APPENDIX 3

Monitoring and Reporting Program No. R1-2019-0001

Annual Report

Report Date: _____
Month / day / year

North Coast Regional Water Quality Control Board
General Waste Discharge Requirements for Existing Dairies

Due November 30 each year; reporting for preceding 12 month period (November 1 through October 31).

Facility Information

Facility: _____ Address: _____
No. Street City Zip

Operator: _____ Address: _____

Phone: (____) _____ E-mail: _____

Property owner: _____ Address: _____

Phone: (____) _____ E-mail: _____

Dairy Animal Population:

	Present Number of Dairy Animals (check one) __ Dairy cows __ Water Buffalo __ Sheep __ Goats	Other Dairy Animals if applicable: __ Water Buffalo __ Sheep __ Goats __ Other Dairy Animal (please specify): _____
Mature Dairy Animals (Milking + dry)		
Heifers (12 to 24 months)		
Calves (birth to 12 months)		
Mature Males: Bulls/Bucks/Rams		
Other (specify)		

The objective of the Annual Report is to provide compliance updates, demonstrate that the dairy is ready for the rainy season, document required water quality monitoring and actions taken to correct identified problems, and to demonstrate that each facility is operating in compliance with the requirements of General Waste Discharge Requirements for Dairies, Order No. R1-2019-0001 (GWDR).

1. In the previous year, have changes been made to the dairy Water Quality Plan? Yes:____ No:____
   If yes, please explain. Include land management changes such as on dairy land parcels owned or leased, change in average volume of wastewater generated daily, acreage that receives process water or manure, compost operations, etc.:
   _____
   _____
   _____

2. Has the dairy had a manure or process water discharge to surface water or groundwater in the past year? Yes: ____ No: ____
   If so, where and how was the problem resolved?
   _____
   _____
   _____

3. Are you aware of your responsibility to report any noncompliance with this GWDR on your dairy that endangers human health or the environment within 24 hours of becoming aware of its occurrence? Yes: ____ No: ____

4. Have all daily, seasonal, and winter rainy season visual inspections of the dairy been performed as listed in the MRP section I.A. to ensure the dairy is being operated and maintained in compliance with the GWDR? Yes: ____ No: ____

Please answer the following questions pertaining to facility conditions and actions taken within the previous year to comply with conditions of the GWDR:

"N/A" means that the subject is not applicable to the facility covered by this report)

A. Prevent animals from entering any surface water within confinement areas: ("Surface water" means waters of the United States or any tributary to a water of the United States)							
Are barriers used to keep animals out of surface waters?	❑ Yes	❑ No	❑ N/A	Are watercourse crossings designed and maintained to protect water quality?	❑ Yes	❑ No	❑ N/A
Are feed sites located away from surface waters?	❑ Yes	❑ No	❑ N/A				
Description of deficiencies (if any) or additional information:							
B. Divert clean stormwater runoff away from manured areas (including heavily used pastures):							
Do buildings have effective gutters?	❑ Yes	❑ No	❑ N/A	Is stormwater that contacts manured areas and feed storage areas contained in holding ponds?	❑ Yes	❑ No	❑ N/A
Is guttered water diverted away from manured areas?	❑ Yes	❑ No	❑ N/A	Is clean stormwater runoff managed separate from manure and process water?	❑ Yes	❑ No	❑ N/A
Is guttered water contained in holding ponds?	❑ Yes	❑ No	❑ N/A	Are diversion ditches functional and properly maintained to protect surface waters?	❑ Yes	❑ No	❑ N/A
Description of Deficiencies (if any) or Additional Information:							

C. Please indicate whether the following materials are managed and contained on the dairy during rain events to protect surface water and groundwater:

Material to be contained	Yes	No	N/A	Material to be contained	Yes	No	N/A
All manure solids	❑	❑	❑				
Runoff from solids storage areas	❑	❑	❑	Waste milk	❑	❑	❑
Runoff from corrals that contain manure	❑	❑	❑	Veterinary waste	❑	❑	❑
Milk barn wash water	❑	❑	❑	Hazardous wastes (pesticides, etc.)	❑	❑	❑
Runoff and leachate from silage	❑	❑	❑				

