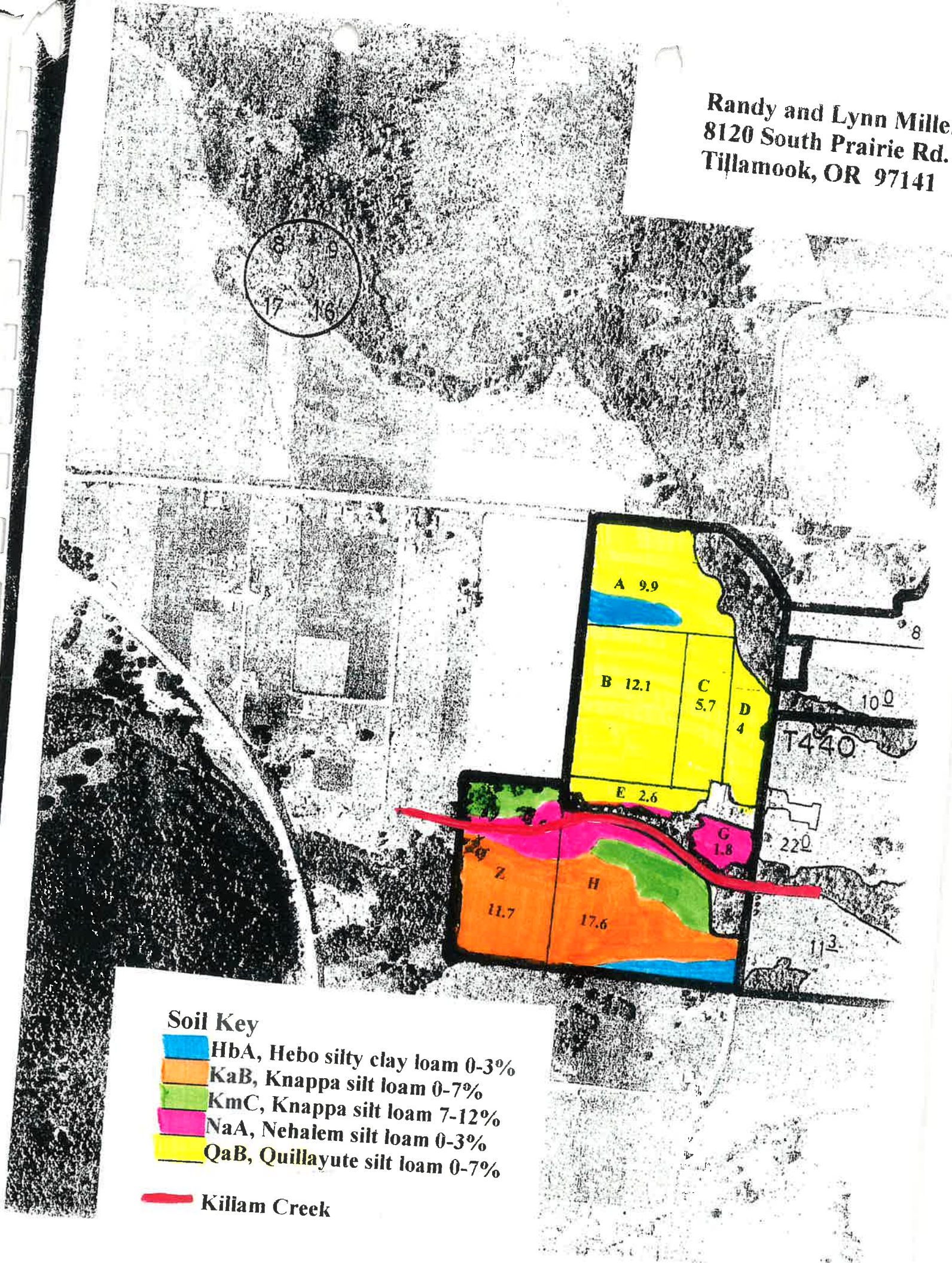
On May 29, 2014, this facility was transferred to Jo Averill who has agreed to assume the existing Animal Waste Management Plan (AWMP) for this facility. The hard copy of the AWMP is now located in Jo L. Averill Farms file MA# 995080.

Field Descriptions

Field	Acres	Status	Usage	DM yield per acre	DM yield total field	
A	9.9	owned	Pasture	5.5	54.5	
B	12.1	owned	Pasture	5.5	66.6	
C	5.7	owned	Pasture	5.5	31.4	
D	4	owned	Pasture	5.5	22.0	
E	2.6	owned	Pasture	5.5	14.3	
G	1.8	owned	Pasture	5.5	9.9	
H	17.6	leased	Pasture	5.5	96.8	
Z	11.7	leased	Pasture	5.5	64.4	
	65.4				**359.7**	**Total tons DM**
					5.5	**Tons DM per acre**

Miller
Tillamook
#63493

Randy and Lynn Miller
8120 South Prairie Rd.
Tillamook, OR 97141



ANIMAL WASTE MANAGEMENT PLAN #12020

AMENDMENT/S TO THE ANIMAL WASTE MANAGEMENT PLAN

South Prairie Dairy — CONFINED ANIMAL FEEDING OPERATION

Lynne Miller — CAFO OPERATOR'S NAME

8120 So. Prairie Rd. Till OR 97141 — FACILITY STREET ADDRESS, CITY, STATE, ZIP

842-2373 — PHONE NUMBER

On 2/2/12, Armando Macias — INSPECTOR'S NAME

of the Oregon Department of Agriculture discussed modifications to Animal Waste Management Plan (AWMP) # C028 (WRF).

The following modifications were made to this AWMP:

1) Include the addition of the 4000 gl BGLMT that was installed in fall of 2009

2)

3)

CONCLUSION:

✓ The above amendment/s will be approved.

INSPECTOR'S SIGNATURE

2/2/12 Date approved

Lynne Miller
OPERATOR'S SIGNATURE

Effective date 2/2/12

✓ operator
✓ Salem

Soil Descriptions

HbA - Hebo silt loam is a poorly drained soil formed in alluvium on terraces. Slopes are 0-3%. Permeability is very slow. The runoff rate is slow. Erosion hazard is slight. The surface and subsoil are both dark gray silty clays with an effective rooting depth of less that 20 inches. High water tables influence rooting depths. Available water holding capacity is 8-11 inches. NRCS capability classification is IVw because of wetness. Hebo soils are primarily used for pastures.

KaB - Knappa silt loam, 0-7% slopes, are very deep, well drained soils. The erosion hazard is slight. Permeability is moderate. NRCS capability classification is IIc because of climate. Effective rooting depth is more than 60 inches. Available water holding capacity is 10 to 12 inches. Soils are well suited for pasturelands. Should they be used for woodland, site indexes are 170 for Douglas-fir. Logging equipment limitations are moderate.

