resubmitted

DEQ
Montana Department of Environmental Quality

WATER PROTECTION BUREAU

Agency Use	
Permit No.:	MTG010242
Date Rec'd	2-12-25
Amount Rec'd	0
Check No.	0
Rec'd By	JMF

FORM NOI-NMP CAFO	**Notice of Intent (NOI) and Nutrient Management Plan (NMP) Concentrated Animal Feeding Operation General Permit MTG010000**

This application form is comprised of the **NOI (Sections 1 – 5)** and the **NMP (Sections 6 – 10)**. Before completing the NOI-NMP form, Concentrated Animal Feeding Operation (CAFO) operators must read the CAFO General Permit. CAFO operators are also advised to read the attached NOI-NMP instructions before completing this form. You must print or type legibly; forms that are not legible, not complete, or unsigned will be rejected. You must maintain a copy of the completed NOI-NMP form for your records.

CAFO Status and Fee

Permit Authorization Number: M T G 0 1 0 2 4 2

Select Appropriate Fee:
- ☐ New Application: $1200
- ☐ Renewal Application: $600
- ☐ Permit Modification: $600

Sections 1 through 5 consist of the NOI. The application form is to be completed by the owner or operator of a Concentrated Animal Feeding Operation (CAFO).

Section 1 – Facility/Site Information

Facility Name	Springwater Colony, Inc
Location (Physical address or Directions)	17 Springwater Lane
Nearest City or Town	Harlowton
Zip Code, County	59036 Wheatland County
Facility Latitude, Longitude	46.4559500, -109.751530
Date facility began operation	**11-26-1981**
Status of Applicant	☐ Federal ☐ State ☐ No ☒ Private ☐ Other
Located on Tribal Lands?	☒ No ☐ Yes *(If yes, obtain the permit through EPA, not DEQ)*

Blue text is information added by Christine Weaver, Permit Writer

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Section 2 – Representatives

2.1 Applicant (Owner/Operator)

The owner/operator assumes all liability for site discharges and compliance with the terms and conditions of the permit. The signatory/responsible official must meet certification requirements listed in the Certification Section at this end of this form.

Owner/Operator Formal Name ___Springwater Colony, Inc _____

Mailing Address ___PO Box 782 _____

City, State, Zip Code ___Harlowton, MT 59036_____

Signatory/Responsible Official Name____ Larry Wipf_____

Contact Information Title_____ Farm Manager_____

Phone_____406-350-9136___ Email___swcfarms@gmail.com_____

2.2 Authorized Representative

For future reports (including NetDMR) to be signed by anyone other than the signatory/responsible official, a duly authorized individual(s) or position must be identified. If one is not designated, than all reports must be signed by the signatory until such designation is made in writing [ARM 17.30.1232(2)].

Select Appropriate Box:

☒ No authorized representative for this permit is designated at this time (continue to Section 3)

☐ I designate the following duly authorized representative for this permit (provide the information below):

Authorized Representative Information:

Authorized Representative Name_____ Title_____

Company Name _____

Mailing Address _____

City, State, Zip Code _____

Contact Information Phone_____ Email_____

Section 3 – Business Description

3.1 SIC Codes and NAICS Codes

Provide at least one Standard Industrial Classification (SIC) code and one North American Industry Classification System (NAICS) code which best reflects the products or services provided by the CAFO.

SIC Code		Description
(1)	252	Chicken Eggs
(2)	213	Hogs
(3)	241	Dairy Farm
(4)	251	Broiler, Fryer & Roaster Chickens

NAICS Code		Description
(1)	11234	Chicken egg production
(2)	11221	Hog & Pig Farming
(3)	11212	Dairy cattle & Milk production
(4)	11232	Broilers &other meat chickens

SIC Code Examples:

211 Beef Cattle Feedlots
212 Beef Cattle, Except Feedlots
213 Hogs
214 Sheep and Goats
241 Dairy Farms
251 Broiler, Fryer and Roaster Chickens
252 Chicken Eggs
253 Turkeys and Turkey Eggs
254 Poultry Hatcheries
259 Poultry and Eggs, not elsewhere classified (Ducks)
272 Horses and other Equines

NAICS Code Examples:

112112 Cattle Feedlots
112111 Beef Cattle Ranching and Farming
11221 Hog and Pig Farming
11240 Sheep Farming
11212 Dairy Cattle and Milk Production
11232 Broilers and other Meat-Type Chickens
11234 Chicken Egg Production
11233 Turkey Production
11234 Poultry Hatcheries
112390 Other Poultry Production
112920 Horses and other Equine Production

3.2 Facility or Operation Description

Provide a brief description of the nature of the facility (feedlot, stockyard, sale barn, etc.)

Production of layer and fryer chickens, dairy for milk production, Swine (farrow to finish) beef cow/calf ranch.

3.3 Existing or Pending Permits, Certification, or Approvals

☒ None
☐ RCRA_____
☐ MPDES_____
☐ Other_____
☐ PSD (Air Emissions)_____
☐ Other_____
☐ 404 Permit (Dredge and Fill)_____

Section 4 – Outfalls

4.1 Receiving Water

For each outfall, provide the latitude and longitude (to the nearest decimal degree) and the name of the receiving water. If the receiving water/drainage is unnamed, indicate the closest named drainage it flows into (i.e., "unnamed tributary to Clear Creek"). Attach additional sheets if necessary for more outfalls. This section must not be left blank, and "N/A" is not acceptable.

Outfall	Latitude	Longitude	Name of Receiving Water
001	46.4587900	-109.740720	Seasonal pond
002	46.417569	-109.745481	Musselshell River

Section 5 – Characteristics

5.1 Impaired Waters 303(d)

Identify whether the receiving water is impaired for nutrients. Check the Clean Water Act Information Center database at https://deq.mt.gov/water/resources to determine if the receiving water is impaired for nutrients (total nitrogen and/or total phosphorus).

☐ The receiving water is impaired for nutrients
☒ The receiving water is NOT impaired for nutrients

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5.2 Animal Confinement

Report the maximum number of each type of animal confined at any one time in open confinement and/or housed under a roof.

Animal type	Number in Open Confinement	Number Housed Under Roof
Mature Dairy Cows	**130**	
Veal Calves		**35**
Cattle including dairy Heifers	**685**	
Swine 55 lbs. or over		**5759**
Swine 55 lbs. or under		**2100**
Horses		
Sheep or Lambs		
Turkeys	**700**	
Chicken broilers –includes juveniles		**6000**
Chicken layers –includes juveniles		**10500**
Ducks		
Other Specify:		
Other Specify: **Bulls**	**35**	

5.3 Rain Gage Location

Identify the nearest gage station or onsite rain gage. Provide either the Station ID of the gage or a latitude and longitude.

Station ID __Harlowton E (HydroMet) OR

Latitude, Longitude _46.4133895__, _-109.7168853_

5.4 Containment Structures

Were the containment structures built after February 2006?

☐ Yes. Skip the following 3 questions and continue to the table below.

☒ No. Complete the questions and table below.

Do the livestock waste control facilities have 10 feet of separation between the pond bottom and any bedrock formations?

☒ Yes ☐ No

Do the waste containment structures have 4 feet of separation from the pond bottom to any ground water?

☒ Yes ☐ No

Do the livestock waste control facilities comply with the applicable well setbacks?

☒ Yes ☐ No

Continue to Page 5

Identify the type of containment/storage, the total capacity with units, and the number of days of storage in each:

Type of Containment/Storage	Total Capacity	Units (gallons or tons)	Days of Storage
Anaerobic Lagoon			
Storage Pond #1	**7,579,244**	**gal**	**365**
Storage Pond #2	**647,955**	**gal**	**180**
Storage Pond #3	**49,790**	**gal**	**30**
Storage Pond #4			
Storage Pond #5			
Above Ground Storage Tank #1			
Above Ground Storage Tank #2			
Above Ground Storage Tank #3			
Underfloor Pits	**647,944**		**180**
Below Ground Storage Tank			
Roofed Storage Shed			
Concrete Pad			
Impervious Soil Pad	**700**	**tons**	**365**
Other Specify:			
Other Specify:			

5.5 Sage Grouse Habitat

Visit the Montana Sage Grouse Habitat Conservation Program (Program) website at https://sagegrouse.mt.gov/ to determine if the proposed operation is located in designated sage grouse core, general, or connectivity habitat.

☐ Yes. Submit an application to the Program and **attach the required consultation letter**.
☒ No. No additional information is required.

5.6 New Source/Operation

Is this a new source and/or operation? New sources must obtain analyses from the Montana Natural Heritage Program (MTNHP) and Montana State Historic Preservation Office (SHPO) demonstrating possible impacts to wildlife and cultural resources, respectively.

☐ Yes. Attach project review analyses from MTNHP and SHPO.
☒ No additional information is required

Continue to Page 6

Sections 6 through 10 consist of the Nutrient Management Plan (NMP). These sections are intended to help CAFO operators develop a site-specific NMP required by the CAFO General Permit. Your NMP must be kept at the operation. Attach additional pages as necessary, indicating the corresponding section number on this NMP form.

