| AGENCY USE ONLY | | | | |
|---|---|---|---|---|
| PERMIT NO.: | Date Rec'd.: | Amount Rec'd.: | Check No.: | Rec'd By: |
| MTG010271 | 10/25/13 | $600 | #5659 | bs |

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Montana Department of Environmental Quality

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WATER PROTECTION BUREAU

FORM **NOI**

# Notice of Intent (NOI) for Montana Pollution Discharge Elimination System Application for New and Existing Concentrated Animal Feeding Operations

The Application form is to be completed by the owner or operator of a Concentrated Animal Feeding Operation (CAFO) or Aquatic Animal Production Facility. Please read the attached instructions before completing this form. You must print or type legibly; forms that are not legible or are not complete will be returned. You must maintain a copy of the completed application form for your records.

**Section A - Application Status** *(Check one):*

- ☐ New — No prior application submitted for this site.
- ☐ Resubmitted — Permit Number: MTG _____
- ☑ Renewal — Permit Number: MTG 0 1 0 2 7 1 — 10/25/13
- ☐ Modification — Permit Number: MTG _____

**Section B - Facility or Site Information** (*See instruction sheet.*):

Site Name: Charley Creek Cattle Co. Inc

Site Location: T27N R53E NE1/4 Section 12

Nearest City or Town: Brockton County: Richland

Latitude: 48.10975 Longitude: -104.81781

Date Facility began operation? Feb 2011

Is this facility or site located on Indian Lands? ☐ Yes ☑ No

**Section C - Applicant (Owner/Operator) Information:**

Owner or Operator Name: Charley Creek Cattle Co Inc

Mailing Address: 15299 County Road 321

City, State, and Zip Code: Brockton Mt. 59213

Phone Number: (406) 787 5274

Is the person listed above the owner? ☑ Yes ☐ No

Status of Applicant *(Check one)* ☐ Federal ☐ State ☑ Private ☐ Public ☐ Other (specify) _____

1592 W P T S

**Section D - Existing or Pending Permits, Certifications, or Approvals:** ☐ None

☒ MPDES MTG010271 ☐ RCRA

☐ PSD (Air Emissions) ☑ Other MTG010271

☐ 404 Permit (dredge & fill) ☐ Other

**Section E – Standard Industrial Classification (SIC) Codes:**

| Provide at least one SIC code which best reflects the activity of project described in Section H. | | | |
|---|---|---|---|
| **Code** | **A. Primary** | **Code** | **B. Second** |
| 1 | 0211 beef cattle feedlots | 2 | |
| **Code** | **C. Third** | **Code** | **D. Fourth** |
| 3 | | 3 | |

**Section F - Facility or Site Contact Person/Position:**

Name and Title, or Position Title Mark Casterline Vice President

Mailing Address 15299 County Road 321

City, State, and Zip Code Brockton Mt 59213

Phone Number (406)787 5274

**Section G – Receiving Surface Waters(s):**

Outfall/Discharge Locations: For each outfall, List latitude and longitude to the nearest second and the name of the receiving waters

| Outfall Number | Latitude | Longitude | Receiving Surface Waters |
|---|---|---|---|
| 001 | 48.10975 | -104.81781 | Frog Coulee |
| 002 | 48.11247 | -104.81781 | Vegetated treatment area |
| 003 | | | |
| 004 | | | |
| 005 | | | |
| | | | |
| | | | |

Map: Attach a topographic map extending one mile beyond the property boundaries or the site activity identified in Section B depicting the facility or activity boundaries, major drainage patterns, and the receiving surface waters, stated above. Also identify the specific location of the production area, and land application area(s).