KmC - Knappa soils, 0-12% slopes, are very deep and well drained. The erosion hazard is moderate. Runoff is medium. Permeability is moderate. SCS capability classification is IIIe because of erosion. Effective rooting depth is greater than 60 inches. Available water holding capacity is 10 to 12 inches. This Knappa series soil consists of sandy and gravelly materials in strafified layers.

NaA - Nehalem silt loam, 0-3% slopes, are well to moderately well drained soils. These occupy level to gently undulating river floodplains. The erosion hazard is slight. Permeability is moderate. Runoff is slow. NRCS capability classification is IIc due to climate. Effective rooting depth is greater than 60 inches. Available water holding capacity is 11 to 12.5 inches. Nehalem soils are excellent for pastures. Manure application is restricted when flood potential is high.

QaB - Quillayute loams, 0-7% slopes, are well drained soils. These soils are located on terraces. The erosion hazard is slight to moderate. Permeability is moderate. NRCS capability classification is IIe because of erosion potential on higher slopes. The effective rooting depth is greater than 60 inches. The total available water holding capacity is 12 to 17 inches. These soils are well suited for pasture.

#12020

MA#63493

ANIMAL WASTE MANAGEMENT PLAN

AMENDMENT/S TO THE ANIMAL WASTE MANAGEMENT PLAN

South Prairie Dairy — CONFINED ANIMAL FEEDING OPERATION

Lynne Miller — CAFO OPERATOR'S NAME

8120 So. Prairie Rd. Till, OR 97141 — FACILITY STREET ADDRESS, CITY, STATE, ZIP

842-2373 — PHONE NUMBER

On 2/2/12, Armando Macias — INSPECTOR'S NAME

of the Oregon Department of Agriculture discussed modifications to Animal Waste Management Plan (AWMP) # 0028.

The following modifications were made to this AWMP:

1) Include the addition of the 4000 gl BGHMT that was installed in fall of 2009.

2)

3)

CONCLUSION:

✓ The above amendment/s will be approved.

INSPECTOR'S SIGNATURE

2/2/12 Date approved

Lynne S Miller
OPERATOR'S SIGNATURE

Effective date 2/2/12

T
Operator
✓ Inspector

MS

Oregon
Theodore R. Kulongoski, Governor

Department of Agriculture
635 Capitol Street NE
Salem, OR 97301-2532

Tillo

November 30, 2004

Randy and Lynne Miller
South Prairie Dairy
8120 South Prairie Dairy
Tillamook, Oregon 97141

Re: Animal Waste Management Plan (AWMP) review.

Dear Mr. and Mrs. Miller:

On April 28, 2000, the Oregon Department of Agriculture received an AWMP for your dairy facility located at 8120 South Prairie Road. The AWMP you provided was logged into our files as #0028. Originally, this plan was approved on July 24, 2000. Additional information submitted to the department to update the plan so that it will meet the Minimum Required Elements have been received and logged into our files as AWMP #0495.

AWMP Status: Approved
With the AWMP amendments #0495, AWMP #0028 has been reviewed and considered complete. Please find enclosed the AWMP review memo.

As a state CAFO, your AWMP is not required until July 1, 2006. Nevertheless, the department truly appreciates your effort to complete your AWMP in advance. If you have any questions, please contact the area Livestock Water Quality Specialist, Kathryn Higgs, at 503-842-6278.

Sincerely,

Debbie Gorham

Debbie Gorham, Administrator
Natural Resources Division
PH (503) 986-4700
FX (503) 986-4730

Enclosure: AWMP Review Memo

MEMO

To: **Debbie Gorham**
From: **Kathryn Higgs**
Subject: AWMP review for Randy and Lynne Miller (dba South Prairie Dairy)
Date: November 30, 2004

South Prairie Dairy has an AWMP on file with ODA (AWMP #0028). I have been working with Mrs. Miller to update the existing AWMP so that it will satisfy the Minimum Required Elements. Mrs. Miller has submitted all of the updated information to the Oregon Department of Agriculture. The new information has been logged into the database as AWMP #0495.

The AWMP was reviewed according to OAR Chapter 340 Division 51 and department policy documents.

AWMP Minimum Required Elements	Notes
1. Summary of CAFO Operation	
a) Contact name, address, phone number	Complete
b) Facility address	Complete
c) Type of operation	Complete
(i) Number and size of animals by species, expansion?	
d) Manure, litter and process waste system – provide a general narrative description of each	
(i) Collection – How is manure, litter and process waste removed from housing, confinement lots? How is clean water diverted from storage?	Complete
(ii) Storage – Types and size of manure, litter and process waste storage tanks, ponds.	Complete
(iii) Transfer – How is manure, litter and process waste moved to storage, application areas?	Complete
(iv) Use – How is manure, litter and process waste treated (composted, separated, anaerobic digestion or storage, aeration)? How is manure, litter and process waste water used on crops? If export is utilized, describe that process.	Complete
2. Specific descriptions and calculations	
a) A narrative of production area and land application locations	

(ii) Describe limitations to manure, litter and process waste applications. Indicate buffer areas and management to avoid frozen or saturated soils. Justify buffer width and management.	Complete
(iii) Using agronomic rates, application limitations, and scheduled applications, calculate the minimum storage required for liquids and solids.	Complete
(iv) How is irrigation water managed relative to manure, litter and process waste water application? Indicate general timing and application rates of irrigation water. Irrigation water management must not allow leaching of soluble nutrients or runoff.	Complete
g) Animal mortality management	
(i) Describe how the farm handles mortalities.	Complete
3. Record keeping and reporting requirements	
a) Testing – Monitoring	
(i) Include the protocol for testing manure, litter and process waste.	Complete
(ii) Include the protocol for testing and measuring crop nutrient removals.	Complete
(iii) Include the protocol for soil testing to evaluate nutrient application sand crop uptake.	Complete
b) Record keeping. Include the following:	
(i) Date and amount of manure, litter and process waste applied by field. Calculate N and P applied.	Complete
(ii) Manure, litter and process waste volume exported.	Complete
c) Reporting to Oregon Department of Agriculture	
(i) Any discharge within 24 hours.	Complete
(ii) Amount of manure, litter and process waste applied annually.	Complete
(iii) Amount of manure, litter and process waste exported annually.	Complete

Recommendations

With the AWMP amendments #0495, AWMP #0028 has been reviewed and considered complete, I recommend that the department approve South Prairie Dairy's AWMP.

REC'D 6/9/2000
AWMP
0028

Miller Dairy

Plan of Correction

4/1/2000

Randy & Lynn Miller

Animal Waste Management Plan

Name: Randy & Lynn Miller
Address: 8120 South Prairie Rd.
Phone: 842-2372
Preparer: Todd Leonnig
Date: 1/2/2000

As owner and operator of this dairy I intend to install the conservation practices described in this plan and manage them in accordance with the operation and maintenance section of the plan.

