

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
SAN FRANCISCO BAY REGION**

**RESOLUTION NO. R2-2015-0031**

**RENEWAL OF CONDITIONAL WAIVER OF WASTE DISCHARGE REQUIREMENTS  
FOR EXISTING DAIRIES  
WITHIN THE SAN FRANCISCO BAY REGION**

WHEREAS, the California Regional Water Quality Control Board, San Francisco Bay Region (Water Board), finds that:

**Scope of Coverage**

1. Resolution No. R2-2015-0031 serves as a conditional waiver of waste discharge requirements (WDRs) for discharges of waste from existing dairies (dairies are confined animal facilities [CAFs])<sup>1</sup> of all sizes and types that meet the terms and conditions of this conditional waiver (hereafter, Conditional Waiver). This Conditional Waiver also covers grazing operations on grazing lands associated with an existing dairy.
2. For purposes of this Conditional Waiver, “existing dairies” are dairies (cow, goat, sheep, etc.) that are constructed and operating as of the effective date of this Conditional Waiver and which have subsequently not expanded the size of their physical facilities beyond their maximum animal capacity. New or expanding dairies must file a report of waste discharge (ROWD) to the Water Board prior to discharging waste.
3. This Conditional Waiver covers the management of process water, manure, and other organic materials at existing dairies, including the application of such materials to land. Other wastes, such as medicines, pesticides, chemicals, and fertilizers must be disposed at appropriately permitted facilities.
4. Owners and operators of existing dairies (facilities) discharging, or proposing to discharge, waste in any manner that could affect the quality of the waters of the State within the San Francisco Bay Region (Region) and who have been designated by the Water Board are hereinafter referred to as “Dischargers” and are subject to the terms and conditions of this Conditional Waiver.
5. This Conditional Waiver applies to facilities that pose a low risk to surface water and/or groundwater; are in compliance with the Statewide Minimum Standards (Attachment G) as defined in Finding 32; and comply with the terms and conditions herein. Such facilities include the dairies previously covered under Water Board Resolution No. R2-2003-0094, dairies covered under General WDRs that can currently meet the terms and conditions of this Conditional Waiver, other existing dairies not previously regulated, and associated grazing operations.

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<sup>1</sup> Title 27 of the California Code of Regulations, section 20164, defines a CAF as “... any place where cattle, calves, sheep, swine, horses, mules, goats, fowl, or other domestic animals are corralled, penned, tethered, or otherwise enclosed or held and where feeding is by means other than grazing.”

Conditional Waiver of Waste Discharge Requirements for Existing Dairies  
Resolution No. R2-2015-0031

6. Owners or operators of dairies that discharge or propose to discharge pollutants<sup>2</sup> to the waters of the United States are required to obtain coverage under a National Pollutant Discharge Elimination System (NPDES) permit and are not required to seek coverage under the Conditional Waiver.
7. Dairies that are defined by federal regulations as a large concentrated animal feeding operation (CAFO)<sup>3</sup>, not subject to NPDES permitting requirements, must separately address any stormwater-related discharges from land application areas. Such discharges can qualify as “agricultural stormwater discharges”, not subject to NPDES permitting, if manure and wastewater are applied to the land in accordance with site-specific nutrient management practices that ensure appropriate agricultural utilization of the nutrients in the manure, litter, or process wastewater (40 CFR section 122.23(e)).
8. Large dairies that discharge stormwater from cropland where manure, litter, or process wastewater has been applied may enroll under this Conditional Waiver if they are implementing a Nutrient Management Plan upon enrollment. Large dairies that discharge such stormwater without a Nutrient Management Plan are in violation of the federal Clean Water Act (CWA) and may be fined for the discharge and/or be required to enroll under a NPDES permit.
9. This Conditional Waiver applies to the disposal of waste generated by onsite animal production and food-processing activities. Food-processing activities, such as cheese-making, which generate additional waste and/or wastewater that may be co-mingled with the animal production waste stream, must be included in the facility’s Waste Management Plan, consistent with the technical standards specified in Attachment B.
10. This Conditional Waiver **does not apply** to other types of waste, including, but not limited to, wastes such as cannery waste, septage, municipal or industrial sludge, and/or biosolids or similar types of waste generated onsite or brought onto the facility for disposal or nutrient recycling. Dischargers must submit a separate ROWD and receive individual WDRs prior to receiving and/or discharging such wastes.
11. This Conditional Waiver does not address the cleanup of existing degraded surface water and groundwater from past dairy operations. Any required cleanup actions are handled under separate authority under the California Water Code (CWC).