Is the receiving water on the 303(d) list for nutrients (nitrogen and/or phosphorus) ☐ Yes ☑ No

## Section H – Concentration Animal Feeding Operation Characteristics

### Waste Production, Storage and Disposal

| Animal type | Number in Open Confinement | Number Housed Under Roof |
|---|---|---|
| ☐ Mature Dairy Cows | | |
| ☐ Dairy Heifers | | |
| ☐ Veal Calves | | |
| ☑ Cattle (not dairy or veal) | 400 | |
| ☐ Swine (55 lbs or over) | | |
| ☐ Swine (55 lbs or under) | | |
| ☐ Horses | | |
| ☐ Sheep or Lambs | | |
| ☐ Turkeys | | |
| ☐ Chickens (broilers) | | |
| ☐ Chickens (layers) | | |
| ☐ Ducks | | |
| ☐ Other (Specify:_____) | | |
| ☐ Other (Specify:_____) | | |
| ☐ Other (Specify:_____) | | |

**Manure, Litter and/or Wastewater Production and Use.**

How much manure, litter, and process wastewater is generated annually by the facility?

Solid (tons): 900 Liquid/Slurry (gallons):_____

If land applied, how many acres of land under control of the permit applicant are available to apply the manure, litter, or process wastewater generated from the facility? (Note: Do not include setback distances in available acreage

126.9 Acres

How much manure, litter, and process wastewater is transferred to other persons per year? (estimated) Solid (tons): none Liquid/Slurry (gallons): none

Were the containment structures built after February 2006?

- ☑ Do the waste containment structures have 10 feet of separation between the pond bottom and any bedrock formations?
- ☑ Do the waste containment structures have 4 feet of separation from the pond bottom and any ground water?
- ☐ Were any of the waste containment structures built within 500 feet of any existing well?

| Type of Containment/Storage | Total Capacity | Units (gallons or tons) | Days of Storage |
|---|---|---|---|
| ☐ Anaerobic Lagoon | | | |
| ☐ Storage Pond #1 | | | |
| ☐ Storage Pond #2 | | | |
| ☐ Storage Pond #3 | | | |
| ☐ Storage Pond #4 | | | |
| ☐ Storage Pond #5 | | | |
| ☐ Above Ground Storage Tank | | | |
| ☐ Below Ground Storage Tank #1 | | | |
| ☐ Below Ground Storage Tank #2 | | | |
| ☐ Underfloor Pits | | | |
| ☐ Roofed Storage Shed | | | |
| ☐ Concrete Pad | | | |
| ☐ Impervious Soil Pad | | | |
| ☐ Other (Specify: in pens ) | 900 | tons | 150 |
| ☐ Other (Specify: ) | | | |

**Physical Data for CAFO**

**Nutrient Management Plan**

All Concentrated Animal Feeding Operations seeking permit coverage after July 31, 2007 are required to complete and implement a Nutrient Management (NMP). The NMP must be submitted to the Department using the form provided by the Department (Form NMP). Check the box below that applies and provide the required information. The NMP must be developed in accordance with ARM 17.30.1334 and implemented upon the effective date of permit coverage. (Check One)

☑ Does the facility have an NMP?

Date NMP was developed: Feb. 2011

Date NMP was last modified: Oct 2013

☐ NMP has not been prepared; provide detailed explanation below

**Section I – Supplemental Information**

## Section J - CERTIFICATION

**Permittee Information:**

This Form NMP 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]

| | |
|---|---|
| **A. Name (Type or Print)**<br>Mark Casterline | |
| **B. Title (Type or Print)**<br>Vice President | **C. Phone No.**<br>(406)787 5274 |
| **D. Signature**<br>Mark Casterline | **E. Date Signed**<br>10-22-13 |

*The Department will not process this form until all of the requested information is supplied, and the appropriate fees are paid.* Return this form (NOI) and the applicable fee to:

Department of Environmental Quality
Water Protection Bureau
PO Box 200901
Helena, MT 59620-0901
(406) 444-3080

