Attachment C

Conditional Waiver of Waste Discharge Requirements

Order No. R1-2015-0051

Water Quality Plan

for Mello 3/Llano Oaks Dairy

Purpose

Owners and operators (hereinafter identified as "Discharger") seeking coverage under the Conditional Waiver of Waste Discharge Requirements for Mello 3/Llano Oaks Dairy in the North Coast Region, Order No. R1-2015-0051 (the Waiver), are required to prepare and implement a Water Quality Plan (WQP). The purpose of the WQP is to help the Discharger ensure that the dairy is designed, constructed, operated, and maintained so that contaminants generated by the dairy are managed to prevent adverse impacts to the quality of surface water and groundwater.

Due Date

The WQP must be prepared and submitted to the Regional Water Board within 60 days of Regional Water Board adoption of Conditional Waiver Order R1-2015-0051.

Format

The WQP is developed by the Discharger by printing and completing the following questionnaire. If the Discharger needs more room for any answers, additional sheets can be attached and responses numbered to correspond to the question.

Water Quality Plan

I. General Information :

A. Basic Dairy Information:

1. Dairy Name:_____
2. Physical Address:_____
   _____
3. Contact person: _____
4. Phone number: _____
5. E-mail address: _____
6. Current number of dairy cows (milking + dry): _____
7. Current other dairy cattle: _____
8. Maximum number of mature dairy cows (milking + dry) the dairy is designed for:_____
9. Maximum number of other dairy cattle the dairy is designed for: _____
   _____
10. Number of Acres Owned: _____ List APNs: _____
    _____
    _____
11. Number of Acres Leased: _____ List APNs: _____
    _____
12. Number of Acres that receive manure and/or process water: _____
13. Average annual amount of manure applied (indicate pounds, tons, cubic yards, or other units): _____
14. Average annual amount of process water applied (indicate gallons, 1,000 of gallons, or acre-inches):_____
    _____
15. Average amount of manure transferred offsite (show units): _____
16. Average amount of process water transferred offsite: (show units):_____
    _____
17. Describe offsite location(s) that receive manure and/or process water:
    _____
    _____

B. **Map**: Please attach legible map(s) identifying the following items where applicable. You may need to use a full-page satellite map (e.g. Bing, Google, or similar) and one or more additional maps at appropriate scales:

1. Perimeter of land owned;
2. Perimeter of land leased;
3. Buildings with use identified;
4. Manure ponds with perimeter outline of drainage area into pond;
5. Solid manure storage area;
6. Silage storage area;
7. Production area perimeter: (areas where livestock feeding and housing areas, feed storage areas, manure and process water storage areas, milk barn, chemical storage areas and manure storage areas are located);
8. Surface watercourses and conveyances (include streams, ditches, piping);
9. Extent of subsurface tile drainage system and associated discharge points;
10. Pumping facilities;
11. Flow meters;
12. Underground pipelines used for transporting process water;
13. Wells and type (domestic, agricultural, industrial, or monitoring well);
14. Drainage controls (berms, levees, and/or ponds) used for tailwater and stormwater;
15. Arrows showing direction of flows;
16. Stormwater discharge point(s);
17. Permanent pens / fences;
18. Crop fields (identified by name or number);
19. Pastures (identified by name or number);
20. Any septic tanks and leachfields on the property;
21. Map legend;

C. **Waste Discharge:** The discharge of process wastewater or stormwater containing manure to surface waters or groundwater is prohibited under the Waiver.

Has the dairy had a discharge of manure or process water to surface or groundwater?
Yes ☐ No ☐ If yes, describe and provide dates: _____
_____
_____
_____

II. Water Quality Requirements

Based on Statewide Water Quality Regulations for Confined Animal Facilities (CAFs) California Code of Regulations (CCR) Title 27, Division 2, Subdivision 1:

A. *22561 General Standards for Surface Water.* *The discharger shall prevent animals at a confined animal facility from entering any surface water within the confined area.*

Do cows have access to any surface water in the production area? Yes □ No □

Describe all measures (i.e. BMPs) taken to prevent access of cows to surface waters in the production area: _____