Description of deficiencies (if any) or additional information:

D. System components & condition	Yes	No N/A	**System component & condition**	Yes	No N/A
Manure ponds are designed to contain all process water and stormwater runoff during a 25-year, 24-hour storm or have a Contingency Plan fully protective of surface water quality?	❑	❑	Design calculations are available for manure storage system?	❑	❑
Above-ground soil and clay lined manure ponds have a least 2 ft. freeboard? In-ground manure ponds have at least 1 foot of freeboard?	❑	❑	The facility has a solids separation system?	❑	❑
Ponds are cleaned annually to maintain capacity and check liner integrity?	❑	❑	The pumping system is maintained?	❑	❑

Are dead animals handled in a manner protective of surface water and groundwater quality? Yes □ No □

Description of Deficiencies (if any) or Additional Information:

E. Photo Documentation per Monitoring and Reporting Plan

Please attach photo documentation of compliance with required preseason pollution prevention measures.

Photos of newly implemented pollution prevention measures to protect surface and groundwater shall be submitted. Examples of pollution prevention includes cleaning of manure ponds, stormwater separation from manured areas, scraping of manured areas, covering manure piles, compost and feed storage areas, impermeable ground covering in these storage areas to prevent groundwater contamination, stream zone protection, and any other best management practices or control measures for water quality protection.

Annually, please include dated photos of the watercourse assessment. This includes photos of riparian vegetation, streambanks, watercourse crossings, and any potential erosion that could discharge to watercourses. Photos are to show current water quality protection and any projects that are in progress to improve water quality.

The objective of the Annual Report is to demonstrate that the dairy is ready for the rainy season and will not discharge sediment and nutrients to surface waters or groundwater.

Photo Documentation of Preseason Best Management Practices is Attached	❑ Yes	❑ No

F. Water Quality Monitoring The information below summarizes the water quality sampling requirements, as presented in the GWDR Attachment D - Monitoring and Reporting Program (MRP).

1. Surface Water Sampling: Surface waters must be tested for:

Parameter	Units
Electrical Conductivity (EC)	**Mmhos**
Total Ammonia Nitrogen (NH_3 + NH_4^+)	**mg/L**
Visual observation of stream changes: Write observation such as stream was clear, opaque, slightly turbid, or turbid. Alternatively, turbidity measurements may be used.	
E. coli bacteria	**cfu/100 mL**
Enterococci bacteria	**cfu/100 mL**

Note: *E. coli* is only to be tested in freshwaters. Enterococci is only to be tested in waters where salinity is greater than 1 part per thousand more than 5 percent of the time in a calendar year.

a. **Individual Surface Water Sampling:** If you are not identified as participating in a group monitoring program, then you are responsible for individual surface water sampling as required in GWDR-Attachment D: MRP. Sampling shall take place during or directly following each of 3 major storm events, after at least 1 inch of rain per 24 hours. Sampling events shall be at least 14 days apart.

i. Attach surface water sampling results from November 1 through October 31 for the previous winter rainy season that occurred prior to submittal of this report. Include time and location of each sample collected. Also, attach a map of the sampling locations.

ii. Describe your sampling methods such as model number and type of field equipment, test kits, measurement devices, etc.:

_____
_____
_____

b. Sampling: Is this dairy a current member of a group monitoring program that conducts the surface water monitoring? Yes: ____ No: ____

If so, which group? _____

c. Has all surface water sampling been conducted and submitted in accordance with the GWDR and MRP? Yes: ____ No: ____

If not, please explain: _____
_____

2. Groundwater Sampling

Representative groundwater wells located at all existing dairies, including domestic and agricultural supply wells, shall be sampled once per year for the first three years beginning in the year 2020, and then just once every three years thereafter. For example, existing dairies shall sample groundwater in the years 2020, 2021, 2022, then 2025, 2028, 2031, and so on. New dairies, expanding dairies, and previously inactive dairies shall sample the first three consecutive years after enrollment in this GWDR and then once every three years thereafter. Additional groundwater sampling may be required by the Regional Water Board based on results as stated in the GWDR and MRP.