Section 6 – NMP Minimum Elements

Facility Photos and Maps

Facilities must attach photos and maps depicting the following:

- The production area that shows the locations of all animal confinement structures described in the **Animal Type, Storage Location, and Generation Rates Table.**
- The flow direction of storm water and wastewater for all animal confinement structures described in the **Animal Type, Storage Location, and Generation Rates Table.**
- Manure and wastewater handling and storage areas
- Raw material handling and storage areas
- Storage and disposal areas of chemicals or other contaminants handled on site
- All land application areas (include topography and soil types)
- Environmentally sensitive areas (sinkholes, wells, drinking water sources, tile drain outlets, etc.) for the production area
- Illustrate the facility/activity boundaries, receiving water, and major drainage patterns
- Identify the specific location of the production area and the land application area(s)

☐ I have attached photos and maps (aerial and topographic) that meet the above requirements.

6.1 Ensure Adequate Storage Capacity

Complete the table below: Be sure to identify each type of animal confined at this facility. This could include animals of a given species, weight class, or housed for a specific purpose.

Livestock Statistics and Manure, Litter, and Process Wastewater Generation Rates

Animal Type	Waste Storage Location	Maximum Number of Animals at Any Time	Number of Days/Year on Site	Annual manure, litter, and process wastewater production	
				Dry (tons/yr)	Liquid (gallons/yr)
1. Cattle (all except dairy/veal)	Impervious soil pad	685	365	650	0
2. Mature Dairy & heifers	Impervious soil pad	165	365	350	2200
3. Veal Calves	Impervious soil pad	65	365	1.0	0
4. Chicken Layers	Impervious soil pad	10500	365	240	0
5. Chicken Fryers	Impervious soil pad	6000	365	140	0
6. Swine <55	Under floor pit/storage pond	5759	365		647,955
7. Swine >55	Under Floor pit/storage Pond	2100	365		7,579,244
8. Turkeys	Impervious soil pad	700	365	15	0
9. Bulls	Free range pasture	35	365	20	0
10.					
11.					

Methods for estimating animal manure, litter, and process wastewater production

Describe the methods used for estimating animal manure, litter, and process wastewater production: Include all formulas, factors, references to tables, and other resources used to calculate manure, litter, and wastewater production. Be sure to account for soiled bedding materials.

_____Standard MT 633-1

Manure handling:

Identify manure, litter, and process wastewater handling at the CAFO. Mark all that apply:

- ☐ Stored in pens
- ☒ Stored on stacking pad
- ☐ Composting on site
- ☐ Other _____
- ☒ Direct pipe to liquid impoundment
- ☒ Stored under floor pit
- ☐ Separator

Frequency of manure removal from confinement areas:

- ☐ Bi-annually
- ☐ Annually
- ☒ As needed
- ☐ Other _____

Is the manure, litter, or process wastewater temporarily stored in any location other than the production area?

- ☒ No.
- ☐ Yes. Explain how and where _____

Is dry manure and/or litter stored on an impervious surface?

- ☐ No.
- ☒ Yes. Describe the type and characteristics of this surface ___Impervious soil pad_____

Waste control structures:

Provide the 24-hr-25-yr storm event at your facility location. Refer to the map provided in the instructions. _____2.7_____ in/hr

Provide the annual precipitation during critical winter storage period (180 days from mid-October to mid-April) _____6.0_____ in

Provide the area within clean water diversions. This is the area that is inside the BMPs used for clean water diversions and is used to calculate volume required to hold the 24-hr-25-yr storm event and the volume of your critical storage period. _____30_____ acres

Check all the surface types within the clean water diversion area and provide the coverage in acres or ft^2. Be sure to circle the correct units.

- ☒ Dirt _____**30**_____ acres or ft^2 (circle correct unit)
- ☐ Concrete _____ acres or ft^2 (circle correct unit)
- ☐ Paved _____ acres
- ☐ Under roof _____ acres or ft^2 (circle correct unit) – check if runoff is not part of clean water BMPs
- ☐ Gravel _____ acres or ft^2 (circle correct unit)
- ☐ Pasture _____ acres or ft^2 (circle correct unit)
- ☐ Other _____ _____acres or ft^2 (circle one)

Use the Table below to identify and describe all production area waste control structures for the production area of each animal type identified in the table "Livestock Statistics and Manure, Litter, and Process Wastewater Generation Rates" above (Section 6.1). Waste control structures may include but are not limited to: manure lagoons, manure ponds, evaporation ponds, wastewater retention ponds, contaminated runoff retention ponds, settling basins, underground storage tanks, underfloor pits, manure solids stacking pads, vegetative treatment strips, composting facilities, and dry stack facilities. Berms, dikes, concrete curbs, ditches, and waste transfer pipelines are also waste control structures and must be listed, though some of the requested measurements may not apply.

Production Area Waste Control Structures Description				
Production area Waste Control Structure (For Corresponding Animal Type Identified in Table Above)	Volume (gal if liquid) (ft^3 if dry)	Number of days of storage	Winter storage depth (ft)	The 24hr-25 yr storm event depth (ft)
1. Storage Lagoon	49790	30	8	8
2. Under floor pit	647,955	180	2	
3. Storage Lagoon	7,579,244	365	24	24.0
4. Impervious soil pad	750	365		
5.				
6.				
7.				
8.				
9.				
10.				
11.				

6.2 Mortality Management

Check the box that describes how mortalities are disposed of at this CAFO.

☒ Burial
☐ Landfill
☐ Composted
☐ Contractor removal
☐ Incineration
☐ Other_____

Provide the location where mortalities are disposed of, if part of the production area:

6.3 Clean Water Diversion Practices

Check all that apply for how clean water is diverted from the production area.

☒ Ditches
☒ Site grading
☒ Earthen berms
☒ Gutters and spouts
☒ Culverts
☐ Other _____

6.4 Prohibiting Animals and Wastes from Direct Contact with State Waters

Check all that apply for how animals and wastes are prohibited from direct contact with sate waters.

- ☒ Fencing
- ☐ Wall
- ☒ Inside building
- ☐ Other _____

6.5 Chemicals and Contaminants

List all major chemicals or other contaminants handled on site as part of your CAFO operation, including, but not limited to: pesticides, herbicides, animal dips, disinfectants, etc. Specify the method of disposal and location stored for each contaminant. Ensure a corresponding map has been attached, as required in Section 6, Facility Photos and Maps.

6.6 Conservation Practices

Check all temporary, permanent, and structural BMPs which will be used to control runnoff of pollutants from the facility's **production area**. Be sure to include them on the map described above in Section 6. If BMPs are not installed, include a schedule for implementation of each of the following measures. Provide details and specifications to suplement the BMP descriptions. Attach additional sheets if necessary.

- ☒ Ditches
- ☒ Earthen berms
- ☒ Culverts and pipes
- ☒ Buffers
- ☒ Site grading
- ☒ Gutters and spouts
- ☒ Covered Pens
- ☐ Other _____

6.7 Sampling and Analysis Procedures for Manure, Litter, Process Wastewater, and Soil

Representative samples of manure, litter, and process wastewater must be analyzed a minimum of once per year for total nitrogen and total phosphorus. Results should be reported in lbs/ton for solids and lbs/1000 gal for liquids. Results will be used to determine rates for manure, litter, and process wastewater. Indicate your method for samping. Be sure to provide a description if you select "other."

- ☒ Sample collection will occur according to CAFO General Permit Section II.D.
- ☐ Other _____

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Section 7 – NMP Land Application

Identify whether manure will be land applied to land that is owned, rented, or leased by the owner or operator of the facility.

☐ No. Explain how animal waste will be managed by the operation, including protocol for transfers of manure, litter, and process wastewater. Skip to Section 10.

_____

_____

☒ Yes. Continue below.

7.1 Land Application Photos and Maps

Facilities that land apply must attach photos/maps clearly identify the following items. If an item is not applicable, check the box "None."

- Individual field boundaries for all planned land application areas
- A name, number, letter or other means of identifying each individual land application field
- The soil type(s) present and their locations within the individual land application field(s)
- The location of any downgradient surface waters
- The specific manure/waste handling or nutrient management restrictions associated with each land application field i.e. setbacks
- Buffers and setbacks around state surface waters, well heads, etc.
- Any downgradient open tile line intake structures
  ☒ None. Not included on map
- Any downgradient sinkholes
  ☒ None. Not included on map
- Any downgradient agricultural well heads
  ☒ None. Not included on map
- All conduits to surface waters
- All temporary, permanent, and structural BMPs used to control runoff of pollutants from the land application area

☒ I have attached photos and maps of the site where manure is to be applied.

7.2 Protocols to Land Apply Manure, Litter, or Process Wastewater

Check all temporary, permanent, and structural BMPs which will be used to control runoff of pollutants from the CAFO's **land application area.** If not already in use, include a schedule for implementation of each of these measures. You may supplement this description by attaching details and specifications.