Signature: Randall D Miller
Signature: Lynn Miller

Date: 4-20-00
Date: 4-20-00

General Description

Miller Farms of Tillamook, Oregon, is a Holstein operation consisting of 30 mature cows (including dry) and 28 heifers ranging from calves to springers. This is a total of 62.85 Animal Units. The Farm has 65.4 acres of pasture land, of which 29.3 is leases. This is a pasture based operation which uses grazing as the main source of nutrient recycling. This operation was recently inspected January 2000, and received an N-O-N. The violation was given for slab runoff in a high traffic (cow) area. The slab is used daily to walk cows to the barn from the parlor and the cows are allowed to loiter throughout the day, also the dry stack is on this slab as well. Since, this area is unroofed, rainwater has been washing some manure off of the concrete into the field. The operator then constructed an earthen berm to contain this runoff in a little pond. It was a good attempt to deter any surface runoff, however this created a problem of ponding and concentrates the dirty water to a small earthen sturcture. The owner must come up with a more permanent solution to this runoff problem to avoid further regulatory problems.

We have come up with a solution to meet the challenge of containment, without putting a major financial strain upon the dairy.

Plan of Correction

Solid Storage Pile

The first area that will be addressed is the solids storage pile. The current pile is on a slab of concrete and uses one of the barn walls for support of the pile. The other two sides of the pile are supported an earthen structure which will have to be removed. To resolve this the operator will put a roof over this area and lengthen the area to increase storage. The roof will be guttered and rainwater diverted into some existing tile drains. The existing solids pile is 25' X 15' X 6'. The new area will be 50' X 15' X 6' which will double the storage from three weeks to almost a month and a half giving the operator more flexibility in spreading times. The operator would like to curb the entrance of the dry stack area to contain the seepage from the stack. If this does not work or is unacceptable the operator would then place a below ground reception tank near the stack and pipe the seepage into it. The operator would then empty the tank with the honey wagon. The operator will produce more detailed plan view drawings should this POC be accepted.

Exercise Lot

The second area of concern is the open slab and since it is a high traffic area. Currently, the cows exit the parlor and are allowed to loiter in this concrete area all day. This causes a buildup of manure and when it rains the manure is washed off the slab. The operator will change current practices and fence a direct path from the parlor to the barn. Any

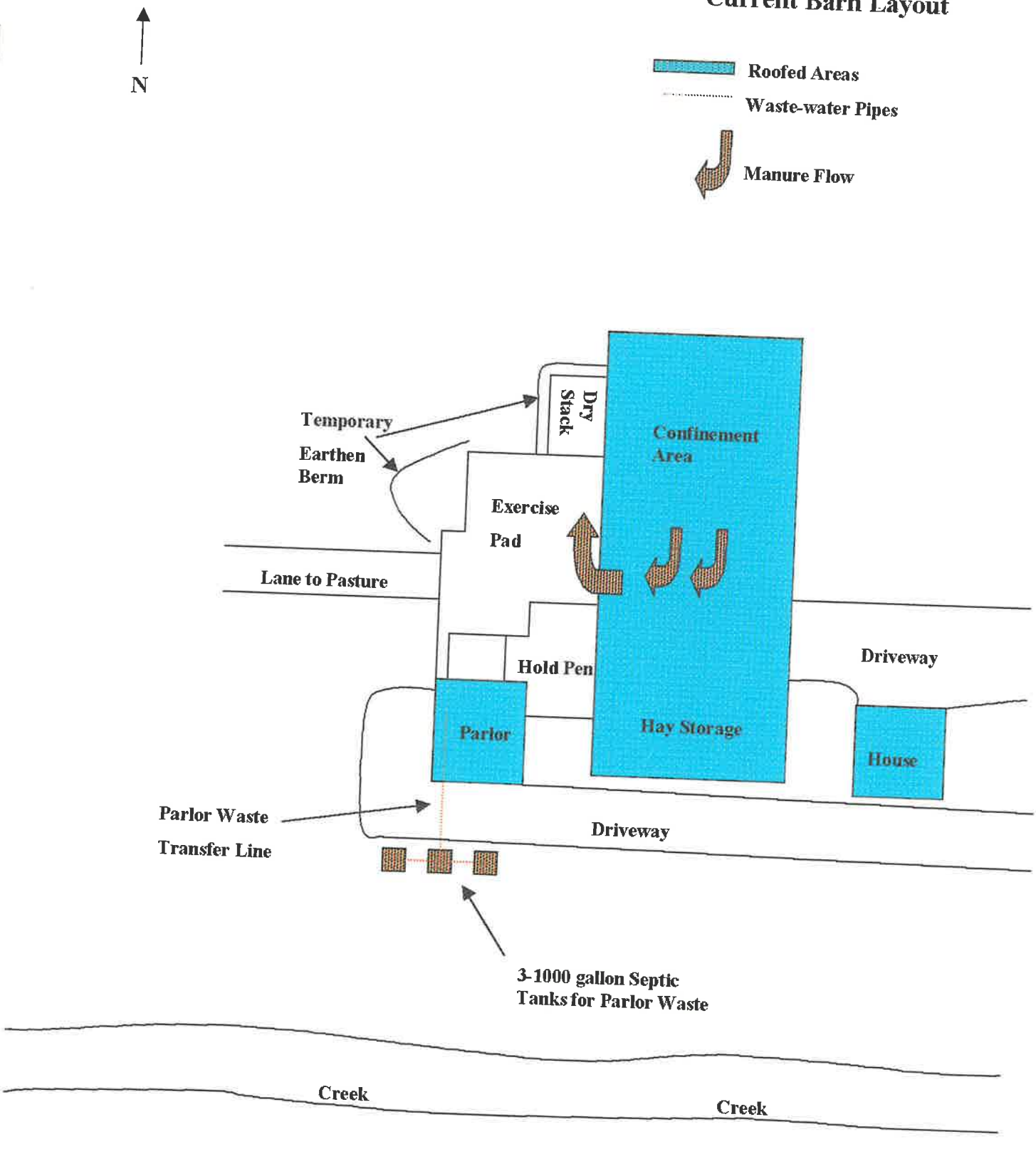
manure that collects in this walkway will be daily hand scraped into the barn where it will be mixed with straw and be incorporated into the dry stack.

Earthen berm

The last area of concern is the earthen berm which is currently in place to capture and store slab runoff. This berm will be eliminated and the area will be planted to permanent pasture. This area will also need to be fenced from cows in early spring and late fall. It is close to the barn and we want to keep it vegetative and not allow the cows to loiter and pug it up.