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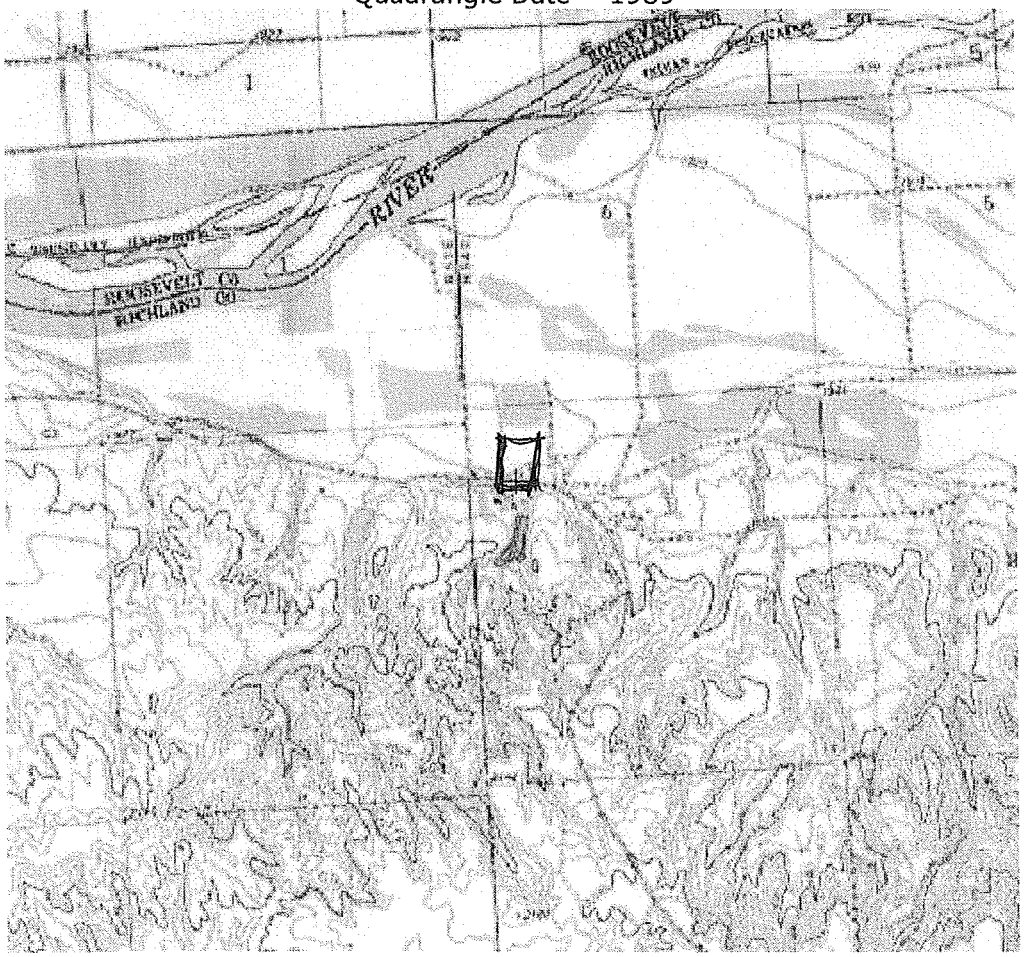
# Montana Topographic Map Finder

**The map is 2.75 miles wide.**

Choose Image Type

Topographic Map | Refresh

Quadrangle Date = 1989




Select a Map Control, then click on the map

**Map Controls**

- ZoomIn
- ZoomOut
- New Center

Zoom Factor: 2

State View

**Map Center Coordinates at Red +**

Datum: NAD83 NAD27

**Decimal Degrees**
Lat 48.11115 Long -104.8018

**State Plane**
E 949493 N 439534

**UTM Zone 13**
E 514753 N 5328673

**US National Grid**
13U EP 14753 28673

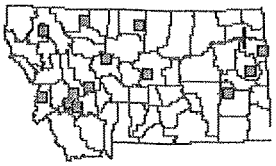
**TRS** T27N R54E S7

**Hydrologic Unit** 10060005
Charlie-Little Muddy Creeks

**Download 24K quadrangle:** Frog Coulee

**Download 100K quadrangle:** Culbertson

**Click the small map to move the main map center.**



**Green squares show areas where 2004 hi-resolution color photos are available.**

**Legend** | **Help**

**Map Size:** Extra Large Large Small Refresh

Search Tools

**Click Here to view other map data for this area.**

Montana Natural Resource Information System

Technical questions about the application can be directed to:nris@mt.gov
Please let us know if you have problems with the Topofinder!!