☐ Buffers
☐ Constructed wetlands
☐ Infiltration field
☐ Setbacks
☒ Conservation tillage
☐ Grass Filter
☒ Residue Management
☐ Terrance

☒ Other ____Slurry effluent Injected directly 3'-6' into soil and litter surface applied and incorporated within 3 days__

7.3 Soil Phosphorus Sampling and Analysis

Representative **soil** (composite) samples from the top 6 inches layer of soil for each field where manure will be applied must be analyzed for phosphorus content at least once every five years. Analyses will be conducted by a qualified laboratory, using the Olsen P test. Results will be reported in parts per million (ppm) and will be used in determining application rates for manure, litter, and process wastewater.

☐ Sample collection will occur according to Part II.D of the CAFO General Permit.
☒ Other (describe)_0-6' and 6-12" NO3PK & Minerals, 12-24" NO3 & SO4, 24-36' NO3

7.4 Soil Nitrogen Sampling and Analysis

Representative composite soil samples for total nitrogen and nitrate must be collected for each field where manure will be applied. Composite samples for total nitrogen must be collected from a soil depth of 0 to 6 inches and must be analyzed annually. Composite samples for nitrate must be collected from a soil depth of 6 to 24 inches and must be analyzed annually. All samples must be analyzed according to method code 4H2al-3 in NRCS Soil Survey Laboratory Methods Manual, Soil Survey Investigation Report No. 42. Results must be reported as mg/kg total nitrogen and pounds per acre.

☐ Sample collection will occur according to Part II.D of the CAFO General Permit.

☐ Other 0-6' and 6-12" NO3PK & Minerals, 12-24" NO3 & SO4, 24-36' NO3

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Section 8. NMP Application Rates

The applicant has 2 ways in which to report how manure or process wastewater application rates can be reported to DEQ. Select one:

☐ **Linear Approach**. Expresses rates of application as pounds of nitrogen and phosphorus. Complete Section 8.1, then continue to Section 9. See page 8 of the NOI-NMP Instructions for guidance on the Linear Approach.

☒ **Narrative Rate Approach**. Expresses a narrative rate of application that results in the amount, in tons or gallons, of manure, litter, and process wastewater to be land applied. Complete Section 8.2, then continue to section 9. See page 9 of the NOI-NMP Instructions for guidance on the Narrative Rate Approach.

8.1 Linear Approach

Expresses rates of application as pounds of nitrogen and phosphorus. CAFOs selecting the linear approach to address rates of application must include in the NMP submitted to the Department the following information for each crop, field, and year covered by the NMP:

1. The maximum application rate (pounds/acre/year of nitrogen and phosphorus) from manure, litter, and process wastewater.
2. The outcome of the field-specific assessment of the potential for phosphorus transport from each field. The Department does not have an N transport risk assessment, therefore the NMP must document any basis for assuming that nitrogen will be fully used by crops. The CAFO must specify any conservation practices used in calculating the risk rating.
3. The crops to be planted or any other uses of a field such as pasture or fallow fields.
4. The realistic annual yield goal for each crop or use identified for each field.
5. The nitrogen and phosphorus recommendations from Department acceptable sources for each crop or use identified for each field.
6. Credits for all residual nitrogen in each field that will be plant available.
7. Consideration of multi-year phosphorus application. For any field where nutrients are applied at a rate based on the crop phosphorus requirement, the NMP must account for single-year nutrient applications that supply more than the crop's annual phosphorus requirement.
8. All other additions of plant available nitrogen and phosphorus (i.e., from sources other than manure, litter, or process wastewater or credits for residual nitrogen).
9. The form and source of manure, litter, and process wastewater to be land-applied.
10. The timing and method of land application. The NMP also must include storage capacities needed to ensure adequate storage that accommodates the timing indicated.
11. The methodology that will be used to account for the amount of nitrogen and phosphorus in the manure, litter, and wastewater to be applied.
12. Any other factors necessary to determine the maximum application rate identified in accordance with this Linear Approach.

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13. Complete the Nutrient Budget Worksheet, below, for the crop grown on each field for each year to which manure or process wastewater is, or may be, applied. A copy of each Nutrient Budget Worksheet will be maintained on site, and a copy will be submitted to the Department.

Nutrient Budget Worksheet

Field identification: **17-8N16E 13** Year: **2024** Crop: **Feed Barley**					
Expected Crop Yield: **60 bu/a**					
Phosphorus index results or Phosphorus application from soil test:					
Method of Land Application:					
When will application occur:					
Nutrient Budget			Nitrogen-based Application	Phosphorus-based Application	Source of information
1		Crop Nutrient Needs, lbs/acre	72 units/ac	25 units/ac	EB-161 and experience
2	(-)	Credits from previous legume crops, or soil test lbs/acre	35		
3	(-)	Residuals from past manure production lbs/acre-only if no new soil test	0 applied in the past 5 + years		
4	(-)	Nutrients supplied by commercial fertilizer and Biosolids, lbs/acre	20 units	26 units	Experience and EB-161 reference
5	(-)	Nutrients supplied in irrigation water, lbs/acre	0	0	
6		**= Additional Nutrients Needed, lbs/acre**	17		
7		Total Nitrogen and Phosphorus in manure, lbs/ton or lbs/1000 gal (from manure test)	0	0	
8	(×)	Nutrient Availability factor, for Phosphorus based application use 1.0	0	0	
9		**= Available Nutrients in Manure, lbs/ton or lbs/1000 gal**	0	0	
10		Additional Nutrients needed, lbs/acre (calculated above)	17 units	0	
11	(÷)	Available Nutrients in Manure, lbs/ton or lbs/1000 gal (calculated above)	0	0	
12		**= Manure Application Rate, tons/acre or 1000 gal/acre**	0	0	

End of Linear Approach. Continue to Section 9

13 Complete the Nutrient Budget Worksheet, below, for the crop grown on each field for each year to which manure or process wastewater is, or may be, applied. A copy of each Nutrient Budget Worksheet will be maintained on site, and a copy will be submitted to the Department.

Nutrient Budget Worksheet

Field identification: **17-8N16E 13** Year: **2025** Crop: **Mustard**					
Expected Crop Yield: 1200					
Phosphorus index results or Phosphorus application from soil test:					
Method of Land Application: Soil injection in the top 3"-6"					
When will application occur: Fall 2024					
Nutrient Budget			Nitrogen-based Application	Phosphorus-based Application	Source of information
1		Crop Nutrient Needs, lbs/acre	78	20	EB-161 and experience
2	(-)	Credits from previous legume crops, or soil test lbs/acre	20	0	
3	(-)	Residuals from past manure production lbs/acre-only if no new soil test	112	24	
4	(-)	Nutrients supplied by commercial fertilizer and Biosolids, lbs/acre	0	20	
5	(-)	Nutrients supplied in irrigation water, lbs/acre	0	0	
6		**= Additional Nutrients Needed, lbs/acre**	0	0	
7		Total Nitrogen and Phosphorus in manure, lbs/ton or lbs/1000 gal (from manure test)	11.2/1000 gal	2.4 units/1000	Manure report
8	(×)	Nutrient Availability factor, for Phosphorus based application use 1.0		0.8	
9		**= Available Nutrients in Manure, lbs/ton or lbs/1000 gal**			
10		Additional Nutrients needed, lbs/acre (calculated above)	0	0	
11	(÷)	Available Nutrients in Manure, lbs/ton or lbs/1000 gal (calculated above)			
12		**= Manure Application Rate, tons/acre or 1000 gal/acre**	10,000 gal/ac	10,000	

End of Linear Approach. Continue to Section 9

1.
13.

13. Complete the Nutrient Budget Worksheet, below, for the crop grown on each field for each year to which manure or process wastewater is, or may be, applied. A copy of each Nutrient Budget Worksheet will be maintained on site, and a copy will be submitted to the Department.

Nutrient Budget Worksheet

Field identification: **17-8N16E 13**	Year: **2026**	Crop: **Winter Wheat**
Expected Crop Yield: 65 bu/ac		
Phosphorus index results or Phosphorus application from soil test: 27.2		
Method of Land Application: None		
When will application occur: None		

		Nutrient Budget	Nitrogen-based Application	Phosphorus-based Application	Source of information
1		Crop Nutrient Needs, lbs/acre	176	20	ED-161 and Experience
2	(-)	Credits from previous legume crops, or soil test lbs/acre	60		
3	(-)	Residuals from past manure production lbs/acre-only if no new soil test	20		
4	(-)	Nutrients supplied by commercial fertilizer and Biosolids, lbs/acre	90	20	
5	(-)	Nutrients supplied in irrigation water, lbs/acre	0		
6		**= Additional Nutrients Needed, lbs/acre**	90		
7		Total Nitrogen and Phosphorus in manure, lbs/ton or lbs/1000 gal (from manure test)	0		
8	(×)	Nutrient Availability factor, for Phosphorus based application use 1.0	0		
9		**= Available Nutrients in Manure, lbs/ton or lbs/1000 gal**	0		
10		Additional Nutrients needed, lbs/acre (calculated above)	90		
11	(÷)	Available Nutrients in Manure, lbs/ton or lbs/1000 gal (calculated above)	0		
12		**= Manure Application Rate, tons/acre or 1000 gal/acre**	0		

End of Linear Approach. Continue to Section 9

13. Complete the Nutrient Budget Worksheet, below, for the crop grown on each field for each year to which manure or process wastewater is, or may be, applied. A copy of each Nutrient Budget Worksheet will be maintained on site, and a copy will be submitted to the Department.