_____

_____

Describe all measures taken to protect water quality at livestock crossings in the production area: _____

_____

_____

B. *22562(a) Design Storm (for Run-On/Run-Off Control)*-*Confined animal facilities shall be designed and constructed to retain all facility wastewater (i.e., process water) generated, together with all precipitation on, and drainage through, manured areas during a 25-year, 24-hour storm.*

Is your facility designed and operated to meet this code? Yes □ No □

Please complete the following table for manure ponds:

Pond name/number	Dimensions (feet) Length x width x depth	Volume, cubic feet (exclude 2 feet freeboard)
	Total volume:	

Explain how you determine compliance with the requirement to retain process water during the 25-year 24-hour storm:_____

_____

_____

Are the manure ponds inspected to ensure design capacity and liner integrity by November 1 of each year? Yes □ No □

Contingency Plan: If pond storage does not meet minimum standards, the dairy facility must have a Contingency Plan that describes how the excess precipitation and runoff that is generated during the higher than normal precipitation will be managed.

Please describe any Contingency Plan in place to manage precipitation and runoff generated during higher than normal precipitation (attach additional sheets, if necessary):

_____

_____

_____

C. ***22562(b) Manured Area Run-On /Exclusion*** *- All precipitation and surface drainage outside of manured areas, including that collected from roofed areas, and runoff from tributary areas during the storm events described in* [Section 22562] *(a), shall be diverted away from manured areas, unless such drainage is fully retained. RWQCBs can waive application of such requirements only in specific instances where upstream land use changes have altered surface drainage patterns such that retention of flood flows is not feasible.*

California State requirements mandate that all precipitation and surface drainage outside of the manure area(s), be diverted away from manured areas unless it is fully retained.

Please describe how your facility is designed and operated to divert run-on or run-off from manured areas or how it is managed to fully contain the drainage:_____

_____

_____

D. ***22562(c)Design Storm (for Flood Protection)***
Retention ponds and manured areas at confined animal facilities in operation on or before November 27, 1984, shall be protected from inundation or washout by overflow from any stream channel during 20-year peak stream flows.

Are your manure ponds protected from a 20-year peak stream flows, and if so, how?
Yes □ No □ _____

Existing facilities that were in operation on or before November 27 1984, and that are protected against 100-year peak stream flows, must continue to provide such protection. Facilities, or portions thereof, which begin operating after November 27, 1984, shall be protected against 100-year peak stream flows.

1. For dairies beginning operation after November 27, 1984, please explain how your dairy is designed and operated to protect from inundation or washout from 100-year peak stream flows:
   _____
   _____

2. If your dairy is required to have protection from 100-year peak stream flows, have the retention ponds and manured facilities at your dairy ever been inundated from any stream during a 100-year peak stream flow?
   Yes □ No □ If yes, explain:
   _____
   _____

3. Is the dairy production area located within a 100-year floodplain?
   Yes □ No □
   If yes, please explain how your facility is designed and operated to protect from inundation or washout from 100-year peak stream flows: _____
   _____
   _____

E. 22562 (d) Retention Pond Design – *Retention ponds shall be lined with, or underlain by, soils which contain at least 10 percent clay and not more than 10 percent gravel or artificial materials of equivalent impermeability.*

1. Do any retention ponds have a liner made from artificial material? Yes□ No□
   If so, which pond(s) and what is the material? _____
   _____
   _____

2. Are your ponds underlain by soils which contain at least 10 percent clay and not more than 10 percent gravel? Yes □ No □ If yes, how was this determined? _____
   _____
   _____

3. Have you conducted a permeability test on any retention ponds? Yes□ No□
   If so, which ponds and what was the result?_____
   _____
   _____

F. 22562 Land Application of Process Waters – This conditional Waiver authorizes the application of manure and process waters to land only if such application is in accordance with the conditions of the Waiver. Absent an NPDES permit for discharge to surface waters, the only allowable discharge is to wastewater treatment facilities approved by the Regional Water Board.