All groundwater samples must be tested for:

Parameter	Units
Nitrate	**mg/L**
Total Dissolved Solids (TDS)	**mg/L**

Only domestic supply wells at the dairy need to be tested for total coliform bacteria:

Total Coliform Bacteria	**MPN/100 mL**

Has all ground water quality sampling been completed as described in the MRP?
Yes □ No □

Groundwater results are required to be uploaded to Geotracker as a searchable pdf copy as described in the MRP. Groundwater monitoring data shall be uploaded to Geotracker in an Electronic Deliverable Format (EDF). Have all water quality results from the past 12 months been uploaded to Geotracker as a searchable pdf copy as described in the MRP? Yes □ No □

Note: Some water quality laboratories can upload the water quality results to Geotracker for you. Instructions for setting up an account and the process of claiming a site, formatting and uploading data, and other technical information can be found under the "ESI Overview" and "Getting Started" sections at: http://www.swrcb.ca.gov/water_issues/programs/ust/electronic_submittal/

G. Best Management Practices

In this section please describe the condition and effectiveness of management measures not previously described elsewhere in this Annual Report. Please attach additional sheets if more space is needed to fully answer these topics.

1. Erosion Control: Please describe all other measures not previously described, that prevent and minimize the occurrence of erosion and discharge of manure, feed, waste, and soil particles from the dairy to surface water or groundwaters:

_____

_____

2. Nuisance Control: Please describe all measures taken to prevent nuisances. Include odors, breeding mosquitoes, damage from burrowing animals, damage from equipment during removal of solids, embankment settling, erosion seepage, excess weeds, algae, and other vegetation that could compromise the needed capacity or proper functioning of your facility and/or degrade water quality:

_____

_____

3. Groundwater Protection: Describe measures taken to protect groundwater from contamination at wellheads, sinkholes, and tile drains:

   _____

   _____

4. Is manure and nutrient application to pastures or croplands performed at rates which are reasonable for the crop, soil, climate, special local situations, management system, and type of manure? _____

   _____

5. By what date this year is nutrient application to pastures and cropland complete?

   _____

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6. How are fall and winter nutrient application prevented from entering surface waters or percolating to groundwater? Example: Include distance applied from creeks and drainages, avoidance of standing water such as in wetlands, application during dry weather, application to vegetated areas, etc.:

   _____

   _____

7. Are the liners of the manure ponds protective of water quality (free of weeds, animal burrows, and cracks that may disturb the liner)? Please describe:

   _____

8. Do the manure ponds have sufficient storage capacity prior to the rainy season as required in the GWDR? Describe the method used to make this determination:

   _____

   _____

9. Please describe the measures taken to avoid surface runoff of manure constituents from the dairy's land application areas:

   _____

   _____

   _____

10. Describe the measures taken to separate or divert stormwater from contacting manured areas, corrals, pens, and animal housing areas:

    _____

    _____

11. Describe the measures taken to minimize infiltration of manure-laden water into underlying soils within manured areas, corrals, pens, and animal housing areas:

_____

H. Nutrient Management Planning for Dairies that Apply Nutrients to Pastures or Cropland

Has a Nutrient Management Plan (NMP per MRP-Appendix 2) been prepared or revised for the dairy?
Yes □ No □

If yes, what is the year the NMP is or will be finalized and who completed the NMP?
Year of NMP: _____
Technical Service Provider/Approving Agency: _____

For facilities with a prepared Nutrient Management Plan (NMP):
How has the dairy NMP been implemented within the past year? _____

Describe crop rotation practiced within the past year and how you accounted for nutrient application at agronomic rates:

_____

_____

Is the dairy in compliance with NMP requirements for soil sampling? Yes: _____ No: _____
If so, do the results show that the is dairy applying nutrients at agronomic rates? Yes: _____ No: _____