Nutrient Budget Worksheet

Field identification: **17-8N16E 13** Year: **2027** Crop: **Malt barley**					
Expected Crop Yield: 55					
Phosphorus index results or Phosphorus application from soil test: 27.2					
Method of Land Application: none					
When will application occur: none					
Nutrient Budget			Nitrogen-based Application	Phosphorus-based Application	Source of information
1		Crop Nutrient Needs, lbs/acre	61 units	20	EB-161 and Experience
2	(-)	Credits from previous legume crops, or soil test lbs/acre	30 units		
3	(-)	Residuals from past manure production lbs/acre-only if no new soil test	0		
4	(-)	Nutrients supplied by commercial fertilizer and Biosolids, lbs/acre	22.5 units	20	
5	(-)	Nutrients supplied in irrigation water, lbs/acre	0		
6		**= Additional Nutrients Needed, lbs/acre**	7.5 units		
7		Total Nitrogen and Phosphorus in manure, lbs/ton or lbs/1000 gal (from manure test)	0		
8	(×)	Nutrient Availability factor, for Phosphorus based application use 1.0	0		
9		**= Available Nutrients in Manure, lbs/ton or lbs/1000 gal**	0		
10		Additional Nutrients needed, lbs/acre (calculated above)	7.5 units		
11	(÷)	Available Nutrients in Manure, lbs/ton or lbs/1000 gal (calculated above)	0		
12		**= Manure Application Rate, tons/acre or 1000 gal/acre**	0		

End of Linear Approach. Continue to Section 9

14.

13. Complete the Nutrient Budget Worksheet, below, for the crop grown on each field for each year to which manure or process wastewater is, or may be, applied. A copy of each Nutrient Budget Worksheet will be maintained on site, and a copy will be submitted to the Department.

Nutrient Budget Worksheet

Field identification: **17-8N16E 13** Year: **2028** Crop: **Winter wheat**					
Expected Crop Yield: 65					
Phosphorus index results or Phosphorus application from soil test: 27.2					
Method of Land Application: None					
When will application occur: None					
		Nutrient Budget	Nitrogen-based Application	Phosphorus-based Application	Source of information
1		Crop Nutrient Needs, lbs/acre	176	20	Be-161 and Experience
2	(-)	Credits from previous legume crops, or soil test lbs/acre	30		
3	(-)	Residuals from past manure production lbs/acre-only if no new soil test	0		
4	(-)	Nutrients supplied by commercial fertilizer and Biosolids, lbs/acre	60 units	20 units	
5	(-)	Nutrients supplied in irrigation water, lbs/acre	0		
6		**= Additional Nutrients Needed, lbs/acre**	86		
7		Total Nitrogen and Phosphorus in manure, lbs/ton or lbs/1000 gal (from manure test)	0		
8	(×)	Nutrient Availability factor, for Phosphorus based application use 1.0	0		
9		**= Available Nutrients in Manure, lbs/ton or lbs/1000 gal**	0		
10		Additional Nutrients needed, lbs/acre (calculated above)	86 units		
11	(÷)	Available Nutrients in Manure, lbs/ton or lbs/1000 gal (calculated above)	0		
12		**= Manure Application Rate, tons/acre or 1000 gal/acre**	86 units		

End of Linear Approach. Continue to Section 9

8.2 Narrative Approach

Fields Available for Land Application

	Field ID	Total Acres
1	1-8N15E 3	207.44
2	1-8N15E 3	180.49
3	6-8N16E2	199.53
4	6-8N16E 4	224.26
5	5-8N16E 6	222.99
6	5-8N16E 7	218.19
7	5-8N16E 8	197.31
8	4-8N16E 11	265.24
9	4-8N16E 1,2	296.67
10	12-8N15E 15	62
11	7-8N16E 15,20,21	206.48
12	7-8N16E 1	324.43
13	8-8N16E 7	214.34
14	8-8N16E 10	214.58
15	8-8N16E 13	198.13
16	13-8N15E 2,4	78.39
17	13/18-8N16E	218.62
18	18-8N16E 18,37	315.59
19	17-8N16E 13	211.5
20	17-8N16E 5,12	204.3
21	16,21-8N16E 1,1,2	330.07
22	16,21-8N16E 6,2,4	349.9
23	15,22-8N16E	371.4
24	15,22-8N16E 5,7,8	419.06
25	19-8N16E 1,2	494.9
26	30,31-8N16E PVT	43.05
27	30,31-8N16E DL	22.25
28	33-8N16E 4	85.93
29	33-8N16E 4,8,12	106.49
30	32-8N16E all	225.49
	Total acres	**6709.02**

Outcome of the Field-Specific Assessment of the Potential for N and P Transport from Each Field and Maximum Amount of Nitrogen and Phosphorus Derived from All Sources

Field ID	Year	Crop	Olsen P Soil Test Results (ppm)	Recommended Rate Basis	Max N Derived from all sources	Max P_2O_5 Derived from all sources
					(Units/acre)	
1-8N15E 3	2024	Malt barley	15.2	Nitrogen Needs of Crop	61	30
	2025	ww			176	30
	2026	Malt barley			61	30
	2027	ww			176	30
	2028	Feed Barley			72	30
6-8N16E 1	2024	Malt barley	10.5	Nitrogen Needs of Crop	61	30
	2025	ww			176	30
	2026	Malt barley			61	30
	2027	ww			176	30
	2028	Feed Barley			72	30
6-8N16E2	2024	Malt barley	9.1	Nitrogen Needs of Crop	61	30
	2025	ww			176	30
	2026	Malt barley			61	30
	2027	ww			176	30
	2028	Feed Barley			72	30
6-8N16E 4	2024	ww	8.7	Nitrogen Needs of Crop	176	30
	2025	Malt barley			61	30
	2026	WW			176	30
	2027	Mustard			78	25
	2028	WW			176	30
5-8N16E 6	2024	ww	5.4	Nitrogen Needs of Crop	176	30
	2025	Malt barley			61	30
	2026	WW			176	30
	2027	Mustard			78	25
	2028	WW			176	30

Field ID	Year	Crop	Olsen P Soil Test Results (ppm)	Recommended Rate Basis	Max N Derived from all sources	Max P_2O_5 Derived from all sources
					(Units/acre)	
5-8N16E 7	2024	Feed Barley	6.6	Nitrogen Needs of Crop	72	30
	2025	ww			176	30
	2026	Malt barley			61	30
	2027	Mustard			78	25
	2028	WW			176	30
5-8N16E 8	2024	WW	12.5	Nitrogen Needs of Crop	176	30
	2025	Feed barley			72	30
	2026	WW			176	30
	2027	Mustard			78	25
	2028	WW			176	30
4-8N16E 11	2024	Feed barley	13.2	Nitrogen Needs of Crop	72	30
	2025	Feed barley			72	30
	2026	WW			176	30
	2027	Mustard			78	30
	2028	ww			176	30
4-8N16E 1,2	2024	Feed barley	15.9	Nitrogen Needs of Crop	72	30
	2025	Feed Barley			72	30
	2026	WW			176	30
	2027	Mustard			78	25
	2028	ww			176	30
12-8N15E 15	2024	ww	12.4	Nitrogen Needs of Crop	176	30
	2025	Malt barley			61	30
	2026	ww			176	30
	2027	Feed Barley			72	30
	2028	ww			176	30
7-8N16E 15,20,1	2024	ww	16.1	Nitrogen Needs of Crop	176	30
	2025	Malt barley			61	30
	2026	ww			176	30
	2027	Feed Barley			72	30
	2028	ww			176	30

Field ID	Year	Crop	Olsen P Soil Test Results (ppm)	Recommended Rate Basis	Max N Derived from all sources	Max P_2O_5 Derived from all sources
					(Units/acre)	
7-8N16E 1	2024	ww	38	Phosphorus Needs of Crop	176	20
	2025	Malt barley			61	20
	2026	ww			176	20
	2027	Mustard			78	20
	2028	WW			176	20
8-8N16E 7	2024	Feed Barley	29.9	Phosphorus Needs of Crop	72	20
	2025	ww			176	20
	2026	Malt barley			61	20
	2027	Mustard			78	20
	2028	WW			176	20
8-8N16E 10	2024	Feed Barley	19.7	Nitrogen Needs of Crop	72	30
	2025	ww			176	30
	2026	Malt barley			61	30
	2027	Mustard			78	25
	2028	WW			176	30
8-8N16E 13	2024	ww	35.1	Phosphorus Needs of Crop	176	20
	2025	ww			176	20
	2026	Malt barley			61	20
	2027	Mustard			78	20
	2028	ww			176	20
13-8N15E 2,4	2024	Feed barley	16	Nitrogen Needs of Crop	72	30
	2025	Malt barley			61	30
	2026	Mustard			78	25
	2027	ww			176	30
	2028	Malt barley			61	30
13/18-8N16E	2024	ww	20.9	Nitrogen Needs of Crop	176	30
	2025	Malt barley			61	30
	2026	Mustard			78	25
	2027	WW			176	30
	2028	Malt barley			61	30