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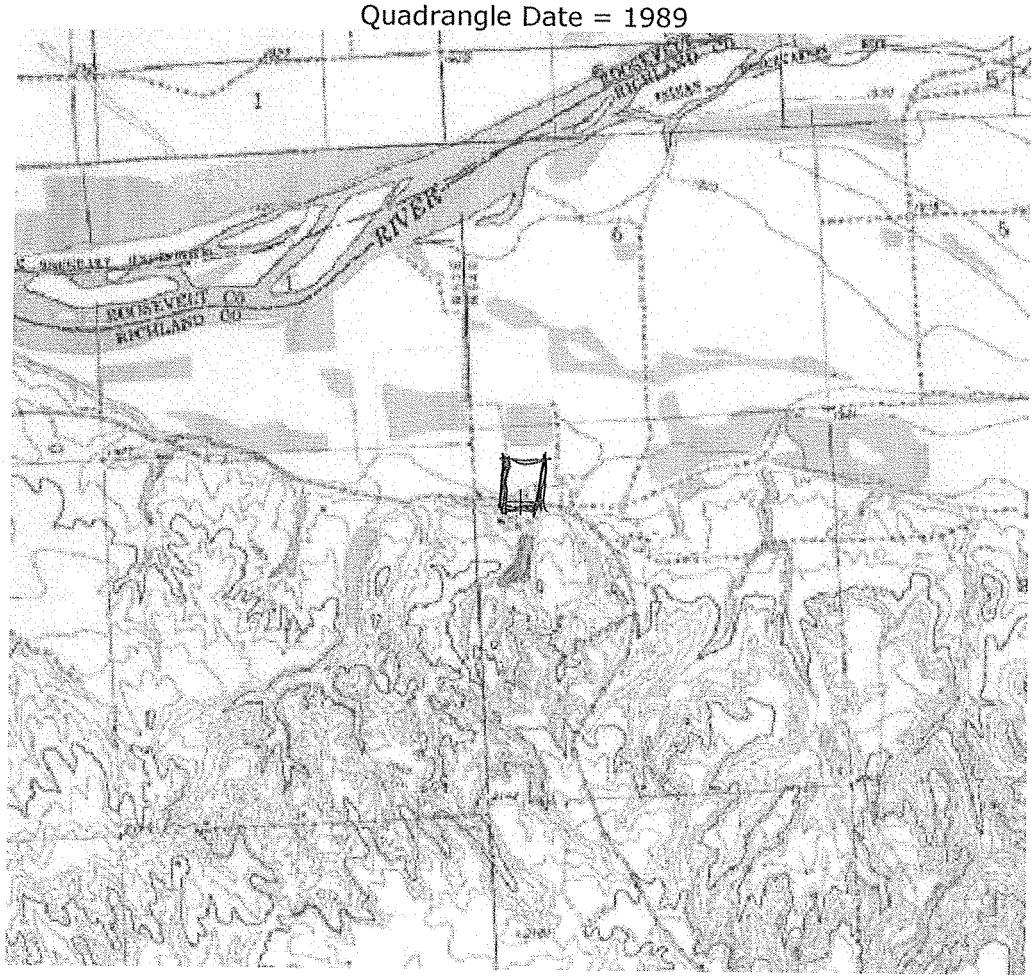


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- New Center

Zoom Factor: 2

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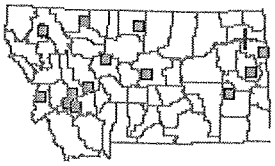

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|---|---|---|---|---|
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Montana Department of
ENVIRONMENTAL QUALITY
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**WATER PROTECTION BUREAU**

FORM
**NMP**

# Nutrient Management Plan

**READ THIS BEFORE COMPLETING FORM:** Before completing this form (Form NMP), Concentrated Animal Feeding Operation (CAFO) operators need to read the General Permit, particularly Part IV.A. CAFO operators also need to read the "Instructions For filling out Form NMP," found at the back of this form. Form NMP is intended to help CAFO operators develop a site-specific Nutrient Management Plan, in compliance with Part IV.A of the General Permit and all applicable State rules and statutes. Your Nutrient Management Plan must be maintained at the site as required in Part III of the General Permit. Sections B and C on your Form NMP must state the information exactly the same way as it was stated on the most recently submitted version of your NOI-CAFO. Attach additional pages as necessary, indicating the corresponding section number on this NMP form. The 2013 General Permit, current fee schedule, and related forms are available from the Water Protection Bureau at (406) 444-3080 or http://www.deq.mt.gov/wpinfo/MPDES/CAFO.asp

**Section A – NMP Status:**

- ☐ New — No prior NMP submitted for this site.
- ☐ Resubmitted — Previous NMP found incomplete.
- ☐ Modification — Change or update to existing NMP.
- ☑ New 2013 — New 2013 version of NMP.