**Water Quality Concerns**

12. Pursuant to the CWC, Division 7, the Water Board regulates the discharge of wastes that could affect the quality of the waters of the State to ensure protection of the beneficial uses of both surface water and groundwater and the prevention of nuisances. Dairies, as described herein, represent a significant source of waste discharges in the Region.

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<sup>2</sup> 40 CFR section 122.23 (d)(1) requires only facilities that discharge to waters of the United States to seek NPDES permit coverage. A facility proposes to discharge if, based on an objective assessment, it is designed, constructed, operated, or maintained such that a pollutant discharge will occur.

<sup>3</sup> 40 CFR section 122.23 (b)(4) defines a large dairy as an operation that stables or confines as many as, or more than, 700 mature dairy cows, whether milked or dry or 10,000 sheep or lambs.

Conditional Waiver of Waste Discharge Requirements for Existing Dairies  
Resolution No. R2-2015-0031

13. CAFs are operations where animals are confined and fed in an area that has a roof or is devoid of vegetation, generating solid and liquid manure wastes that are collected and disposed of on land (crops and pastures) or offsite. Within the Region, the primary types of CAFs are cow dairies, horse facilities, a few goat and sheep dairies, and a few egg, chicken, turkey, and/or swine production facilities. The majority of animal waste is produced by cow dairies within the counties of Marin and Sonoma. There are approximately 40 cow dairies currently operating within the Region, with total herd sizes ranging from 100 to 2200, averaging 200-300 head.
14. Dairies generate wastes that include, but are not limited to, manure, process wastewater, animal wash water, and any water, precipitation or rainfall runoff that contacts animal confinement areas and/or raw materials, products or byproducts such as manure, compost piles, feed, bedding materials, silage, eggs or milk. Wastewater may also contain certain chemicals such as detergents, disinfectants, and biocides. Wastes from such facilities can contain significant amounts of pathogens, oxygen-depleting organic matter, sediment, nitrogen compounds, and other suspended and dissolved solids that can impact both groundwater and surface water if not properly managed. Daily operations can cause degradation of water quality of surface water and groundwater as a result of waste discharges and activities that result in soil erosion and destruction of riparian habitat.
15. Dairy wastes are stored in retention ponds, in corrals, and/or in waste piles. These wastes are then applied to onsite cropland or pastures or transported offsite. The applied wastes are a source of water and nutrients to crops and pastures but, if improperly managed, can create nuisance conditions and cause pollution of surface water and groundwater. Adverse aquatic habitat impacts associated with improper waste management and application may include: nutrient enrichment resulting in algal blooms, organic waste loading resulting in lowered oxygen levels, siltation of gravel areas that can eliminate fish habitat, high levels of ammonia that are toxic to fish and aquatic invertebrates, and raised levels of nitrates and other salts in groundwater.

**Background**

16. In 2003, the Water Board adopted Resolution No. R2-2003-0094, Renewal of Waiver of Waste Discharge Requirements for Confined Animal Facilities (2003 Conditional Waiver) and Order No. R2-2003-0093, General Waste Discharge Requirements (2003 General WDRs) for Confined Animal Facilities. Resolution No. R2-2003-0094 was in effect for a five year-term and expired in 2008.
17. Forty-two dairies within the Region initially operated under the 2003 Conditional Waiver. Nine dairies did not meet the conditions of the 2003 Conditional Waiver and applied for coverage under the 2003 General WDRs.
18. Numerous watersheds throughout the Region are listed as impaired pursuant to CWA section 303(d). The CWA requires states to address these impairments by developing Total Maximum Daily Loads (TMDLs) that examine these water quality problems, identify sources of pollutants, and specify actions that create solutions and restore beneficial uses.
19. The renewal of the 2003 Conditional Waiver provides an opportunity to include implementation plan requirements identified in Chapter 7, Water Quality Attainment Strategies Including Total

Maximum Daily Loads of the Water Quality Control Plan for the San Francisco Basin (Basin Plan).