Randy and Lynn Miller

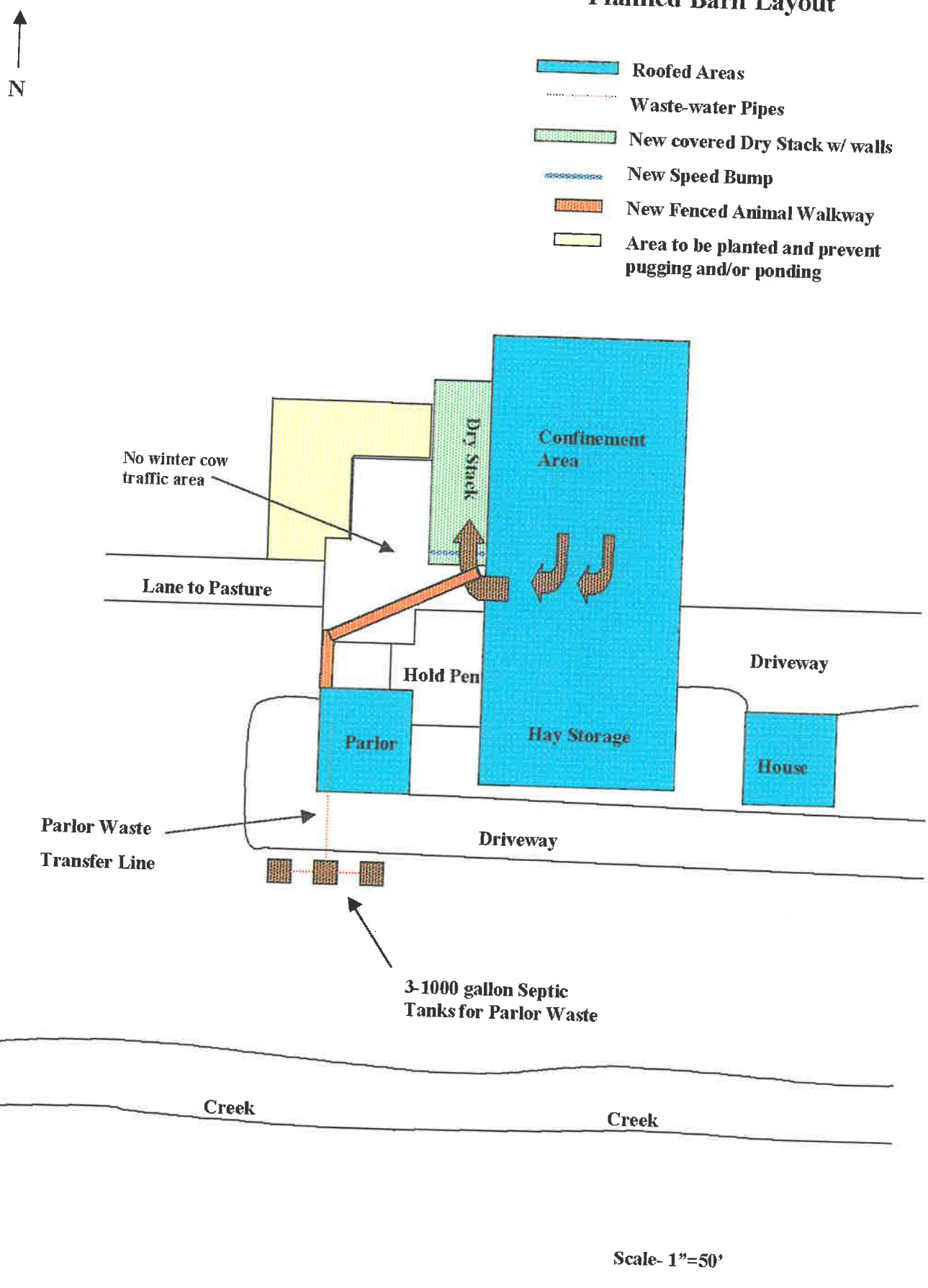
Current Barn Layout



Scale- 1"=50'

Randy and Lynn Miller

Planned Barn Layout



Scale- 1"=50'

Field & Soil, Maps & Descriptions

6-8-00

JOEL -

JUST A REMINDER ....

THE MILLERS ARE PLANNING TO DECOMMISSION ANIMAL WASTE HOLDING POND, EXPAND THEIR CDSF AND DIVERT CATTLE FROM USING THE OPEN SLAB. THIS INFORMATION IS CONTAINED IN THE FIRST SECTION OF THEIR NUTRIENT MANAGEMENT PLAN.

THEY ARE HOPING TO GET NOTICE OF APPROVAL SOON SO THEY CAN COMPLETE CONSTRUCTION BY NOVEMBER.

THIS IS A SMALLER OPERATION AND ARE MAKING A GOOD EFFORT TO ADDRESS ISSUES IN THEIR NON. WITH FINANCIAL AND LABOR CONSTRAINTS.

CALL ME IF YOU HAVE ANY QUESTIONS.

PATRICIA PARRISH

Operation and Maintenance

Operation and Maintenance

BELOW GROUND LIQUID MANURE STORAGE FACILITY
Facility will be pumped out within the first two years following construction to check for structural damage. All damages will be corrected. Thereafter, it will be pumped out at least every five years to check for damages and/or removal of rocks, gravel, wire and other debris. A one foot free board will be maintained to prevent spillage. Apply manure to fields when weather and soil conditions are favorable. Care shall be taken in pumping the tank out during periods of high water table. Failure to follow these guidelines in pumping the tank could result in catastrophic results. The liquid tank will not be pumped more than 3.5 feet lower than the surrounding ground water level. The tank lid will not be subjected to more than two 8,000 pound wheel loads. WARNING: ENTERING UNVENTILATED TANKS IS EXTREMELY "HAZARDOUS"!

SOLID MANURE STORAGE FACILITY
Solid manure storage facility will be inspected annually. All broken trusses, rafters, poles, rusted roof sections, missing bolts, and broken gutters and/or down spouts will be repaired or replaced. Check for adequacy/function of drain away from down spouts. Facility will be available by November 1 for manure storage.

GUTTERS AND DOWNSPOUTS
Gutters will be inspected annually to insure all gutters are free of foreign materials. Broken gutters or downspouts will be replaced and/or repaired. All gutters will be connected to the downspouts. Leaky gutters and downspouts will be repaired. Weeds and sediment will be removed from outlets. All downspouts will be connected to outlets which are kept free-flowing. Broken rodent guards will be repaired or replaced.

ROOF
Roof will be inspected annually. All rusted sections will be repaired and/or replaced. Loose sections will be secured. All broken trusses, rafters, beams, poles, gutters and downspouts will be repaired and/or replaced.