**Section B – Facility Information:**

Facility Name Charley Creek Cattle Co Inc

Facility Location T27N R53E NW 1/4 Section 12

Nearest City of Town Brockton County Richland

**Section C – Applicant (Owner/Operator Information):**

Owner or Operator Name Charley Creek Cattle Co Inc

Mailing Address 15299 County Road 321

City, State, and Zip code Brockton Mt. 59213

Facility Phone Number (406)787 5274

Email charleycreekcattle@hotmail.com

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**Section D – NMP Minimum Elements:**

| 1. Livestock Statistics | | |
|---|---|---|
| **Animal Type and number of animals** | **# of Days on Site (per year)** | **Annual Manure Production (tons, cu. yds. or gal** |
| 1. Feeder calves-400 head | 150 | 900 tons |
| 2. | | |
| 3. | | |
| 4. | | |
| 5. | | |
| 6. | | |
| 7. | | |
| 8. | | |

**Method used for estimating annual manure production:**

Manure per day x number of animals x number of days / pounds in a ton
example 30 x 400 x 150 / 2000 =900

**2. Manure Handling**

**a. Describe Manure handling at the facility:**

Manure will be left undisturbed in each pen until September of each year. In September a manure sample will be taken and analyzed for nutrient and spread on fields. A two inch manure pack will be maintained over the entire pen area for its water holding capacity.

**b. Frequency of Manure Removal from confinement areas:**

Manure will be removed from confinement areas annually in fall

**c. Is this manure temporarily stored in any location other than the confinement area?** ☐ Yes ☑ No
**If so then how and where?**

**d. Is manure stored on impervious surface?** ☐ Yes ☑ No
**If yes, describe type and characteristics of this surface:**

| 3. Waste Control Structures | | | | | |
|---|---|---|---|---|---|
| **Waste Control Structures (name/type)** | **Length (ft.)** | **Width (ft.)** | **Depth (ft.)** | **Volume (cubic ft. or gallons)** | **Number of days of storage** |
| 1. pen diversion | 926 | 4@ top | 2 | | |
| 2. waste pipeline | 885 | | | | |
| 3. settling basin | 10 | 60 | | | |
| 4. VTA | 270 | 300 | | 819 cf | |
| 5. VTA dike | 792 | 4@ top | 2 | | |
| 6. clean diversion | 977 | 4@ top | 2 | | |
| 7. | | | | | |
| 8. | | | | | |
| 9. | | | | | |
| 10. | | | | | |
| 11. | | | | | |
| 12. | | | | | |

**What is the 24 hr. 25 yr. storm event at this facility** 3.3 NOAA data

**Production area:** 5 **acres.** **Type of lot (dirt or paved):** dirt

**Area contributing drainage form outside CAFO that enters confinement areas and waste storage, conveyance, or treatment structures:** 0 **acres.**

**What is the annual precipitation during the critical storage period** 12

**How much freeboard do the pond(s) have** VTA has 2 feet

**4. Disposal of Dead Animals.**

**Describe how dead animals are disposed of at this facility:**
Dead animals will be removed from the feedlot as soon as possible after death. Theey will be buried on tract 8946 (lat. 48.11261 long. 104.83688). Carcasses will be covered with 2 feet of dirt as soon as possible according to Circular DEQ 9 specifications.

## 5. Clean Water Diversion Practices

**Describe how clean water is diverted from production area:**
A series of earth dikes divert clean water away from feedlot and over a level lip spreader.