20. The Basin Plan specifies implementation measures for each categorical pollutant source identified as contributing to the water quality impairment. Livestock grazing lands and CAFs, including dairies, are identified as categorical pollutant sources that are required to implement site-specific management measures to control and reduce animal waste and sediment runoff. This Conditional Waiver implements the Basin Plan by requiring grazing land management.
21. The Water Board adopted Resolution No. R2-2011-0060, Conditional Waiver of Waste Discharge Requirements for Grazing Operations in the Napa River and Sonoma Creek Watersheds, and Resolution No. R2-2013-0039, Renewal of Conditional Waiver of Waste Discharge Requirements for Grazing Operations in the Tomales Bay Watershed. These conditional waivers require landowners or operators of grazing operations to implement specific management practices to minimize discharges of sediment, pathogens, and nutrients from their grazing operations to receiving waters, conduct compliance monitoring, and submit annual reports of progress made in controlling and minimizing discharges. Grazing operations associated with dairies are not covered under the 2011 and 2013 conditional waivers.
22. This Conditional Waiver includes consideration for potential impacts to groundwater associated with dairy operations. Since the adoption of the 2003 Conditional Waiver, California dairy groundwater data and various published studies related to dairies and groundwater impacts have been evaluated in order to determine the effectiveness of current confined animal State regulations in protecting groundwater quality. Findings from these studies indicate that effective groundwater protection depends on whether subsurface conditions were adequately assessed in the siting, design, and operation of each facility. Since impacts to groundwater depend on site-specific considerations, facility-specific data are necessary to assess compliance with groundwater water quality objectives. Therefore, this Conditional Waiver requires sampling of existing groundwater wells.

### **Regulatory Framework**

23. CWC section 13260 (a) requires that any person discharging waste or proposing to discharge waste within any region that could affect the quality of the waters of the State, other than into a community sewer system, must file with the appropriate water board an ROWD containing such information and data as may be required by the water board, unless the requirement is waived pursuant to CWC section 13269.
24. The Water Board may waive WDRs when it finds, pursuant to CWC section 13269, that a waiver of submission of ROWDs and/or issuance of WDRs is in the public interest. CWC section 13269 authorizes the Water Board to waive WDRs for a specific discharge or type of discharges if the waiver is consistent with the Basin Plan and is in the public interest. Relevant factors in determining whether a waiver is in the public interest include the following: whether the discharger is implementing reasonable practices to minimize the deleterious effects of the discharge; whether a feasible treatment method or set of management practices exist to control the pollutants in the discharge; and whether waiving ROWDs and/or WDRs will adequately protect beneficial uses while allowing the Water Board to focus its limited resources to conduct field oversight, public outreach, and, where necessary, enforcement.

Conditional Waiver of Waste Discharge Requirements for Existing Dairies  
Resolution No. R2-2015-0031

25. Pursuant to CWC section 13269, waivers of WDRs may not exceed five (5) years in duration but may be renewed by the Water Board after holding a public hearing. The Water Board may terminate a waiver at any time.
26. CWC section 13263 (i) authorizes the Water Board to prescribe general WDRs and/or waivers of WDRs for a category of discharges if the discharges are produced by the same or similar operations, involve the same or similar types of waste, require the same or similar treatment standards, and are more appropriately regulated under general WDRs or waivers than individual WDRs.
27. The Water Board, in compliance with CWC sections 13263 (i) and 13269, reviewed the 2003 Conditional Waiver and determined that it should be replaced by a new conditional waiver.
28. The adoption of this Conditional Waiver is in the public interest because it:
  - a. Includes industry-specific conditions that are intended to reduce and prevent pollution and nuisance and protect beneficial uses of the waters of the State;
  - b. Applies to those existing facilities that pose a low risk to surface water or groundwater and are currently in compliance with waiver terms and conditions, including the Statewide Minimum Standards for confined animal facilities;
  - c. Provides a more efficient and timely mechanism of complying with water quality objectives than other regulatory options,
  - d. Provides for an efficient and effective use of limited Water Board resources; and
  - e. Provides flexibility for the Dischargers by providing an option of complying with water quality monitoring through a third-party entity.
29. CWC section 13269 includes the following provisions:
  - a. The waiver of WDRs shall include the performance of individual, group, or watershed-based monitoring, unless the Water Board determines that the discharges do not pose a significant threat to water quality.
  - b. Monitoring requirements shall be designed to support the development and implementation of the waiver program, including, but not limited to, verifying the adequacy and effectiveness of the waiver's conditions.