CONCRETE CURB
Concrete curbs will be inspected periodically. Broken curbs will be repaired. Manure will be prevented from flowing over the curb.

NUTRIENT MANAGEMENT
Calibrate manure and fertilizer application equipment to ensure recommended rates are applied.

1. Minimize exposure to animal and organic wastes, manure gases, and chemical fertilizers. Wear protective clothing when appropriate.

2. Protect commercial fertilizer and agricultural waste storage facilities from weather and accidental leakage or spillage that will result in undesirable effects on soil, water, and plants.

3. When cleaning equipment after nutrient application, remove and save fertilizers or wastes in an appropriate manner. If system is flushed, use rinse water in the following batch of nutrient mixture, where possible, or dispose of it according to state and local regulations, always avoiding high runoff areas, ponds, lakes, streams, and other water bodies. Extreme care must be exercised to avoid contaminating wells.

ORAWM Calculations

SUMMARY OF ANIMAL WASTE MANAGEMENT
PLANNING WORKSHEET
FOR

Randy Miller

Assisted by- Todd Leonnig **Date- 04-25-2000**

NUMBER OF ANIMALS, AVERAGE WEIGHT AND STORAGE PERIODS
REF: NRCS Agricultural Waste Management Field Handbook (AWMFH)

DESCRIPTION	NUMBER	WEIGHT LBS	CONFINEMENT START	CONFINEMENT END	CONFINEMENT DAYS	DAYS GRAZED	DAYS STORAGE LIQUIDS	DAYS STORAGE SOLIDS
MILKER	25	1400	DEC	MAR	121	244	10	22
MILKER (DRY)	5	1450	DEC	MAR	120	245	0	22
HEIFERS	25	800	NONE	NONE	0	365	0	0
CALVES	3	200	JAN	DEC	365	0	0	22

NRCS Animal Waste Management System(PS 312), Job Class- I **63 AUs**

1000LB ANIMAL UNITS(AU)	CF/DAY MANURE	LB/DAY N	LB/DAY P	LB/DAY K
63	89.7	28.9	4.3	17.8

BEDDING AND SEPARATOR FACTORS **REF: AWMFH Chapter 9**
TYPE OF BEDDING- Straw
DAILY BEDDING FACTOR- 1.80 CF/DAY/AU OR 113 CF/DAY
TYPE OF SEPARATOR- Dry Scrape System
SELECTED SEPARATOR FACTOR- 90 %

VOLUME OF WASH WATER **REF: AWMFH Chapter 10**
Total Daily Volume = 165 GAL/DAY OR 22.07 CF/DAY

TOTAL RAINFALL RUNOFF AREA CONTRIBUTING TO STORAGE = 0 SF
Does silage seepage enter liquid storage facility (Y/N)-? NO

CLIMATIC STATION - TILLAMOOK 1 W **REF: AWMFH Chapter 10**

LIQUID STORAGE FACILITY - Tank(Covered)
SOLID STORAGE FACILITY - Solids Storage(Unroofed)

STORAGE VOLUMES -	LIQUID	SOLID
Volume to Store for 10 Days =	276 CF	2025 CF
Volume of Existing Facilities =	360 CF	2250 CF
Volume of Planned Facility =	0 CF	0 CF

CROPS AND NUTRIENT ACCOUNTING- **REF: AWMFH Chapter 6**

Crops	Yield Units	Target Yield	Nutrients Utilized Pounds/Acre N	P2O5	K2O	Application Inches/Acre Liquid	Solid
Tillamook Mix	(Ton)	6	281.6	34.1	178.8	4.7	0.9

AVAILABLE ACRES=	Nutrients in Pounds Nitrogen	Phosphorous(P2O5)	Potassium(K2O)
TOTAL NUTRIENTS PRODUCED>	6,635	3,433	7,518
TOTAL ACRES NEEDED>>>>>>>	24	101	42

ORAWM Version 5.7 **January 2000**

ANIMAL WASTE MANAGEMENT
PLANNING WORKSHEET
FOR
Randy Miller

Location- 8120 South Prairie Rd.
Assisted by- Todd Leonnig
Date- 04-25-2000

NUMBER OF ANIMALS, AVERAGE WEIGHT AND STORAGE PERIODS
REF: NRCS Agricultural Waste Management Field Handbook Chapter 4 & 10

DESCRIPTION	NUMBER	WEIGHT LBS	CONFINEMENT START	CONFINEMENT END	CONFINEMENT DAYS	DAYS GRAZED	DAYS STORAGE LIQUIDS	DAYS STORAGE SOLIDS
MILKER	25	1400	DEC	MAR	121	244	10	22
MILKER (DRY)	5	1450	DEC	MAR	120	245	0	22
HEIFERS	25	800	NONE	NONE	0	365	0	0
CALVES	3	200	JAN	DEC	365	0	0	22

DAILY NUTRIENTS AND VOLUMES PRODUCED
REF: AWMFH Chapter 4
NRCS Animal Waste Management System(PS 312), Job Class- I
63 AUs

DESCRIPTION	1000 LB ANIMAL UNITS(AU)	CF/D/AU MANURE	LB/DAY/AU N	LB/DAY/AU P	LB/DAY/AU K
MILKER	35.00	1.57	0.57	0.09	0.32
MILKER (DRY)	7.25	1.10	0.36	0.05	0.23
HEIFERS	20.00	1.30	0.31	0.04	0.24
CALVES	0.60	1.30	0.31	0.04	0.24
TOTALS>>>>>>>>>>>>>>>>>>>	62.85	1.43	0.46	0.07	0.28

BEDDING AND SEPARATOR FACTORS
REF: AWMFH Chapter 9

TYPE OF BEDDING- Straw
DAILY BEDDING FACTOR- 1.8 CF/DAY/AU

TYPE OF SEPARATOR- Dry Scrape System
SELECTED SEPARATOR FACTOR- 90 %

Landowner/Operator- Randy Miller
Location- 8120 South Prairie Rd.
Assisted by- Todd Leonnig

Date- 04-25-2000

VOLUME OF WASH WATER

REF: AWMFH Chapter 10

DESCRIPTION	RANGE	SELECTED GAL/DAY	SELECTED CF/DAY
Cow Preparation-			
Manual	(3-7Gal or 0.5-1CF /Cow-Day)	.2	0.027
Automatic- Stall Wash	(5-15Gal or 1-2CF /Cow-Day)		
Sprinkler Wash	(25-40Gal or 3-5.5CF /Cow-Day)		
Total Daily Volume=	25 Cows X Total Selected Amount=	5	1
Bulk Tank- Automatic	(60-110Gal or 8-15CF /Wash)	30	4.011
Manual	(30-50Gal or 4-7CF /Wash)		
Miscellaneous Equipment	(25-35Gal or 3-5CF /Wash)	0	0
Pipelines	(75-150Gal or 10-20CF /Wash)	40	5.348
Milkhouse and Parlor	(300-700Gal or 40-90CF /Wash)	10	1.337
Holding Area	(500-1200Gal or 70-160CF /Wash)		
Total Daily Volume= 2	Washes X Total Selected Amount=	160	21