G. **22563 Reasonable Soil Amendment Rate** – Manure and process water may not be applied to land at a dairy facility solely for disposal. Application of manure and process water to croplands shall be at rates which are reasonable for the crop, soil, climate, special local situations management systems, and type of manure. Please provide information on application practices as requested in the following sections:

For facilities with a prepared Nutrient Management Plan:
The purpose of a Nutrient Management Plan (NMP) is to identify the management practices used to minimize adverse impacts to surface water and groundwater from runoff and leaching from land application areas. A NMP is specific for a particular dairy and considers crops, soil types, climate, and local conditions for all nutrients, and non-nutrient salts, applied to each field. The NMP must be updated in response to changing conditions and when the NMP is not effective in preventing periodic discharges of manure or process water.

Within 180 days of adoption of the Waiver, your dairy is required to have a written NMP prepared for the maximum number of dairy cattle onsite.

1. Does your dairy have a written NMP? Yes □ No □ If so, what is the date of the NMP and what specialists helped you prepare the NMP?
   _____
   _____
   _____

   If your facility has a written NMP, the most current version should be kept at the dairy and available for review by Regional Water Board staff during inspections.

2. Do you implement the written NMP? Yes □ No □

H. ***22563 Run-Off & Percolation*** – *Land application of process wastewater to cropland shall not result in surface runoff from the cropland and shall be managed to minimize percolation to groundwater.*

1. To reduce the potential for stormwater runoff to transport contaminants to waters of the United States, is nutrient application and associated irrigation completed by November 1st of each year? Yes □ No □

2. Describe the measures taken to minimize to process wastewater runoff to surface water and percolation to groundwater to avoid a discharge of pollutants:
   _____
   _____
   _____

I. ***22564 Management of Manured Areas***
Manured areas (corrals, manure solids storage areas, etc.) *shall be managed to minimize infiltration of water into underlying soils.*

1. Is runoff from manured areas prevented from entering surface waters?
   Yes □ No □

   Are manured areas lined, and if so, how?
   _____
   _____

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

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

III. Best Management Practices

Best management practices (BMPs) are any practices or measures used to protect surface and groundwater. Please provide the following information for BMPs not identified previously in this document which are used at your dairy:

A. Erosion Control: Describe all measures taken to minimize erosion and the discharge of soil particles to surface water: _____
   _____
   _____
   _____

B. Stream Protection: Please list all stream water quality protection measures throughout the dairy: _____
   _____
   _____
   _____

C. Nuisance Control: Describe all measures taken to prevent nuisance from manure ponds. Include measures to control: odors, breeding of 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 manure pond and/or degrade water quality: _____
   _____
   _____
   _____

D. Groundwater Protection: What practices are employed at the dairy facility to protect groundwater from contamination at wellheads, sinkholes, and tile drains?

_____
_____
_____

E. Dead Animal Disposal: What actions are taken at your dairy to ensure the protection of surface water and groundwater from the disposal of dead animals?

_____
_____
_____

F. Chemical Disposal: What BMPs and chemical handling methods do you use to prevent impacts to surface water and groundwater? _____
_____
_____

G. Petroleum Products: The California Aboveground Petroleum Storage Act requires owners or operators to take specific actions to prevent spills:

http://www.leginfo.ca.gov/cgi-bin/displaycode?section=hsc&group=25001-26000&file=25270-25270.13

Daily inspections and secondary containment may be required. Spill reporting to the city, county, and state agencies is required. Are you aware of this Act and is your facility compliant? Yes □ No □

H. Other Best Management Practices (BMPs): Describe BMPs, not discussed above, as used to:

1. Prevent waste discharges to surface waters:_____
_____
_____

2. Prevent waste discharges to groundwater: _____
_____
_____

I. Spill or Noncompliance Reporting: Are you aware of spill and noncompliance reporting requirements in the Monitoring and Reporting Plan? Yes □ No □

Are you in compliance with those reporting requirements? Yes □ No □

"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: _____

Signature: _____Date: _____

This Water Quality Plan shall be submitted within 60 days of adoption of the Waiver to:

North Coast Regional Water Quality Control Board
5550 Skylane Boulevard, Suite A
Santa Rosa, CA 95403
Phone (707) 576-2220
Fax (707) 523-0135

Or electronically to: Northcoast@waterboards.ca.gov