This Conditional Waiver requires compliance with monitoring conditions consistent with CWC section 13269.
30. Pursuant to this Conditional Waiver and CWC section 13267, Dischargers will implement a Monitoring and Reporting Program (Attachment A). The Monitoring and Reporting Program is necessary to ensure compliance with this Conditional Waiver's terms and provisions and must be consistent with the facility's Waste Management Plan, Nutrient Management Plan, and Grazing Management Plan. The goal of the Monitoring and Reporting Program is to prevent or reduce uncontrolled waste discharges and to protect water quality; it requires regular visual inspections, surface and groundwater sampling, reporting, and record-keeping.

31. This Conditional Waiver satisfies the State Water Resources Control Board's 2004 Policy for the Implementation and Enforcement of the Nonpoint Source Pollution Control Program (NPS Policy), which requires that nonpoint source discharges of waste be regulated by WDRs, waiver of WDRs, or prohibitions to ensure compliance with Regional Water Board Water Quality Control Plans.
32. This Conditional Waiver is consistent with the requirements of the Statewide Minimum Standards for confined animal facilities, California Code of Regulations, Title 27, sections 22560-22565, which are attached to this Conditional Waiver as Attachment G (hereafter, the "Statewide Minimum Standards"). These Statewide Minimum Standards require containment of manure, wash water, and stormwater runoff from animal confinement areas. The Statewide Minimum Standards are the *minimum* standards for discharges of animal waste at CAFs and must be implemented in WDRs.

### **Water Quality Control Plan for the San Francisco Bay Basin**

33. The Water Quality Control Plan for the San Francisco Bay Basin (Basin Plan) is the Water Board's master water quality control planning document. It designates beneficial uses and water quality objectives for waters of the State, including surface waters and groundwater. Economics were considered as required by law during the development of these objectives. It also includes programs of implementation, prohibitions, provisions and policies to achieve and protect water quality objectives. The region's TMDLs and associated implementation plans are also part of the Basin Plan. The Basin Plan was duly adopted by the Water Board and approved by the State Water Resources Control Board (State Water Board), Office of Administrative Law, and U.S. EPA, where required.
34. Pursuant to the Basin Plan, the existing and potential beneficial uses of waters in the San Francisco Bay Region that could be impacted by the discharge of the wastes described in Finding 14 include:
  - a. Municipal and domestic water supply
  - b. Agricultural water supply
  - c. Groundwater recharge, estuarine habitat
  - d. Marine habitat
  - e. Preservation of rare and endangered species
  - f. Water contact recreation
  - g. Noncontact water recreation
  - h. Shellfish harvesting
  - i. Cold freshwater habitat
  - j. Warm freshwater habitat
  - k. Wildlife habitat
  - l. Preservation of areas of special biological significance.
35. The Basin Plan directs the Executive Officer to work with the dairy industry through local dairy waste committees and local/State agencies in obtaining cooperative corrections of dairy waste problems. The Basin Plan also recommends adoption of WDRs in those cases where water quality objectives for waters within an agricultural watershed are consistently exceeded or where corrective action is not yet successful in eliminating either short- or long-term water quality problems or threats. It also states that WDRs may be waived where such a waiver is not against the

public interest and still assures the protection of beneficial uses of State waters. This Conditional Waiver is consistent with the Basin Plan since it applies to those facilities currently in compliance with the Statewide Minimum Standards.

### **Anti-Degradation**

36. State Water Board Resolution 68-16 (“*Statement of Policy with Respect to Maintaining High Quality of Waters in California*”) requires whenever the existing quality of water is better than the quality established in policies as of the date on which such policies become effective, such existing high quality must be maintained. Resolution 68-16 only allows change in the existing high quality if it has been demonstrated to the Water Board that the change is consistent with maximum benefit to the people of the State, will not unreasonably affect present and anticipated beneficial uses of such water, and will not result in water quality less than that prescribed in the policies. Resolution 68-16 further requires that discharges meet WDRs that will result in the best practicable treatment or control of the discharge necessary to assure that (a) pollution or nuisance will not occur and (b) the highest water quality consistent with the maximum benefit to the people of the State will be maintained. Resolution 68-16 incorporates the federal “antidegradation” policy (Cal. Code Regs., tit. 40, § 131.12). This Conditional Waiver is consistent with these policies.