RAINFALL RUNOFF AREA CONTRIBUTING TO STORAGE

DESCRIPTION	AREA IN SQUARE FEET
Roof	0
Concrete Slab, Scraped Daily, (Y/N)- YES	
Unsurfaced Lot	
Total-	0 SF

Does silage seepage enter liquid storage facility (Y/N)-? NO

CLIMATIC AND HYDROLOGIC DATA

REF: AWMFH Chapter 10

CLIMATIC STATION- TILLAMOOK 1 W
25YR-24HR STORM RAINFALL- 6.00 Inches

Month	Average Monthly in Inches Precipitation	Evaporation	% Lot Runoff Factors Concrete	Unpaved
JAN	13.46	0.48	100	25
FEB	10.45	0.78	100	25
MAR	10.35	1.26	100	15
APR	6.03	1.90	100	15
MAY	4.24	3.22	100	10
JUN	3.16	3.40	100	10
JUL	1.44	3.91	100	0
AUG	1.73	3.52	100	10
SEP	3.69	2.54	100	15
OCT	7.48	1.42	100	20
NOV	12.80	0.75	100	25
DEC	14.25	0.60	100	25
ANNUAL	89.08	23.78		

Landowner/Operator- Randy Miller
Location- 8120 South Prairie Rd.
Assisted by- Todd Leonnig

Date- 04-25-2000

RAINFALL RUNOFF ENTERING LIQUID STORAGE FACILITY

Month	0SF Roof	0SF Concrete Slab	* 0SF Unsurfaced Lot	0SF Storage Surface	Monthly Totals
	<<<<<<<<<<<<<<<<<<<<RUNOFF IN CUBIC FEET>>>>>>>>>>>>>>>>>>>				
JAN	0	0	0	0	0
FEB	0	0	0	0	0
MAR	0	0	0	0	0
APR	0	0	0	0	0
MAY	0	0	0	0	0
JUN	0	0	0	0	0
JUL	0	0	0	0	0
AUG	0	0	0	0	0
SEP	0	0	0	0	0
OCT	0	0	0	0	0
NOV	0	0	0	0	0
DEC	0	0	0	0	0

* - Unsurfaced lot area includes surface area of solid stacking facility.

TOTAL MONTHLY INFLOWS ENTERING LIQUID STORAGE FACILITY

Month	Surface Runoff	Evaporation	Seepage	Wash Water	Manure	Totals
	<<<<<<<<<<<<<<<<<<<<<<INFLOW IN CUBIC FEET>>>>>>>>>>>>>>>>>>>>>>					
JAN	0	0	0	684	197	882
FEB	0	0	0	618	178	796
MAR	0	0	0	684	197	882
APR	0	0	0	662	2	664
MAY	0	0	0	684	2	686
JUN	0	0	0	662	2	664
JUL	0	0	0	684	2	686
AUG	0	0	0	684	2	686
SEP	0	0	0	662	2	664
OCT	0	0	0	684	2	686
NOV	0	0	0	662	2	664
DEC	0	0	0	684	197	882
ANNUAL	0	0	0	8,054	790	8,844

Total Liquids Entering Liquid Storage Facility Based on 10 Day Storage-

Roof, Slab and Lot Runoff=	0 CF or	0.0 AF
Seepage=	0 CF or	0.0 AF
Washwater=	221 CF or	0.0 AF
Manure=	55 CF or	0.0 AF
25Yr-24Hr Rainfall Runoff=	0 CF or	0.0 AF
Existing Storage=	360 CF or	0.0 AF
Existing Storage Surface Area=	0 SF or	0.0 AC

Landowner/Operator- Randy Miller
Location- 8120 South Prairie Rd.
Assisted by- Todd Leonnig Date- 04-25-2000

DESCRIPTION OF LIQUID WASTE MANAGEMENT SYSTEM

STORAGE METHOD>>> Tank(Covered)

Diameter of Tank=	0 ft.
Depth of Tank=	ft.
Is Tank Covered, (Y/N)?-	YES
Volume of Liquids to Store=	276 CF
Volume of Facility=	0 CF

APPLICATION METHOD>>> Broadcast
Moderately Well Drained Soil Drainage Class
Location- Coast

NUTRIENT ACCOUNTING FOR LIQUIDS>>> REF: AWMFH Chapter 11

Loss Category	Nitrogen Remaining Percent	Nitrogen Remaining Pounds 280	Phosphorous(P2O5) Remaining Percent	Phosphorous(P2O5) Remaining Pounds 99	Potassium(K2O) Remaining Percent	Potassium(K2O) Remaining Pounds 717
Storage	80	224	90	89	90	645
Application	80	179	100	89	100	645
Denitrification	82	147	100	89	100	645

MANAGEMENT CRITERIA FOR Broadcast APPLICATION OF LIQUIDS>>>

	Tank Wagon Capacity=	1,500 GALLONS	
	Width of Application=	10 FEET	
NITROGEN	Concentration in Storage=	405 PPM OR	3.38 LBS/1000 GAL

To apply 66,155 gallons of liquids generated from the operation, it will take approximately 44 trips annually using a tank wagon. Based on applying NITROGEN at the agronomic rate, use the application depths, travel lengths and loads per acre listed below for each crop:

CROP	Application (NO) (LBS)	(INCHES)	Travel Length (FEET) per Load	Loads per Acre (NO)
Tillamook Mix	5.6 50	0.83	2166	2.0

Landowner/Operator- Randy Miller
Location- 8120 South Prairie Rd.
Assisted by- Todd Leonnig Date- 04-25-2000

DESCRIPTION OF SOLIDS WASTE MANAGEMENT SYSTEM

STORAGE METHOD>>> Solids Storage(Unroofed)

Length of Facility=	0 ft.
Width of Facility=	0 ft.
Wall Height of Facility=	0 ft.
Total Stacking Height of Facility=	0 ft.
Side Slopes of Stack=	2 : 1
Is the Facility Covered, (Y/N)?-	NO
Existing Storage=	2,250 CF
Existing Storage Surface Area=	0 SF
Volume of Solids to Store=	2,025 CF
Volume of Facility=	0 CF

APPLICATION METHOD>>> Broadcast
Moderately Well Drained Soil Drainage Class
Location- Coast