## 6. Prohibiting Animals and Wastes from Contact with State Waters

**Describe how animals and wastes are prohibited from direct contact with state waters:**
Animals are prohibited from direct contact with state waters by fences. Clean water is diverted from the feedlot by a series of earthen dikes. Another series of earth dikes divert pen water into a pipeline that leads to a settling pond. Water from the settling pond moves into a vegetative treatment area that is surrounded by earth dikes.

**Describe how Chemicals and other contaminants are handled on-site:**
Herbicides are stored and prepared for use off-site. Mfg. instructions will be followed for safe chemical handling and application. Livestock pesticides are stored off-site and administered to animals according to mfg. directions. Livestock pharmaceuticals are stored off-site and administered to animals according to mfg. directions. Any chemical containers that are emptied at the site will be promptly removed and disposed of according to state and federal regulations.

## 7. Best Management Practice (BMPS)

**Describe in detail all temporary, permanent and structural BMPS which will be used to control runoff of pollutants from facility's production area. Indicate the location of these measures. If BMPS are not installed include a schedule for implementation of each of these measures. Examples of BMP measures could include but are not limited to: constructing ditches, terraces,, and waterways above and open lot to divert clean water run on; installing gutters, downspouts and buried conduits to divert roof drainage; providing more roofed area: decreasing open lot surface area; repairing of adjusting water systems to minimize water wastage; using practical amounts of water for cooling purposes; recycling water if practical and applicable.**

**Production Area BMP's**
Permanent structures include a series of earth dikes to divert clean water away from the feedlot and over a level lip spreader. Another series of dikes divert pen water into a pipeline that leads to a settling pond. Water from the settling pond moves over a level lip spreader and into a vegetative treatment area that is surrounded by dikes. Water tanks have overflow drains and will be inspected to minimize water waste. Water tanks will be shut off when not in use. A dry ration is fed so there is no silage runoff.

**Describe in detail all temporary, permanent and structural Best Management Practices (BMPs) which will be used to control runoff of pollutants from facility's land production area. Indicate the location of these practices. If not already in use, include a schedule for implementation of each of these measures. Attached details and specifications may be used to supplement this description. Examples of BMP measures could include but are not limited to: maintaining setbacks from surface waters for manure applications; managing irrigation practices to prevent ponding of wastewater on land application sites;**

**never spray irrigating waste on to frozen ground: consulting with the Department prior to applying any liquid waste to frozen or snow-covered ground; applying wastes at agronomic rates.**

**Land Application BMP's**

On Tract 8955 Field 4 a soil health/grazing cocktail is seeded after barley harvest and irrigation is managed to prevent waste water ponding. Maintain manure application setbacks on all fields in Tracts 8945, 8944, 8955.

| | | | |
|---|---|---|---|
| **Buffers** | ☐ Yes ☑ No | **Conservation Tillage** | ☑ Yes ☐ No |
| **Constructed Wetlands** | ☐ Yes ☑ No | **Grass Filter** | ☑ Yes ☐ No |
| **Infiltration Field** | ☑ Yes ☐ No | **Residue Management** | ☑ Yes ☐ No |
| **Set backs** | ☑ Yes ☐ No | **Terrace** | ☐ Yes ☑ No |

**Other examples**

On Tract 8955 Field 4 a soil health/grazing cocktail is seeded after barley harvest and irrigation is managed to prevent waste water ponding. Maintain manure application setbacks on all fields in Tracts 8945, 8944, 8955.

**8. Implementation, Operation, Maintenance and Record Keeping – Guidance**

**The permittee is required to develop guidance addressing implementation of NMP, proper operation and maintenance of the facility, and record keeping as described in Part 2 of the permit.**

**Has a guidance document been developed for the facility?** ☑ Yes ☐ No

**Certify the document address the following requirements:**

| | |
|---|---|
| **Implementation of the NMP:** | ☑ Yes ☐ No |
| **Facility operation and maintenance:** | ☑ Yes ☐ No |
| **Record keeping and reporting** | ☑ Yes ☐ No |
| **Sample collection and analysis:** | ☑ Yes ☐ No |
| **Manure transfer** | ☑ Yes ☐ No |

**Provide name, date and location of most recent documentation:**

NRCS Comprehensive Nutrient Management Plan
USDA- Natural Resources Conservation Service
Sidney Field Office, Sidney Mt 59270

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

**Section E – Land Application**

Will manure be land applied to land either owned, rented, or leased by the owner or operator of the facility?