This Conditional Waiver prohibits discharges of waste to surface waters except in specified circumstances that are consistent with federal regulations, requires Dischargers to manage waste and waste disposal in a manner that will prevent degradation of groundwater, and requires Dischargers to manage waste to minimize odors and prohibit nuisance conditions. The Water Board finds that under normal operating conditions:

- a. The discharge conditions and effluent limitations established in this Conditional Waiver will ensure that the existing beneficial uses and quality of waters of the State in the Region will be maintained and protected, and
- b. Discharges regulated by this Conditional Waiver will not degrade existing water quality if the terms and conditions of this Conditional Waiver are met.

37. This Conditional Waiver requires that discharges of waste, as defined in Finding 14, from existing dairies shall not cause surface water or groundwater to be further degraded, to exceed water quality objectives, to unreasonably affect beneficial uses, or to cause a condition of pollution or nuisance. This Conditional Waiver also requires monitoring of surface water and groundwater to demonstrate compliance with water quality objectives.

### **California Environmental Quality Act**

38. The Water Board is the lead agency for purposes of complying with the California Environmental Quality Act (CEQA), Public Resources Code sections 21100-21177. Pursuant to CEQA Guidelines section 15301, this action to adopt a Conditional Waiver of WDRs for existing dairies is exempt from the provisions of CEQA under Exemption 1 for “Existing Facilities.” CEQA Guidelines section 15301 applies to “...the operation, repair, maintenance, permitting, leasing, licensing, or minor alteration of existing public or private structures, facilities, mechanical equipment, or topographical features, involving negligible or no expansion of use beyond that existing at the time of the lead agency’s determination...”

Conditional Waiver of Waste Discharge Requirements for Existing Dairies  
Resolution No. R2-2015-0031

39. This Conditional Waiver involves the permitting of facilities, which are defined as dairies that are fully constructed and operating as of the effective date of this Conditional Waiver, and which have subsequently undergone no expansion in size of their physical facilities. Accordingly, because this Conditional Waiver allows for no expansion in use beyond the existing physical facilities, this Conditional Waiver is exempt from CEQA pursuant to CEQA Guidelines section 15301.
40. Each Discharger must demonstrate that it is operating an “existing facility” under CEQA Guidelines Exemption 1 for Existing Facilities (Cal. Code Regs., tit.14, § 15301) before obtaining coverage under this Conditional Waiver. New sources that do not qualify for the Existing Facilities categorical exemption will be required to submit an ROWD.
41. Two additional CEQA categorical exemptions may also be applicable to this action:
  - a. CEQA Guidelines Exemption 2 for Replacement of Existing Structures (Cal. Code Regs., tit.14, § 15302) exempts “replacement or reconstruction of existing structures and facilities where the new structure will be located on the same site as the structure replaced and will have substantially the same purpose and capacity as the structure replaced.” Consistent with the categorical exemption for Replacement of Existing Structures, covered facilities may replace or reconstruct retention ponds or other structures on the facility to ensure proper function in compliance with this Conditional Waiver.
  - b. CEQA Guidelines Exemption 4 for Minor Alterations (Cal. Code Regs., tit.14, § 15304) exempts “minor public or private alterations in the condition of land, water, and/or vegetation which do not involve removal of healthy, mature, scenic trees except for forestry and agricultural purposes...” Consistent with the categorical exemption for Minor Alterations, covered facilities may make improvements to their facilities that will result in minor alterations to land, water, and/or vegetation.
42. Food and Agricultural Code section 33487 exempts State agencies from any requirement to prepare a CEQA environmental impact report for CAFOs under the following circumstances: (1) when the CAFO will be constructed and operated in accordance with the minimum standards in Chapter 5 of the Food and Agricultural Code; (2) where the applicable local agencies have completed all necessary reviews and approvals including that required by CEQA; and (3) where a permit for construction was issued by a local agency on or after the effective date of Food and Agricultural Code section 33487 and construction has begun.

**Safe Drinking Water Act**

43. It is the policy of the State of California that every human being has the right to safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes. This Conditional Waiver promotes that policy by requiring the Dischargers to meet water quality objectives, as applicable, designed to protect human health and ensure that water is safe for domestic use.

**Public Notice**

44. The Water Board has reviewed the contents of this Conditional Waiver and all evidence concerning this matter, written public comments, and testimony provided at the public hearing on June 10,

Conditional Waiver of Waste Discharge Requirements for Existing Dairies  
Resolution No. R2-2015-0031

2015, in Oakland and hereby finds that the adoption of this Conditional Waiver is consistent with the Basin Plan and is in the public interest.