Outcome of the Field-Specific Assessment of the Potential for N and P Transport from Each Field and

Field ID	Year	Crop	Olsen P Soil Test Results (ppm)	Recommended Rate Basis	Max N Derived from all sources	Max P_2O_5 Derived from all sources
					(Units/acre)	
18-8N16E	2024	ww	31	Phosphorus Needs of Crop	176	20
18,37	2025	Malt barley			61	20
	2026	WW			176	20
	2027	Mustard			78	20
	2028	WW			176	20
17-8N16E 13	2024	Feed baley	27.2	Phosphorus Needs of Crop	72	20
	2025	Mustard			78	20
	2026	WW			176	20
	2027	Malt barley			61	20
	2028	WW			176	20
17-8N16E 5,12	2024	Feed baley	33.5	Phosphorus Needs of Crop	72	20
	2025	Mustard			78	20
	2026	WW			176	20
	2027	Malt barley			61	20
	2028	WW			176	20
16,21-8N16E	2024	ww	39.7	Phosphorus Needs of Crop	176	20
1,1,2	2025	Malt barley			61	20
	2026	WW			176	20
	2027	Feed Barley			72	20
	2028	Mustard			78	20
16,21-8N16E	2024	ww	59.7	Phosphorus Needs of Crop	176	20
6,2,4	2025	Malt barley			61	20
	2026	WW			176	20
	2027	Feed baley			72	20
	2028	Mustard			78	20

Field ID	Year	Crop	Olsen P Soil Test Results (ppm)	Recommended Rate Basis	Max N Derived from all sources	Max P_2O_5 Derived from all sources
					(Units/acre)	
15,22-8N16E	2024	Malt barley	28.6	Phosphorus Needs of Crop	61	20
	2025	Mustard			78	20
	2026	ww			176	20
	2027	Malt barley			61	20
	2028	WW			176	20
15,22-8N16E	2024	Malt barley	36.8	Phosphorus Needs of Crop	61	20
5,7,8	2025	Mustard			78	20
	2026	WW			176	20
	2027	Feed baley			72	20
	2028	ww			176	20
19-8N16E 1,2	2024	ww	22.1	Nitrogen Needs of Crop	176	30
	2025	ww			176	30
	2026	Malt barley			61	30
	2027	Mustard			78	25
	2028	WW			176	30
30,318N16E	2024	Alfalfa	35.6	Phosphorus Needs of Crop	0	55
1,2,3,6	2025	Alfalfa			0	55
	2026	Alfalfa			0	55
	2027	Alfalfa			0	55
	2028	Alfalfa			0	55
30,31-8N	2024	Grass Alf	9.8	Nitrogen Needs of Crop	50	30
1,2 DL	2025	Grass Alf			50	30
	2026	Grass Alf			50	30
	2027	Grass Alf			50	30
	2028	Gras alf			50	30
29/32-8N16E	2024	ww	21.5	Nitrogen Needs of Crop	297	30
Pvt	2025	Malt barley			121	30
	2026	Canola			176	25
	2027	Sp Wheat			319	30
	2028	Malt barley			121	30

Field ID	Year	Crop	Olsen P Soil Test Results (ppm)	Recommended Rate Basis	Max N Derived from all sources	Max P_2O_5 Derived from all sources
					(Units/acre)	
32-8N16E 2	2024	ww	19.6	Nitrogen Needs of Crop	297	30
Pvt	2025	Malt barley			121	30
	2026	Canola			176	30
	2027	Sp Wheat			319	30
	2028	Malt barley			121	30
32-8N16E 3	2024	ww	23.4	Nitrogen Needs of Crop	297	30
Pvt	2025	Malt barley			121	30
	2026	Canola			176	30
	2027	WW			319	30
	2028	Malt barley			121	30
33-8N16E	2024	Alfalfa	19.8	Nitrogen Needs of Crop	0	50
4,8,12	2025	Alfalfa			0	50
	2026	Forage Bly			75	30
	2027	Forage Bly			75	30
	2028	Forage Bly			75	30
33-8N16E 4	2024	Forage Bly	24.5	Nitrogen Needs of Crop	75	30
Pvt	2025	Alfalfa			0	50
	2026	Alfalfa			0	50
	2027	Alfalfa			0	50
	2028	Alfalfa			0	50

Alternative Crops

Field	Potential Alternative Crop(s)	Yield Goal (unit/acres)	N rec.	P_2O_5 rec.
			(Units/acre)	
DL	Canola/Mustard (Lbs)	1200	78	25
DL	Chickpeas (Lbs)	1000	0	25
DL	Barley - Forage (ton)	2	50	25
DL	Sp Wheat	55	160	30
DL	Sp Peas	35	0	25
Irr	Canola	2700	175	30
Irr	Malt Barley	110	176	30
Irr	Sp Wheat	110	319	30
Irr	Forage Barley (ton)	4.5	75	30

Methodology

Rates of application that are expressed using the narrative rate approach must include the *methodology* for calculating the amount of manure to be land applied.

In the text box below, provide the methodology that will be used to account for:
- Soil test results
- Credits for plant available nitrogen in the field
- Amount of nitrogen and phosphorus in the manure, litter, and process wastewater to be applied
- Consideration of multi-year phosphorus application
- Accounting for all other additions of plant available nitrogen and phosphorus to the field
- Form and source of manure, litter, and process wastewater
- Timing and method of land application
- Volatilization of nitrogen and mineralization of organic nitrogen

Attach additional sheets as necessary.

-Soil samples will be collected using the composite method collecting min of 10 cores per field. Samples woll be collected from 0-6", 6-12", 12-24" and 24-36" depths. NPK NO3 plus minerals will be tested in the first 2 depths and NO3, S from 12-24" and NO3 for 24-36".

- Data from soil and manure samples collected will be used to determine the manure litter and slurry application rates for nutrient needs of the rotational crops being planted on the manure treated acres.

- Manure slurry, and litter will be determined by commercial Lab analyasis and data used to determine the manure litter and slurry nutrients required to raise the planned crop (mainly winter wheat, canola, mustard, malt and feed barley).

- No multi-year manure applications are planned nor allowed becaue there are plenty of rotational acres to provide a minimum of three years between manure applications. Manure applications are planned prior to winter wheat seeding unless a spring application is needed.

- Manage additional nutrients (N, P) based on soil and manure nutrient content plus estimated nutrient mineralization. Field maps and volumes of manure will be applied based on nutrient content and crop needs. GPS maps and per acre volumes will be recorded.

- Soil injection of manure slurry into the top 3"-6" only and surface applied dry litter is lightly incorporated within 3 days after application. All manure applications are planned to be fall applied, however, some years application of slurry and dry litter may be applied fall or spring.
-Based on application methods and tillage applications, volatility is low or none.

Methodolgy for fertilizer recommendations with and without manure applications:

Based on 30+ years of soil fertility recomendations, crop needs, understanding soil-nutrient interactions/fertilizer type/crop response, and nutrient availability, the following is used to provide nutrient recommendations to growers who apply liquid slurry manure and dry litter.

Following is what is used to calculate N needs by crop for annual crop needs. Phosphorous needs are based on crop removal numbers from EB-161, NDSU Publications, other sources providing crop nutrient removal plus 30+ years of in field crop production experience. Specific N and P needs for crops grown for Springwater Colony Inc are as follows:

WW: 2.7 units/bu x 65 bu/ac = 176 units total N/ac to raise 12+ protein wheat.
SpW: 2.9 units/bu X 50 bu/ac = 145 units total N/ac to raise 14+ protein wheat.
SpW: 2.9 units/bu X 110 bu/ac = 319 units total N/ac to raise 14+ protein wheat (Irrigated).
Barley - Feed: 1.3 units/bu x 55 bu/ac = 72 units total N/ac to raise feed barley.
Barley - Malt: 1.1 units/bu x 55 bu/ac = 61 units total N/ac to raise lower protein malt barley.
Barley - Malt: 1.1 units/bu x 110 bu/ac = 121 units total N/ac to raise lower protein malt barley (irrigated) .
Pulse crops: no added N required.
Canola/mustard: 0.065 units N/lb x 1200 lbs/ac = 78 units total N/ac. (dry land)
Canola: 0.065 units N/lb x 2700 lbs/ac = 176 units total N/ac. (Irrigated)
Alfalfa: 11 units/ton x 4.5 t/ac = 50 units/ac

Phosphorous needs based on crop removal:

Barley grain removal = 0.36 units/bu
Barley grain + stover = 4.10 units/T
Wheat grain removal = 0.62 units/bu
Wheat grain + stover = 3.6 units/T
Pea removal = 0.67units/bu
Canola removal = 0.02 units/lb
Mustard removal = 0.0234 units/lb
Alfalfa removal = 11 units/ton

Expresses a narrative rate of application that results in the amount, in tons or gallons, of manure, litter, and process wastewater to be land applied. CAFOs selecting the narrative rate approach to address rates of application must include in the NMP submitted to the Department the following information for each crop, field, and year covered by the NMP:

1. The maximum amounts of nitrogen and phosphorus that will be derived from all sources of nutrients (pounds/acre for each crop and field).

