APPENDIX 1

Annual Report

Report Date: _____
Month / day / year

For Compliance with Order No. R1-2016-0011
Waste Discharge Requirements
For McClelland Dairy West

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: _____

Current # of mature dairy cows (milking + dry): _____

Current # of other dairy cattle: _____

1. **In the previous year, have changes been made to the facility Water Quality Plan? Yes ❑ No ❑ if yes, please attach explanation.** _____

2. **In the previous year, has a Nutrient Management Plan been prepared or revised for your facility?** _____ _____ **Yes ❑ No ❑ if yes, please attach explanation.**

3. **Has the Facility had a manure or process water discharge to surface or groundwater in the past year? Yes ❑ No ❑**
4. **If so, where and how was the problem resolved?** _____
_____
_____

5. **Please answer the following questions pertaining to facility conditions and actions taken within the previous year to comply with the Order:**

"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 storm water runoff away from manured areas (including heavily used pastures)

Do buildings have effective gutters?	❑ Yes	❑ No	❑ N/A	Is storm water 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 storm water 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. Is the Facility designed to retain all manure and process water generated at the facility, including all runoff from manured areas produced during a 25-year, 24-hour storm? Are wastes managed and contained 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	❑	❑	❑	Waste milk	❑	❑	❑
Runoff from solids storage areas	❑	❑	❑				
Runoff from corrals that contain manure	❑	❑	❑	Veterinary waste	❑	❑	❑
Milk barn washwater	❑	❑	❑	Hazardous wastes (pesticides, etc.)	❑	❑	❑
Runoff and leachate from silage	❑	❑	❑				

Description of deficiencies (if any) or additional information:

System component & condition	Yes	No	N/A	**System component & condition**	Yes	No	N/A
Ponds are designed to contain all process water and storm water runoff during a 25-year, 24-hour storm or have a Contingency Plan fully protective of surface water quality? A 25-year, 24-hour storm event at McClelland Dairy West is equivalent to 5.5 inches of rain or more within any 24-hour period.	❑	❑	❑	Design calculations are available for manure storage system?	❑	❑	❑
Above-ground soil and clay lined manure ponds have a least 2 feet of 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?	❑	❑	❑

D. Miscellaneous

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

Description of Deficiencies (if any) or Additional Information: _____

A Manure Manifest form is required to be filled out and kept on the Facility if manure is hauled off the Facility. This is to ensure tracking of nutrients and ensure responsibility that manure is handled properly in a manner protective of water quality. Completed forms must be available to Regional Water Board staff during inspections and upon staff request. Has manure been hauled off site within the past year and is a Manure Manifest form on file at the Facility for this handling? Yes ❑ No ❑ N/A ❑

_____

_____

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, storm water 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 (Monitoring and Reporting Program, Section I, Item A.7). 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. Page 6 of this Annual Report has space to explain improvement projects.

The objective of the Annual Report is to demonstrate that the Facility is ready for the wet 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 Sampling

The information below summarizes the water quality sampling requirements, as presented in the Monitoring and Reporting Program (MRP).

Surface Water Sampling

Surface watercourses that flow through the Facility, including the production area, cropland, or pastures, must be sampled using grab samples at the point where watercourses enter and leave the property. Alternatively, if surface waters flow adjacent to the property but not through the property, and are located such that they could be impacted by activities at the Facility, the grab samples shall be collected upstream and downstream of the areas closest to the Facility. Sampling shall take place during or directly following each of three (3) major storm events, of one (1) inch or more per 24-hours, during the rainy season, beginning in the winter season of 2016-2017. Three (3) measurements of electrical conductivity taken three (3) minutes apart shall be recorded during each sampling event at each location. Total ammonia nitrogen, pH, and temperature shall be collected once at each sampling location for each sampling event during or following storm events described in this section above. The MRP requires recording of visual observations, such as changes in stream color or turbidity at the time of sampling. Please include those observations below or in an attachment.

Electrical Conductivity (EC)	Mmhos
Total Ammonia Nitrogen (NH_3) as N, mg/L	
pH	
Temperature	^oC

Is this Facility in a group monitoring plan?_____If so, which group? _____

Groundwater Well Sampling

Representative wells currently used and located at the Facility, including domestic and agricultural supply wells, shall be sampled four (4) times total, approximately six (6) months apart. A sample must be collected in: (1) Spring 2017, (2) Fall 2017, (3) Spring 2018, and (4) Fall 2018. One (1) sample from each well shall be tested for the following parameters:

Constituent	Units
Nitrate	mg/L
Fecal Coliform Bacteria	MPN/100mL

Has all surface and ground water quality sampling been completed as described in the Monitoring and Reporting Plan? Yes ❑ No ❑

Have all water quality results from the past 12 months been attached? Yes ❑ No ❑

G. **Best Management Practices**
(In this section please describe the current 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).

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

Do the manure ponds have sufficient storage capacity prior to the upcoming rainy season as required in the Order? Describe the method used to make this determination:_____
_____

Please describe all new measures taken to prevent nuisances at the manure ponds. 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: _____
_____
_____

Riparian Protection: Are effective stream protections present in all pastures that prevent animal waste and sediment from entering waterways (example: bridges, culverts, rocked crossings, fencing out animals, water troughs away from streams, shade away from streams, extensive vegetation, revegetation of bare areas, etc.):
Yes ❑ No ❑ N/A ❑

Describe current water quality issues on the Facility such as at stream crossings and riparian areas (example: stream bank trampling and compaction, soil erosion, lack of ground cover and riparian shade protection, and discharge of fecal matter, sediment, and nutrients): _____
_____

Where there is evidence of impacts to designated beneficial uses, the Discharger must develop riparian management protection measures and implement best management practices to control adverse impacts to the beneficial uses. What gradual improvements are being done to resolve adverse impacts?
_____
_____

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 Facility to surface or groundwater:
_____
_____

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

Nutrient Management Planning:

In the past year, was manure and process water generated at your facility been 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/process wastewater characteristics? Yes ❑ No ❑

_____

Please explain:_____

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

_____

_____

_____

Describe the measures taken to separate or divert storm water from contacting manured areas, corrals, pens, and animal housing areas:

_____

_____

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

_____

_____

H. CEQA Mitigation Measures

The Order states that: "Areas specified in Confidential Appendix D of the CEQA document shall be surrounded with permanent fencing and rotationally grazed when soil conditions are dry. Dairy cattle within this permanent fencing shall not exceed 20 cattle for a maximum of two consecutive days for a rotation of once per 18-day period or more."
Does the Facility implement these required CEQA mitigation measures identified in Order? Yes❑ No ❑

The Order states that: "Also, the dirt road that bisects the area specified in Confidential Appendix D will be used only when dry. If visible erosion of the road surface or adjacent area occurs, then the use will be halted immediately until the road surface is restored, or is reseeded so that a thick growth of pasture grasses is established, or is covered with gravel or other material."
Does the Facility implement these required CEQA mitigation measures identified in Order? Yes❑ No ❑

I. Summary

Has all required monitoring been conducted?	Yes ❑	No ❑
Have all required reports been submitted to the Regional Water Board?	Yes ❑	No ❑
Does facility meet Regional Water Board WDR criteria?	Yes ❑	No ❑

Reports and attachments shall be submitted (either by mail or electronically) by November 30 of each year:
By mail:

North Coast Regional Water Quality Control Board
5550 Skylane Blvd., Suite A
Santa Rosa, CA 95403

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

I. 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