45. The Water Board has publicly notified interested agencies and persons of its intent to issue this Conditional Waiver for discharges of wastes from existing dairies (including associated grazing operations) and has provided them with an opportunity for a public meeting and an opportunity to submit comments.

**THEREFORE BE IT RESOLVED** that, the Water Board hereby approves and adopts the CEQA exemptions in this Conditional Waiver and directs the Executive Officer to file all appropriate notices; and

**BE IT FURTHER RESOLVED** that, pursuant to CWC section 13269 subdivision (a) and (e), WDRs are waived for existing dairies provided that conditions listed below are met; and

**BE IT FURTHER RESOLVED** that this Conditional Waiver is for a period of five years unless terminated sooner.

**A. DISCHARGE PROHIBITIONS**

1. The discharge of waste classified as hazardous (Cal. Code Regs., tit. 23, section 2521(a)), is prohibited.
2. The collection, treatment, storage, discharge, or disposal of waste at the facility shall not cause a condition of nuisance, contamination, pollution, or degradation of surface water or groundwater (as defined in CWC section 13050).
3. The discharge of waste from a facility that causes or contributes to an exceedance of any applicable water quality objective in the Basin Plan or any applicable State or federal water quality criteria or to a violation of any applicable State or federal policies or regulations is prohibited.
4. The direct and indirect discharge of waste, including stormwater contacting wastes, from the animal production or housing area to any surface water, or tributary thereof, is prohibited.
5. The application of manure or process water to a land application area in a manner that results in the discharge of wastes to surface water is prohibited.
6. The disposal of dead animals at the facility or in any liquid manure or wastewater retention pond is prohibited. The Discharger must dispose of dead animals in compliance with all applicable federal, State, county, and local laws and regulations.
7. The discharge of manure or process water to lands not owned, leased, or controlled by the Discharger without written permission from the landowner and in a manner not approved by Executive Officer is prohibited.

8. The direct discharge of wastewater into groundwater via backflow through water supply or irrigation supply wells is prohibited.

## **B. WASTE DISCHARGE SPECIFICATIONS BY FACILITY OPERATION**

### **1. PRODUCTION/CONFINED AREA**

- a. All facilities shall be designed, constructed, operated and maintained to retain all waste, wastewater flow, and stormwater contacting manured areas that are likely to accumulate up to and during a 25-year, 24-hour storm event. Management of such facilities shall be in accordance with a site-specific Waste Management Plan, consistent with the technical standards specified in Attachment B. (Cal. Code Regs., tit. 27, §22562(a).)
- b. In addition to manure waste, and wastewater generated from stormwater contacting manured areas, the Discharger must properly contain and manage all other wastes including, but not limited to, silage leachate, dead animals, waste milk, veterinary medical waste, solid and liquid waste from onsite slaughtering, solid and liquid waste from onsite food processing (such as cheese), spoiled feed, bedding, and any precipitation contacting these materials. Specific pollution prevention measures must be included in the facility's Waste Management Plan.
- c. All precipitation and clean surface drainage outside of manured areas, including that from roofed areas and tributary drainages, shall be diverted away from confined and/or manured areas, unless such drainage is fully contained in a retention pond. (Cal. Code Regs., tit. 27, §22562(b).)
- d. All animal confinement areas, and feed and waste storage areas, shall be managed to minimize standing water as of 72 hours after the last rainfall and the infiltration of water into underlying soils.
- e. All confined animals shall be fenced or excluded from any surface water or perennial streams passing through the confined area. Creek crossings shall be bridged in a manner that prevents animal waste from entering the waterway.

### **2. RETENTION PONDS**

- a. Retention ponds and manured areas at dairies in operation on November 27, 1984, shall be protected from inundation or washout by overflow from any stream channel during 20-year peak flows. Dairies existing before November 27, 1984, and protected against 100-year peak stream flows must continue to provide such protection. Dairies, or portions thereof, that began operating after November 27, 1984, shall be protected against 100-year peak stream flows. (Cal. Code Regs., tit. 27, §22562(c).)
- b. Existing retention ponds must, at a minimum, be lined with, or underlain by, soils which contain at least ten (10) percent clay and not more than ten (10) percent gravel or artificial materials or materials with equivalent impermeability or include additional lining materials necessary to comply with this Conditional Waiver's Discharge Prohibitions No. 2 and No. 3. (Cal. Code Regs., tit. 27, §22562(d).)