2. The outcome of the field-specific assessment of the potential for nitrogen and phosphorus transport from each field. The Department does not have an N transport risk assessment, therefore the NMP must document any basis for assuming that nitrogen will be fully used by crops. The CAFO must specify any conservation practices used in calculating the risk rating.

3. The crops to be planted in each field or any other uses of a field such as pasture or fallow fields, including alternative crops if applicable. Any alternative crops included in the NMP must be listed by field, in addition to the crops identified in the planned crop rotation for that field.

4. The realistic annual yield goal for each crop or use identified for each field for each year, including any alternative crops identified.

5. The nitrogen and phosphorus recommendations from Department acceptable sources for each crop or use identified for each field, including any alternative crops identified.

6. The methodology (including formulas, sources of data, protocols for making determination, etc.) and actual data that will be used to account for: (1) the results of soil tests, (2) credits for all nitrogen in the field that will be plant-available, (3) the amount of nitrogen and phosphorus in the manure, litter, and process wastewater to be applied, (4) consideration of multi-year phosphorus application (for any field where nutrients are applied at a rate based on the crop phosphorus requirement, the methodology must account for single-year nutrient applications that supply more than the crop's annual phosphorus requirement), (5) all other additions of plant available nitrogen and phosphorus to the field (i.e., from sources other than manure, litter, or process wastewater or credits for residual nitrogen), (6) timing and method of land application, and (7) volatilization of nitrogen and mineralization of organic nitrogen.

7. Any other factors necessary to determine the amounts of nitrogen and phosphorus to be applied in accordance with the Narrative Rate Approach.

8. NMPs using the Narrative Rate Approach must also include the following projections, which will not be used by the permitting authority in establishing site-specific permit terms:
   - Planned crop rotations for each field for the period of permit coverage.
   - Projected amount of manure, litter, or process wastewater to be applied.
   - Projected credits for all nitrogen in the field that will be plant available.
   - Consideration of multi-year phosphorus application.
   - Accounting for other additions of plant available nitrogen and phosphorus to the field.
   - The predicted form, source, and method of application of manure, litter, and process wastewater for each crop.

Section 9 – NMP Phosphorus

Phosphorus Risk Assessment: The permittee shall assess the risk of phosphorus contamination of state waters. An assessment shall be conducted for each field, under the control of the operator, to which manure, litter or process wastewater will or may be applied. If a new field is added in the future, then the permittee must submit a revised (modified) NMP. The permittee has the option of using Method A or Method B (below) to complete the assessment, unless the receiving water is impaired for nutrients, then you must use method B below for phosphorus risk assessment. Copies of all tables and calculations used to complete the assessments, as well as the results of the assessments, shall be submitted to the Department and copies shall be maintained onsite at the facility and available for Departmental review. The results of the assessments shall be used to determine the appropriate basis for land application of wastes from the facility.

Indicate which method will be used to determine phosphorus application:

X **Method A** – Representative Soil Sample. Complete Section 9.1, then continue to Section 10.

☐ **Method B** – Phosphorus Index. Complete Section 9.2, then continue to Section 10.

9.1 Method A – Representative Soil Sample

Obtain one or more representative soil sample(s) from the field per ARM 17.30.1334
Have the sample analyzed for phosphorus by a qualified lab. The "Olsen P test" must be used for the analysis, and the result must be reported in parts per million (ppm). Using the results of the Olsen P test, determine application basis according to the Table below.

Olsen P Soil Test Results (ppm)	Application Basis
<25.0	Nitrogen Needs of Crop
25.1 - 100.0	Phosphorus Needs of Crop
100.0 – 150.0	Phosphorus Needs up to Crop Removal Rate
>150.0	No Application allowed

Olsen P Test Result: _____27.2_____ ppm

End of Method A. Continue to Section 10

9.2 Method B – Phosphorus Index

Complete a phosphorus Index according to the crop grown on each field. Complete the Phosphorus Index Worksheet below to calculate phosphorus index. For information on filling out specific sections of this table, please refer to the method as described in NRCS Agronomy Technical Note MT-77.

Appendix A: Phosphorus Index Worksheet (Complete for each field and crop)

Field:		**Crop:**		**Year:**				
Field Category Factor	**None (0)**	**Low (1)**	**Medium (2)**	**High (4)**	**Very High (8)**	**Risk Value (0,1,2,4,8)**	**Weight Factor**	**Weight Risk**
Soil Erosion	NA	<5 tons/as/yr	5-10 ton/ac/yr	10-15 tons/ac/yr	QA> 10 for erodible soils		X 1.5	
Furrow Irrigation Erosion	N/A	Tail water recovery, QS>6 very erodible soils, or QS>10 other soils	QS> for erosion resistant soil	QS> for erodible soils	QA>6 for very erodible soils		X 1.5	
Sprinkler Irrigation Erosion	All fields 0-3% slope, all sandy fields or field evaluation indicates little or no runoff large spray on silts 3-8%	Medium spray on silty soils 3-15% slopes, large spray on silty soils 8-15% slope, low spray on silt soils 3-8% large spray on clay soil 3-15% slope	Medium spray on clay soils 3-8% slopes, large spray on clay soils >15% slope, medium spray on silt soil >15% slope	Medium spray on clay soils >8% slope, low spray on clay soil 3-8% slope, low spray on silty soils >15% slopes	Low spray on clay soils >8% slopes		X 1.5	
Runoff Class	Negligible	Very Low or Low	Medium	High	Very High		X 0.5	
Olson Soil Test P	--------	<20 ppm	20-40 ppm	40-80 ppm	>80 ppm		X 0.5	
Commercial P Fertilizer Application Method	None Applied	Placed with Planter or injection deeper than 2 inches	Incorporated <3 months prior to planting or surface applied during growing season	Incorporated >3 months before crop or surface applied <3 months before crop emerges	Surface applied to pasture or >3 months before crop emerges		X 1.0	
Commercial P Fertilizer Application Rate	None Applied	<30 lbs/ac P205	31-90 lbs/ac P205	91-150 lbs/ac P205	>150 lbs/ac P205		X 1.0	
Organic P Source Application Method	None Applied	Injected deeper than 2 inches	Incorporated <3 months prior to planting or surface applied during growing season	Incorporated >3 months before crop or surface applied <3 months before crop.	Surface applied to pasture or >3 months before crop emerges		X 1.0	
Organic P Source Application Rate	None Applied	<30 lbs/ac P205	31-90 lbs/ac P205	91-150 lbs/ac P205	>150 lbs/ac P205		X 1.0	
Distance to Concentrated Surface Water Flow	>1,000 feet	200-1,000 feet, or functioning grass waterways in concentrated surface water	100-200 feet	<100 feet	0 feet or application are directly into concentrated surface water flow areas.		X 1.0	
Total Phosphorus Index Value:								

Using the calculated Total Phosphorus Index Value, assign the overall site/field vulnerability to phosphorus loss according to the table below.

Total Phosphorus Index Value	Site Vulnerability to Phosphorus Loss
<11	Low
11-21	Medium
22-43	High
>43	Very High

Using the calculated Site Vulnerability to Phosphorus Loss, determine the appropriate application basis according to the table below.

Site Vulnerability to Phosphorus Loss	Application Basis
Low	Nitrogen Needs
Medium	Nitrogen Needs
High	Phosphorus Need Up to Crop Removal
Very High	Phosphorus Crop Removal or No Application

Phosphorus Index Value: _____

Section 10 – NMP Guidance

Land Application Equipment Calibration

Describe the type of equipment used to land apply wastes and the calibration procedures: Liquid manure is injected and dry manure is surface applied and worked in within 3 days of application.

Implementation, Operation, Maintenance and Recordkeeping

The permittee is required to develop protocols for implementation of the NMP, proper operation and maintenance of the livestock waste control facilities, and recordkeeping as described in Part 2 of the permit.

Have protocols been developed for the operation? ☒ Yes ☐ No

The documents below are maintained:

Implementation of the NMP:	☒ Yes ☐ No
Facility operation and maintenance:	☒ Yes ☐ No
Recordkeeping and reporting	☒ Yes ☐ No
Sample collection and analysis	☒ Yes ☐ No
Manure transfer	☒ Yes ☐ No

If your answer to any of the above question is no, provide explanation:

Provide date and location of most recent documentation:

Date: _1-15-24_____

Location: ___Farm Boss Shop_____

MTG010242

NOI-NMP Certification

The NOI Form certification must be completed by the applicant (owner/operator) responsible for the authorization as identified in Section C. Certification of this NOI is certification that the applicant will comply with the applicable terms of the CAFO General Permit.

Permittee Information: This form must be completed, signed, and certified as follows:

- For a corporation, by a principal officer of at least the level of vice president;
- For a partnership or sole proprietorship, by a general partner or the proprietor, respectively; or
- For a municipality, state, federal, or other public facility, by either a principal executive officer or ranking elected official.