NUTRIENT ACCOUNTING FOR SOLIDS>>> REF: AWMFH Chapter 11

Loss Category	Nitrogen Remaining Percent	Nitrogen Remaining Pounds 2,516	Phosphorous(P2O5) Remaining Percent	Phosphorous(P2O5) Remaining Pounds 892	Potassium(K2O) Remaining Percent	Potassium(K2O) Remaining Pounds 1,221
Storage	65	1,635	80	714	80	976
Application	80	1,308	100	714	100	976
Denitrification	82	1,073	100	714	100	976

MANAGEMENT CRITERIA FOR Broadcast APPLICATION OF SOLIDS>>>

Tractor Spreader Capacity=	180 BUSHELS or 224 CF
Width of Application=	10 FEET
NITROGEN Concentration in Storage=	2,066 PPM OR 12.89 LBS/100CF

To apply 12,682 cubic feet of solids generated from the operation, it will take approximately 57 trips annually using a tractor spreader. Based on applying NITROGEN at the agronomic rate, use the application depths, travel lengths and loads per acre listed below for each crop:

CROP	Application (NO)	Application (LBS)	Application (INCHES)	Travel Length (FEET) per Load	Loads per Acre (NO)
Tillamook Mix	2.8	100	0.33	825	5.3

Landowner/Operator- Randy Miller
Location- 8120 South Prairie Rd.
Assisted by- Todd Leonnig

Date- 04-25-2000

DESCRIPTION OF WASTE MANAGEMENT FOR GRAZING SYSTEM

STORAGE METHOD>>> None (grazing)

APPLICATION METHOD>>> Grazing
Moderately Well Drained Soil Drainage Class
Location- Coast

NUTRIENT ACCOUNTING FOR GRAZING>>> REF: AWMFH Chapter 11

Loss Category	Nitrogen Remaining Percent	Nitrogen Remaining Pounds 7,770	Phosphorous(P2O5) Remaining Percent	Phosphorous(P2O5) Remaining Pounds 2,630	Potassium(K2O) Remaining Percent	Potassium(K2O) Remaining Pounds 5,896
Storage	100	7,770	100	2,630	100	5,896
Application	85	6,605	100	2,630	100	5,896
Denitrification	82	5,416	100	2,630	100	5,896

CROP INVENTORY N-Nitrogen P2O5-Phosphorous K2O-Potassium

REF: AWMFH Chapter 6

Crops	Yield Units	Target Yield	Nutrients Utilized Pounds/Acre N	P2O5	K2O	Allowable Application Inches/Acre Liquid	Solid
Tillamook Mix	(Ton)	6	281.6	34.1	178.8	4.7	0.9

UTILIZATION ACRES BASED ON NITROGEN

Crop	Percent to be Applied / Acres Liquids	Solids	Grazing
Tillamook Mix	100 / 1	100 / 4	100 / 19
TOTALS>>>>>>>>>>>>>>>>>>>>>>>>	100 / 1	100 / 4	100 / 19

Landowner/Operator- Randy Miller
Location- 8120 South Prairie Rd.
Assisted by- Todd Leonnig

Date- 04-25-2000

NUTRIENTS TO BE UTILIZED AND VALUE IN DOLLARS PER POUND

Nutrient Form	Nutrients in Pounds Nitrogen	Phosphorous(P2O5)	Potassium(K2O)
Liquid-	147	89	645
Solid-	1,073	714	976
Grazing-	5,416	2,630	5,896
TOTAL>>>>>>>>>>>>>>>	6,635	3,433	7,518
Nutrient Value>>>>>>	$0.30/Lb	$0.60/Lb	$0.15/Lb

NUTRIENT MANAGEMENT COSTS AND NUTRIENT BALANCE

System Life = 40 YEARS
Annual Percentage Rate = 8 %
Fertilizer Application Cost = $6.25 /Acre
Manure Application Cost = $20.00 /Acre

Utilization Area Acres	Cost Savings $/Yr	Breakeven Cost $/Life	Nutrients Utilized Lbs N	P2O5	K2O	Nutrient Balance Lbs N	P2O5	K2O
*******24	$2,796	$33,347	6770	820	4297	135	-2613	-3221
60	$3,524	$42,018	17010	2060	10798	10375	-1373	3279
81	$3,659	$43,629	22681	2746	14397	16045	-687	6879
******101	$3,794	$45,240	28351	3433	17996	21715	0	10478
121	$3,517	$41,938	34021	4120	21595	27386	687	14077
141	$3,240	$38,637	39691	4806	25194	33056	1373	17676

NOTE: Negative values under Nutrient Balance indicate excess nutrients available. Positive values under Nutrient Balance indicate additional nutrients may be needed to meet target yields.

NUTRIENT APPLICATION CALENDAR
REF: AWMFH Chapter 10

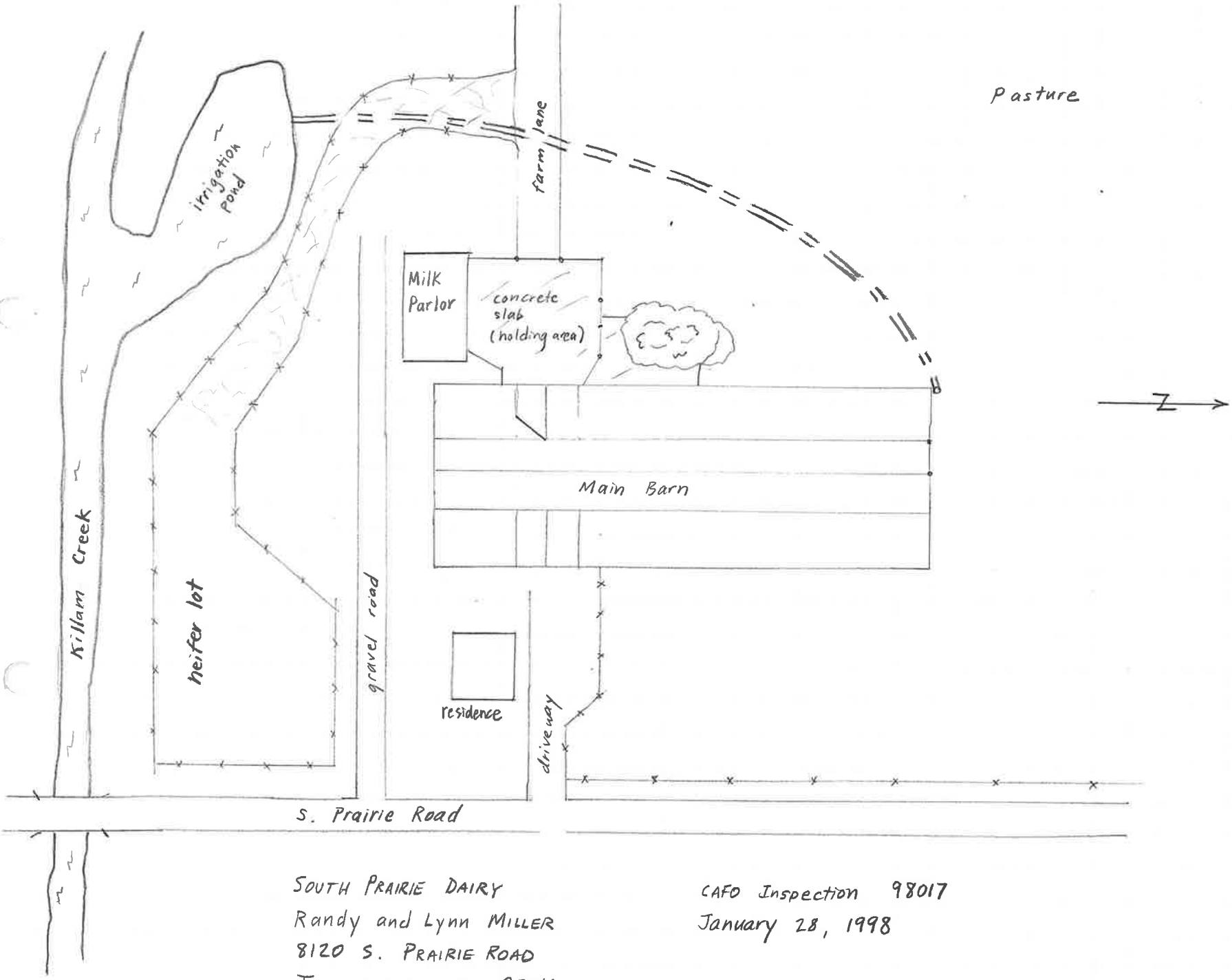
S - Storage Period
A - Application Period