Conditional Waiver of Waste Discharge Requirements for Existing Dairies  
Resolution No. R2-2015-0031

- c. Retention ponds constructed after adoption of this Conditional Waiver must meet all applicable federal, State, and local laws and regulations. Waste storage facilities should be located outside of floodplains; however, if site restrictions require location within a floodplain, they shall be protected from inundation or damage from a 100-year flood event, or larger if required by laws, rules, and regulations.
- d. Retention ponds (or expanded ponds) constructed after adoption of this Conditional Waiver must comply with Natural Resources Conservation Service (NRCS) Waste Storage Facility Code 313 including a maximum specific discharge (unit seepage rate) of  $1 \times 10^{-6}$  cm/sec. Such ponds may not be used until the Discharger submits a report verifying that the liner meets this requirement. Waste shall not be placed into the retention pond until after the Executive Officer notifies the Discharger in writing that the report is acceptable.
- e. Retention ponds shall be managed to have sufficient freeboard, but in no case less than two feet in partially or completely aboveground ponds and one foot in pond structures that are completely in ground. Freeboard shall be measured vertically, from the water surface up to the point on the surrounding berm or dike having the lowest elevation, and shall be designed and constructed to prevent overtopping as a result of windy storm conditions. Lesser freeboard may be approved by the Executive Officer if documented by a registered civil engineer that structural integrity and required capacity will not be compromised with the proposed freeboard.
- f. Following a storm event, the Discharger shall restore the wastewater holding capacity of retention ponds, if necessary to maintain required freeboard, in a timely manner and in a manner consistent with the Waste Management Plan and the Nutrient Management Plan.
- g. Retention pond clean-out shall occur annually, at a minimum, and should be conducted prior to the start of the rainy season, but no later than November 30.

**3. LAND APPLICATION AREAS (if applicable)**

- a. Discharges to land of solid and liquid waste shall be conducted in such areas that prevent the discharge of waste to surface waters or flood-prone areas and shall be managed to minimize percolation to groundwater.
- b. Discharges to land of solid or liquid waste shall be at rates that are reasonable for crop, soil, climate, special local situations, management system, and type of manure. The total nutrient loading shall not exceed the amount needed to meet crop demand and shall be in accordance with the facility's Nutrient Management Plan, consistent with the technical standards specified in Attachment C.
- c. Manure and wastewater discharges to land, including spray irrigation, shall be conducted during non-rainy or non-saturated conditions; must not result in runoff to surface waters; and must infiltrate completely within 72 hours after application.
- d. Manure and wastewater shall not be applied closer than 100 feet to any down-gradient surface waters, open tile line intake structures, sinkholes, agricultural or domestic well heads, or other conduits to surface waters, unless a 35-foot wide vegetative buffer or

physical barrier is substituted for the 100-foot setback, or alternative conservation practices or field-specific conditions will provide pollutant reductions equivalent or better than the reductions achieved by the 100-foot setback.

- e. Large CAFOs that are eligible to enroll under this Conditional Waiver must implement an adequate Nutrient Management Plan (in accordance to technical standards specified in Attachment C) prior to discharging and prior to obtaining coverage, if they will discharge stormwater from cropland where manure, litter, or process wastewater has been applied.

#### 4. GRAZING OPERATIONS (if applicable)

- a. Dischargers shall implement site-specific management practices that reduce water pollution due to grazing and protect water quality. In selecting management practices for the facility, the Discharger shall take into consideration the vegetation, terrain, type of livestock, and general facility operation procedures.
- b. Dischargers with grazing operations on grazing lands that encompass an area of 50 acres or more, or encompass an area smaller than 50 acres and are identified by the Executive Officer as posing a threat to water quality, must develop and implement a Grazing Management Plan, consistent with the technical standards specified in Attachment D.