All Permittees Must Complete the Following Certification:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information; including the possibility of fine and imprisonment for knowing violations. [75-5-633, MCA].

Certification of this form indicates conformance with the CAFO General Permit.

Name (Type or Print)	
LARRY EWIPF	406-717-1045
Title (Type or Print)	Phone Number
FARM BOSS	406-350-9163
Signature	Date Signed
Larry Wipf	2-20-25

DEQ will not process this form until all the requested information is supplied, and the appropriate fees are paid.

Return this NOI-NMP-CAFO Form and the applicable fee payment to:

Department of Environmental Quality
Water Protection Bureau
PO Box 200901
Helena, MT 59620-0901
(406) 444-5546

RECEIVED
FEB 25 2025
DEQ WATER QUALITY DIVISION

RECEIVED
By Theresa Froehlich at 8:55 am, Feb 12, 2025

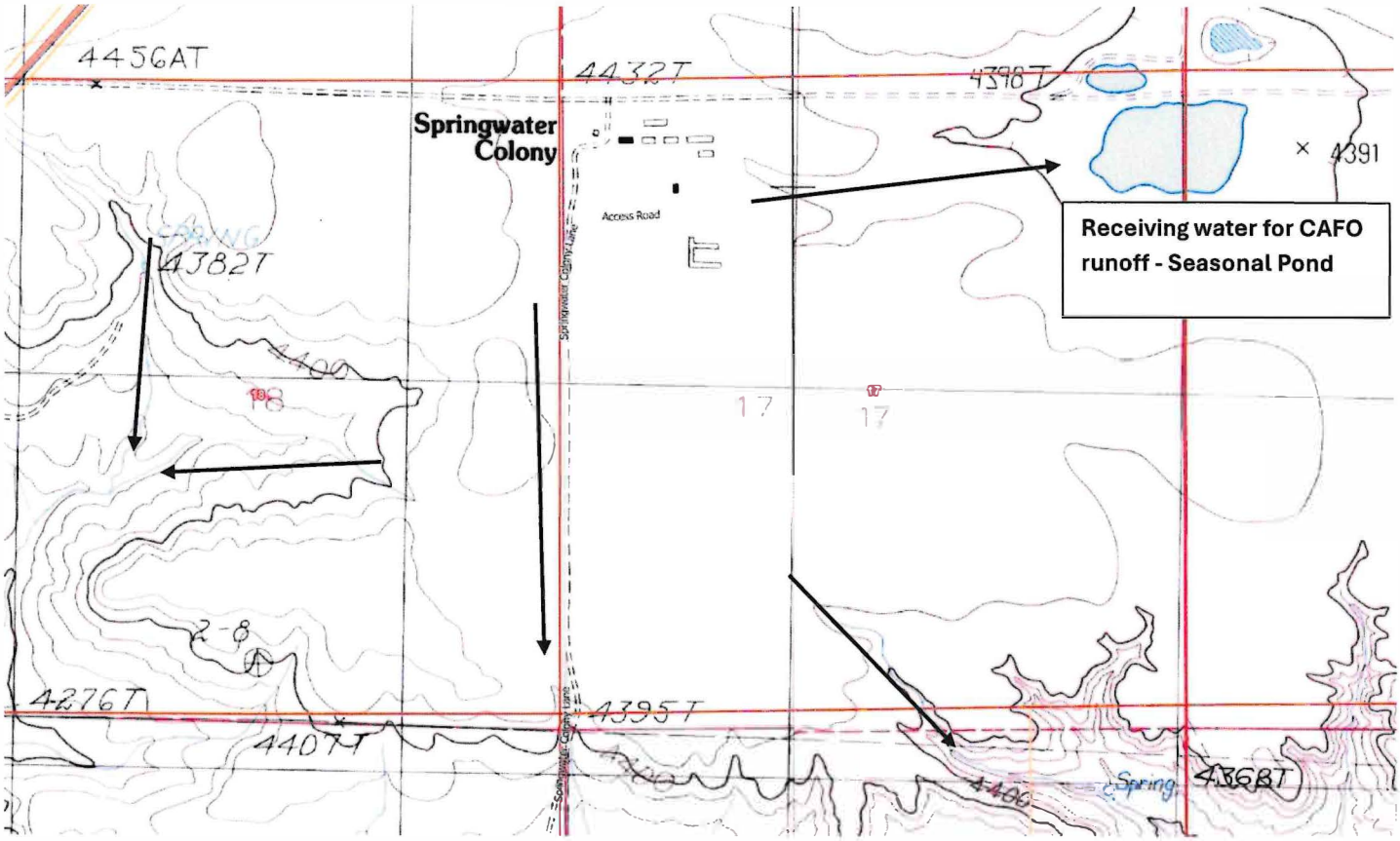
Springwater Colony, Inc: MTG010242

Facility Satellite View

Facility Lat/Long: 46.4559500, -109.751530

Springwater Colony, Inc

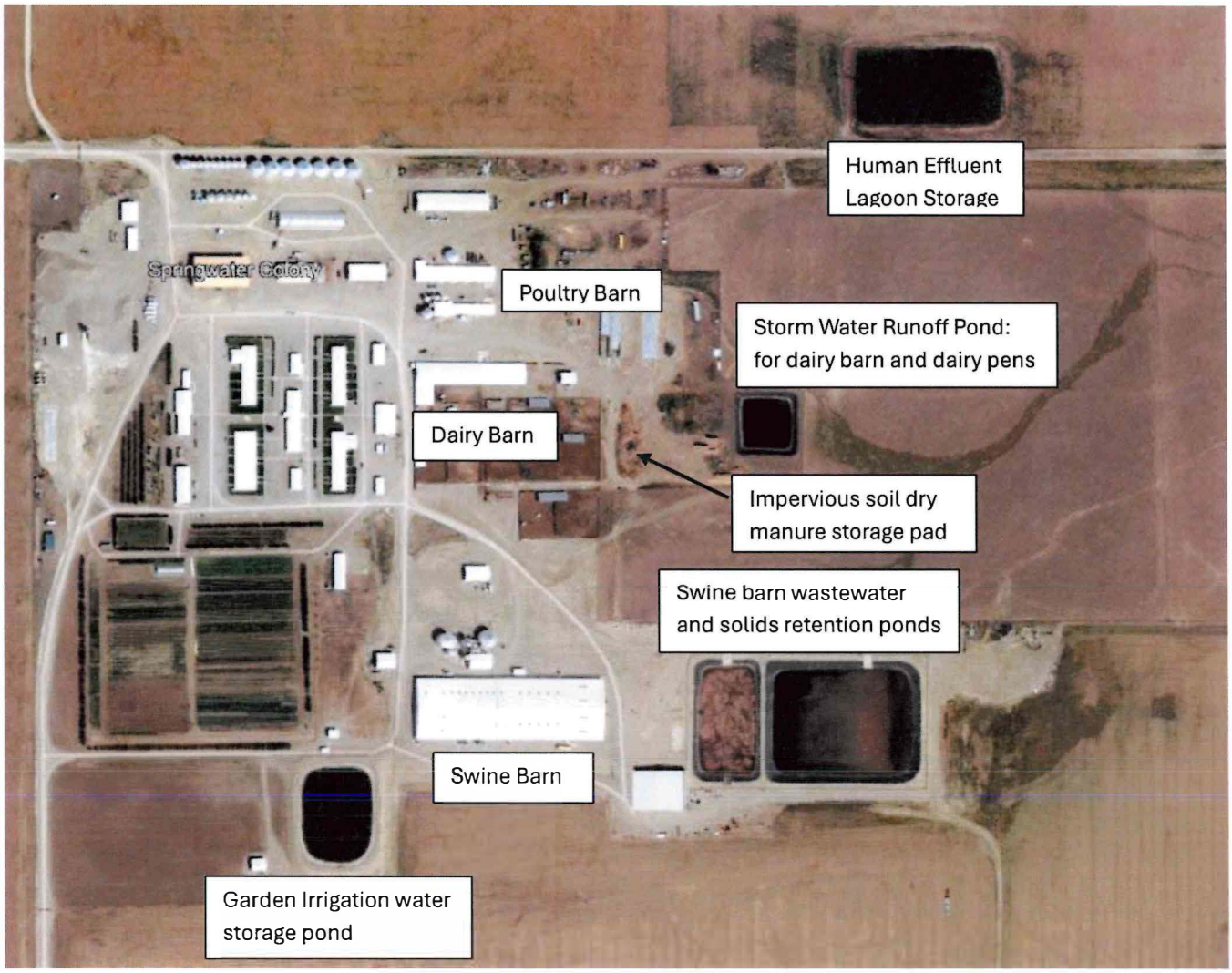
Runoff Flows and receiving water



Water flow

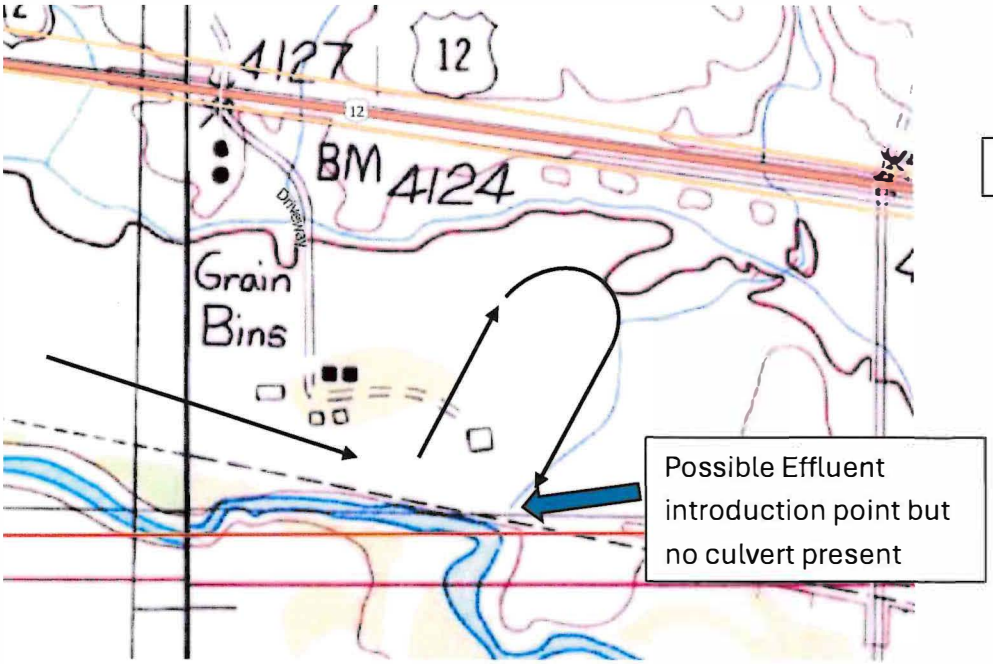
Springwater Colony, Inc

Main Animal Barn and Lagoon/Pond/Pad Locations

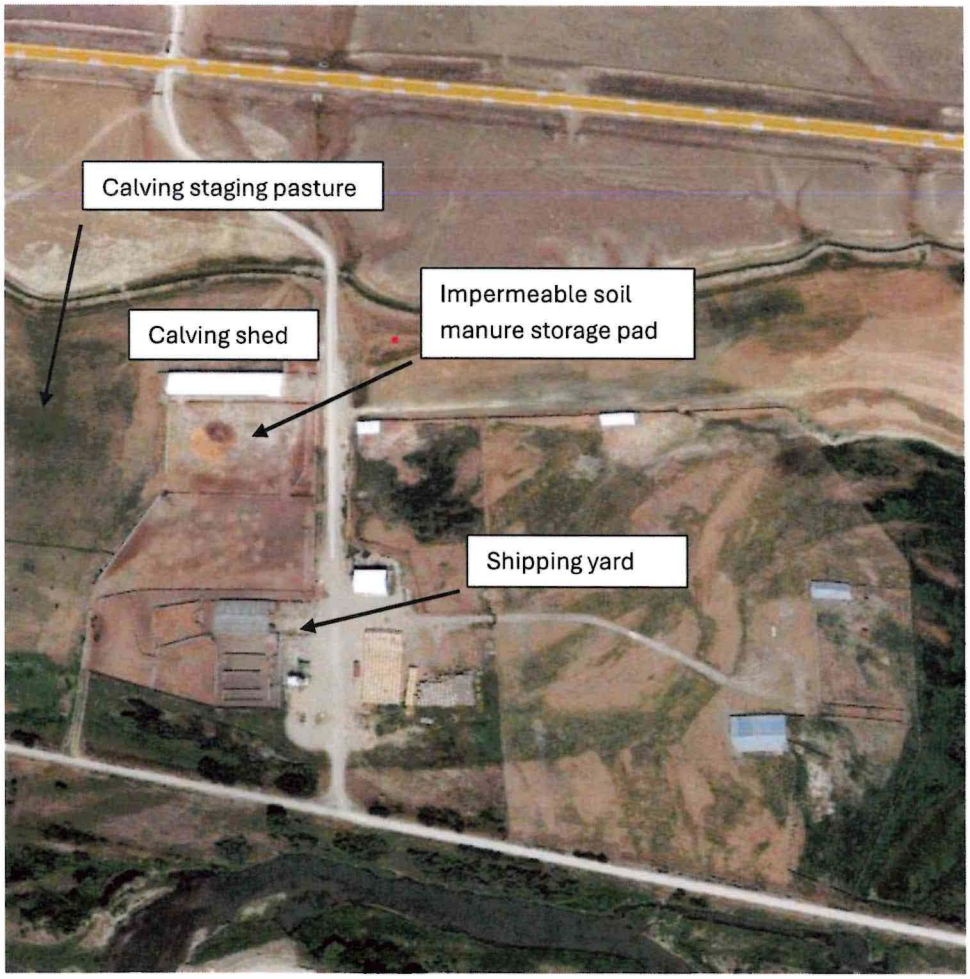


Springwater Colony, Inc

Calving shed and Shipping

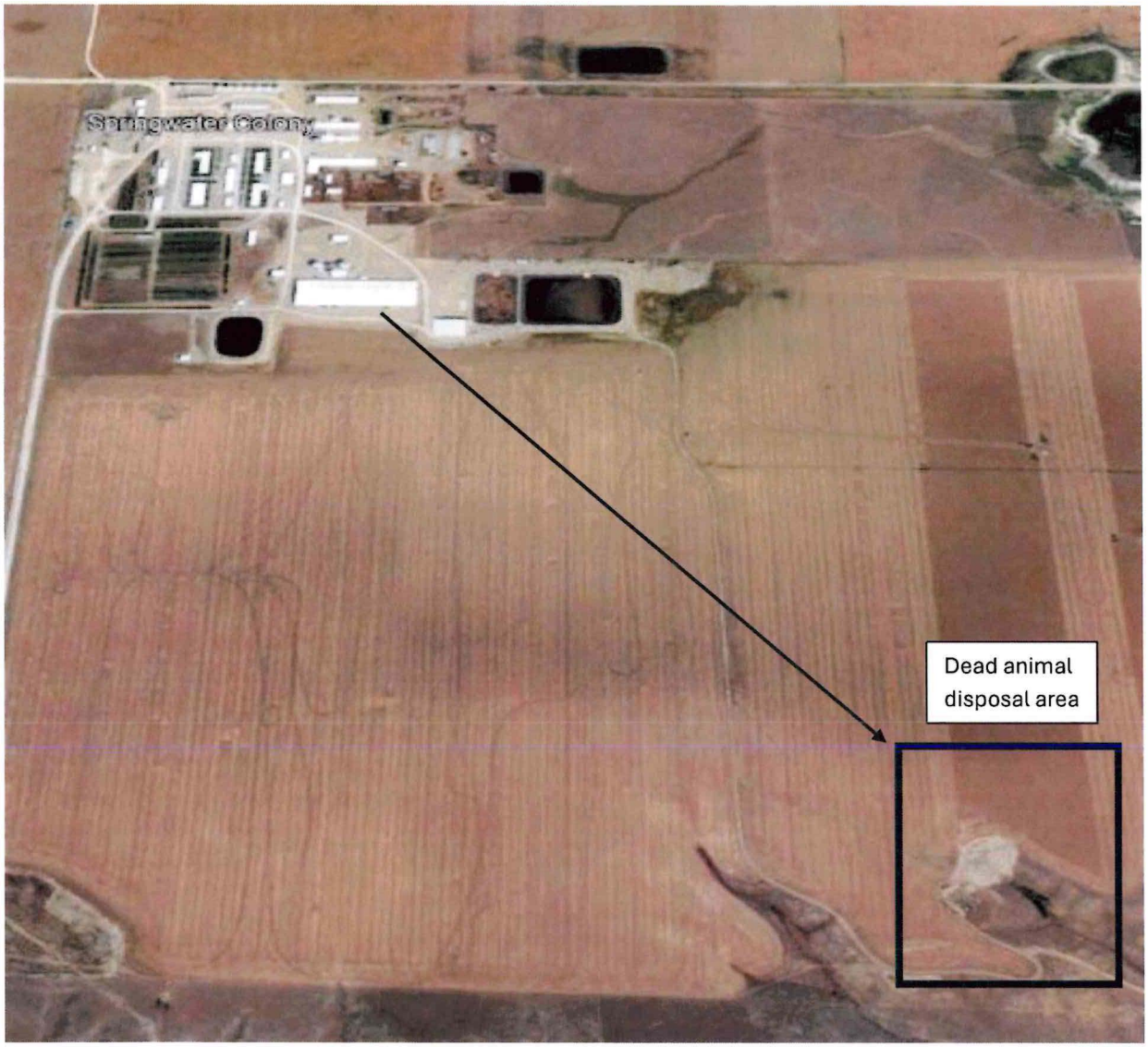


Arrows indicate drainage flow



Springwater Colony, Inc

Dead Animal Disposal Site



Springwater Colony, Inc

Manure Application Fields Main Site and Calving Barn Site

Main Site Field Labels (Blue boundary fields)

Calving Barn Field Labels (Blue Boundary Fields)