Fm= 1.0 Fs Liquids= 1.0 Fs Solids= 1.0 Fl= 1.0
Fn= 1.0 Fa Liquids= 0.9 Fa Solids= 1.0 Lf= 0 Ef= 0

MONTH>>>>>	---JAN---		--FEB--		----MAR----			----APR----			
WEEK>>>>>	1	2	3	4	5	6	7	8	9	10	11
APPLY>>>>>	S	S	S	S	S	S	S	S	S	S	S

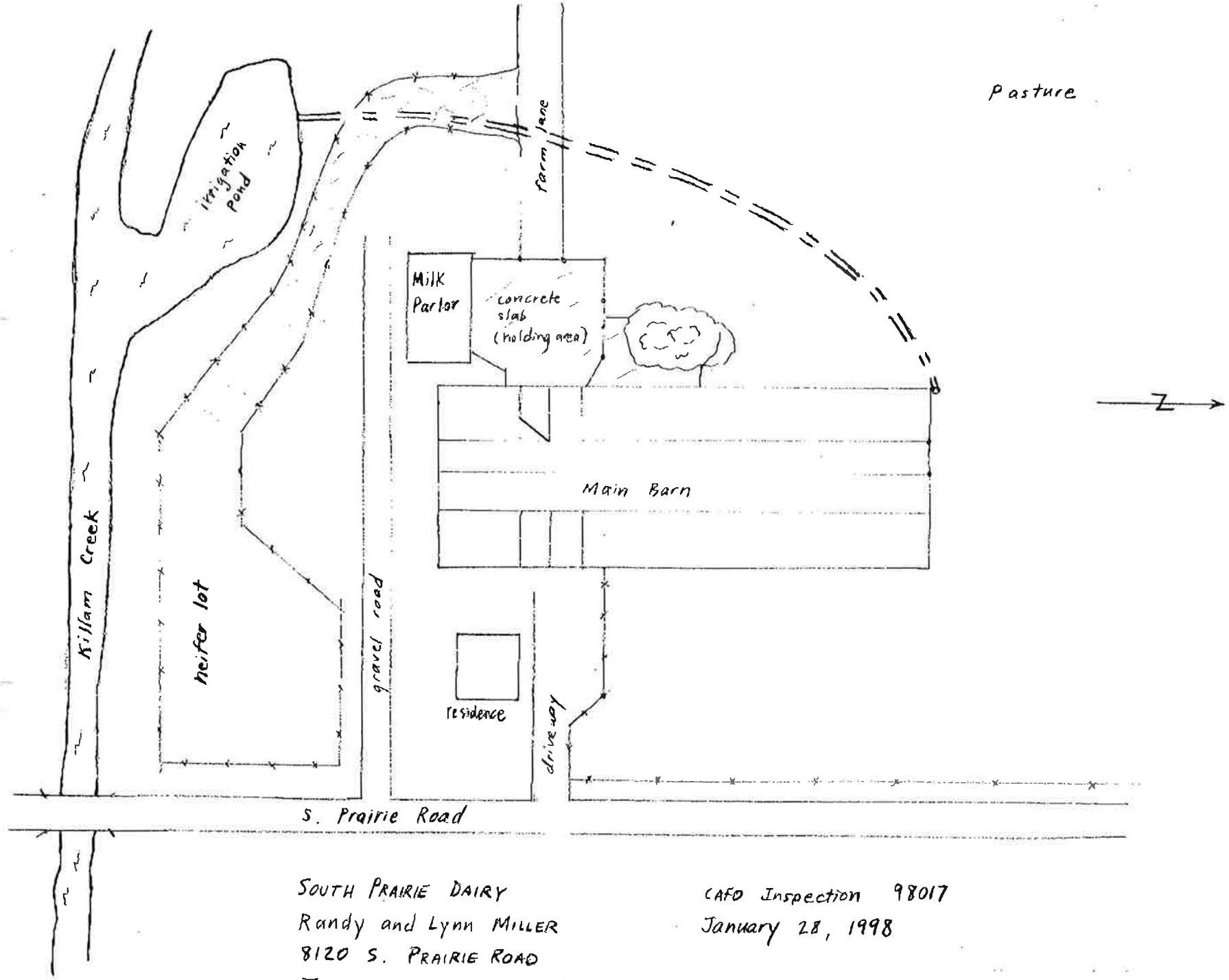
MONTH>>>>>	------MAY-----					----JUN----				------JUL-----					----AUG----			
WEEK>>>>>	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
APPLY>>>>>	S	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A

MONTH>>>>>	----SEP----				------OCT-----					----NOV----					----DEC----			
WEEK>>>>>	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	
APPLY>>>>>	A	A	A	A	S	S	S	S	S	S	S	S	S	S	S	S	S	



SOUTH PRAIRIE DAIRY
Randy and Lynn MILLER
8120 S. PRAIRIE ROAD
TILLAMOOK, OR 97141

CAFO Inspection 98017
January 28, 1998



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