Please add any comments regarding soil sampling results such as plans to adjust nutrient application rates at specific locations to meet agronomic rates:

_____

_____

For facilities without a prepared Nutrient Management Plan:

In the past year, was manure and process water generated at your facility applied to pastures, fields or crop lands at rates that are agronomically sound for the crop, soil, climate, special local situations, management system, and manure/wastewater characteristics? Yes □ No □

Please explain: _____
_____

Describe crop rotation practiced within the past year and how you accounted for nutrient application at agronomic rates:

_____

_____

Do you plan on obtaining an NMP for your dairy and if so, what date do you expect completion?

_____

_____

I. Compost

GWDR Condition B.5. on pages 18-19, encourages composting at dairies however, discharges of waste to surface waters and groundwater are prohibited. Does the dairy conduct composting operations?
Yes:_____ No: _____
If yes, then please explain how the composting practice is managed to avoid discharges to surface waters and groundwater:

_____

_____

Is the composting practice in accordance with State Water Board Division of Water Quality DWQ 2015-0121 or subsequent Order(s)?

_____

_____

J. Tribal Cultural Resources Protection

The Tribal Cultural Resources Mitigation Program (GWDR - Attachment E) is required. Dairy operators must familiarize themselves with this information and follow the steps indicated if archaeological resources are discovered. Is the dairy compliant with the TCRMP? Yes: _____ No: _____

K. Water Conservation

The GWDR encourages water conservation. The Water Quality Plan, section J, discusses the importance of water conservation. Please describe the water conservation measures practiced within the past year on the dairy including pastures and cropland that help to conserve water. (Examples: vegetate bare soil areas, use water efficiently, repair leaks in a timely manner, utilize rain gutters on buildings and discharge the clean stormwater to vegetated areas, infiltrate clean stormwater to recharge groundwater, use recycled water, dry scrape manured areas, catch rainwater in basins for re-use, practice no-till on pastures and croplands, reduce freshwater use where possible, etc.) : _____

_____

_____

L. Riparian Management Planning:

The Riparian Management Plan (RMP) is located at the end of the Water Quality Plan-Appendix 1. Does the owned and leased dairy property, including the production area, pastures, and cropland, contain areas along creeks or small drainages that flow between storm events? Yes: _____ No: _____

If yes, please specify the actions within the past year that are being taken to protect this area including riparian vegetation growing along streams and other watercourses:

_____

The RMP is to be submitted to the Regional Water Board by November 30, 2020.

Is the RMP for the dairy completed and submitted? Yes: _____ No: _____ N/A: _____

Does the dairy comply with the performance measures of the RMP? Yes: _____ No: ____ N/A: _____

If not, what is the plan to comply with the RMP including timing of improvements?

_____

M. Certification of Goat, Sheep, and Water Buffalo Dairies:

GWDR Finding 8 (page 1) indicates that existing goat, sheep, and water buffalo dairies must certify that their facility is structurally and operationally in compliance with all terms and conditions of the GWDR within two years of submittal of the Notice of Intent (Attachment A). It is expected that goat, sheep, and water buffalo dairies have installed adequate water quality protection practices to meet the requirements of the GWDR with this allotted time period. Does your goat, sheep, or water buffalo dairy meet this requirement? Yes: _____ No: _____
Please describe improvements made to meet the GWDR requirements:

_____

N. Summary

Has all required monitoring been conducted?	Yes ☐	No ☐
Have all required reports been submitted to the Regional Water Board?	Yes ☐	No ☐
Based on your visual inspections and water quality monitoring results, did your facility operate in compliance with the GWDR?	Yes ☐	No ☐

Reports shall be submitted by November 30 of each year (starting in 2020) to:

North Coast Regional Water Quality Control Board
5550 Skylane Boulevard, Suite A
Santa Rosa, CA 95403
Phone (707) 576-2220

Or electronically: **Northcoast@waterboards.ca.gov**

O. Certification of Report Preparer

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this report and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Printed Name Title

Signature Month / day / year