☑ Yes If yes, then the information requested in Section E must be provided.

☐ No If no, then provide an explanation of how animal waste at this facility are managed.

**Photos and/or Maps**

Attach an aerial photograph or map of the site where manure is to be applied. (Use multiple photos/maps if necessary to show required details.) The photo(s)/map(s) must be printed on no larger than an 11"X 17" piece of paper, and must clearly identify the following items:

- Individual field boundaries for all planned land application areas
- A name, number, letter or other means of identifying each individual land application field
- The location of any downgradient surface waters.
- The location of any downgradient open tile line intake structures
- The location of any downgradient sinkholes
- The location of any downgradient agricultural well heads
- The location of all conduits to surface waters
- The specific manure/waste handling or nutrient management restrictions associated with each land application field
- The soil type(s) present and their locations within the individual land application field(s)
- The location of buffers and setbacks around state surface waters, well heads, etc.

**Land Application Equipment Calibration**

Describe the type of equipment used to land apply wastes and the calibration procedures:

A commercial broadcast spreader will be calibrated according to Circular DEQ 9

**Manure Sampling and Analysis Procedures**

A representative manure sample will be analyzed a minimum of once annually for Total Nitrogen, and Total Phosphorus. Analysis results will be reported in lbs/ton or lbs/1,000 gal. Results of these analyses will be used in determining rates for manure, litter, and process wastewater.

Manure Sample collection will occur according to ARM 17.30.1334

Other (describe)

Total N 18.5 lb/ton, P 9.9 lb/ton, K 11.8 lb/ton from Agvise Laboratories via telephone.

**Soil Sampling and Analysis Procedures**

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 three 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

Soil samples collection will occur according the methods in ARM 17.30.1334

Other (describe)

samples were from 0 to 24 inches for phosphorus analyses using Olsen P test

**Phosphorus Risk Assessment**

The permittee shall access 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

Nutrient Budget Worksheet

| | | | | | |
|---|---|---|---|---|---|
| Field identification: T8955 fld 5 Year: 2013 Crop: Barley | | | | | |
| Expected Crop Yield:60 bushel/acre | | | | | |
| Phosphorus index results or Phosphorus application from soil test: 6 ppm | | | | | |
| Method of Application:broadcast | | | | | |
| When will application occur:fall | | | | | |
| Nutrient Budget | | | Nitrogen-based Application | Phosphorus-based Application | Source of information |
| 1 | | Crop Nutrient Needs, lbs/acre | 160 | | |
| 2 | (-) | Credits from previous legume crops, lbs/ac | 65 | | |
| 3 | (-) | Residuals from past manure production lbs/acre | 0 | | |
| 4 | (-) | Nutrients supplied by commercial fertilizer and Biosolids, lbs/acre | 0 | | |
| 5 | (-) | Nutrients supplied in irrigation water, lbs/acre | 0 | | |
| 6 | | **= Additional Nutrients Needed, lbs/acre** | 95 | | |
| | | | | | |
| 7 | | Total Nitrogen and Phosphorus in manure, lbs/ton or lbs/1000 gal (from manure test) | 28.4 | | |
| 8 | (x) | Nutrient Availability factor, for Phosphorus based application use 1.0 | .5 | | |
| 9 | | **= Available Nutrients in Manure, lbs/ton or lbs/1000 gal** | 14.2 | | |
| | | | | | |
| 10 | | Additional Nutrients needed, lbs/acre (calculated above) | 95 | | |
| 11 | (/) | Available Nutrients in Manure, lbs/ton or lbs/1000 gal (calculated above) | 14.2 | | |
| 12 | | **= Manure Application Rate, tons/acre or 1000 gal/acre** | 6.96 | | |

Comments:

Nutrient Budget Worksheet

| | | | | | |
|---|---|---|---|---|---|
| Field identification: T8955 fld 2 Year: 2013 Crop: grass | | | | | |
| Expected Crop Yield: 2 tons | | | | | |
| Phosphorus index results or Phosphorus application from soil test: 7 ppm | | | | | |
| Method of Application: broadcast | | | | | |
| When will application occur: fall | | | | | |
| Nutrient Budget | | | Nitrogen-based Application | Phosphorus-based Application | Source of information |
| 1 | | Crop Nutrient Needs, lbs/acre | 50 | | |
| 2 | (-) | Credits from previous legume crops, lbs/ac | 0 | | |
| 3 | (-) | Residuals from past manure production lbs/acre | 0 | | |
| 4 | (-) | Nutrients supplied by commercial fertilizer and Biosolids, lbs/acre | 0 | | |
| 5 | (-) | Nutrients supplied in irrigation water, lbs/acre | 0 | | |
| 6 | | **= Additional Nutrients Needed, lbs/acre** | 50 | | |
| | | | | | |
| 7 | | Total Nitrogen and Phosphorus in manure, lbs/ton or lbs/1000 gal (from manure test) | 28.4 | | |
| 8 | (x) | Nutrient Availability factor, for Phosphorus based application use 1.0 | .5 | | |
| 9 | | **= Available Nutrients in Manure, lbs/ton or lbs/1000 gal** | 14.2 | | |
| | | | | | |
| 10 | | Additional Nutrients needed, lbs/acre (calculated above) | 46 | | |
| 11 | (/) | Available Nutrients in Manure, lbs/ton or lbs/1000 gal (calculated above) | 14.2 | | |
| 12 | | **= Manure Application Rate, tons/acre or 1000 gal/acre** | 3.23 | | |

Comments:

Nutrient Budget Worksheet

| | | | | | |
|---|---|---|---|---|---|
| Field identification: T8946 fld 1,2 Year: 2013 Crop: grass | | | | | |
| Expected Crop Yield: 2 tons | | | | | |
| Phosphorus index results or Phosphorus application from soil test: 7 ppm | | | | | |
| Method of Application: broadcast | | | | | |
| When will application occur: fall | | | | | |
| Nutrient Budget | | | Nitrogen-based Application | Phosphorus-based Application | Source of information |
| 1 | | Crop Nutrient Needs, lbs/acre | 50 | | |
| 2 | (-) | Credits from previous legume crops, lbs/ac | 0 | | |
| 3 | (-) | Residuals from past manure production lbs/acre | 0 | | |
| 4 | (-) | Nutrients supplied by commercial fertilizer and Biosolids, lbs/acre | 0 | | |
| 5 | (-) | Nutrients supplied in irrigation water, lbs/acre | 0 | | |
| 6 | | **= Additional Nutrients Needed, lbs/acre** | 50 | | |
| | | | | | |
| 7 | | Total Nitrogen and Phosphorus in manure, lbs/ton or lbs/1000 gal (from manure test) | 28.4 | | |
| 8 | (x) | Nutrient Availability factor, for Phosphorus based application use 1.0 | .5 | | |
| 9 | | **= Available Nutrients in Manure, lbs/ton or lbs/1000 gal** | 14.2 | | |
| | | | | | |
| 10 | | Additional Nutrients needed, lbs/acre (calculated above) | 46 | | |
| 11 | (/) | Available Nutrients in Manure, lbs/ton or lbs/1000 gal (calculated above) | 14.2 | | |
| 12 | | **= Manure Application Rate, tons/acre or 1000 gal/acre** | 3.23 | | |

Comments:

## Section F - CERTIFICATION

**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]

| A. Name (Type or Print) | |
|---|---|
| Mark Casterline | |
| **B. Title (Type or Print)** | **C. Phone No.** |
| Vice-President | 406-787-5274 |
| **D. Signature** | **E. Date Signed** |
| Mark Casterline | 10-22-13 |

*The Department will not process this form until all of the requested information is supplied, and the appropriate fees are paid.* Return this form and the applicable fee to:

Department of Environmental Quality
Water Protection Bureau
PO Box 200901
Helena, MT 59620-0901
(406) 444-3080

RECEIVED
OCT 25 2013
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PERMITTING & COMPLIANCE DIV.