### C. PROVISIONS

1. The Discharger shall comply with all applicable provisions of the CWC, Title 27, and the Basin Plan.
2. The Discharger shall comply with the attached Monitoring and Reporting Program, and also develop and implement a site-specific Waste Management Plan, Nutrient Management Plan, and Grazing Management Plan, as applicable, according to the waste discharge specifications B.1 through B.4. All existing plans must be updated and new plans developed in accordance to the technical standards specified in Attachments A, B, C and D. **Plans must be completed within the schedule outlined below in Section F. Required Reports and Notices.**
3. If the Discharger observes deficiencies, defects, and/or impending failures in any of the manure-contacted water conveyance, control, and/or retention structures, the Discharger shall take immediate action to correct and/or prevent any unauthorized release. Records of such actions shall be kept and maintained as required in the Monitoring and Reporting Program. The Waste Management Plan shall be updated to include corrective management measures needed to avoid a recurrence of the observed condition.
4. If onsite or offsite monitoring (visual or water quality testing) results indicate that the Discharger's facility (including land application areas) is causing a condition of nuisance, contamination, pollution, or degradation of surface water or groundwater, the Discharger shall take immediate corrective action to cease such pollutant discharges. The corrective action must be documented and submitted with a Noncompliance Report, as required by the Monitoring and Reporting Plan.

Conditional Waiver of Waste Discharge Requirements for Existing Dairies  
Resolution No. R2-2015-0031

5. Manifests are required to be kept onsite to record transfer of waste to outside facilities and must be kept as part of the Waste Management Plan. The application of manure or process water to lands not owned, leased, or controlled by the Discharger without written permission from the landowner or in a manner that is not consistent with the conditions of this Conditional Waiver is prohibited. The requirements for such third party agreements are outlined in Attachment C.
6. The Discharger shall comply with all federal, State, county, and local laws and regulations pertaining to the discharge of wastes from the facility that are no less stringent than the requirements of this Conditional Waiver.
7. The requirements prescribed herein do not authorize the commission of any act causing injury to the property of another, nor protect the Discharger from liabilities under federal, State, or local laws, nor guarantee the Discharger a capacity right in receiving waters.
8. This Conditional Waiver does not convey any property rights or exclusive privileges. In accordance with CWC section 13263(g), “No discharge of waste into the waters of the State, whether or not the discharge is made pursuant to waste discharge requirements, shall create a vested right to continue the discharge. All discharges of waste into waters of the State are privileges, not rights.”
9. This Conditional Waiver does not authorize any act that results in the taking of a threatened or endangered species or any act that is now prohibited, or becomes prohibited in the future, under either the California Endangered Species Act (Fish and Wildlife Code §§ 2050-2097) or the federal Endangered Species Act (16 U.S.C. §§ 1531-1544). Dischargers shall be responsible for meeting all requirements of the applicable endangered species act. A discharge that is deleterious to fish, plant life, mammals, or bird life, or is otherwise in violation of California Fish and Wildlife Code section 5650 is not a discharge that is authorized nor in compliance with the terms and conditions of this Conditional Waiver. The Discharger shall obtain permits as necessary and comply with permit conditions and all other applicable federal, State, county, and local laws and regulations.
10. Upon presentation of credentials at reasonable hours or in response to a complaint or report of noncompliance, Water Board staff and other authorized representatives shall be allowed:
  - a. Entry upon premises where a regulated facility or activity is located or conducted or where records are kept under the conditions of this Conditional Waiver;
  - b. Access to copy any records that are kept under the conditions of this Conditional Waiver;
  - c. To inspect any facility, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Conditional Waiver; and
  - d. To photograph, sample, and monitor for the purpose of assuring compliance with this Conditional Waiver.
11. The Discharger shall maintain a copy of this Conditional Waiver and each management plan (i.e., Waste, Grazing, and Nutrient) at the site so as to be available at all times to daily supervising personnel. The Discharger shall ensure that all daily supervising personnel are familiar with the content of this Conditional Waiver and each management plan.

12. The provisions of this Conditional Waiver are severable, and if any provision or the application of any provision of this Conditional Waiver to any circumstance is held invalid, the application of such provision to other circumstances, and the remainder of this Conditional Waiver shall not be affected thereby. If there is any conflicting or contradictory language between this Conditional Waiver and the associated attachments that outline technical requirements for the Monitoring and Reporting Program, Waste Management Plan, Nutrient Management Plan, and Grazing Management Plan, the language in the Conditional Waiver shall govern over the other documents.
13. Compliance determination with the terms of this Conditional Waiver shall be based on the following:
  - a. Periodic inspections by Water Board staff;
  - b. Evaluation of the completed Annual Report and required information submitted according to the Monitoring and Reporting Program, including monitoring results, certificates of completion for the Waste Management Plan, the Nutrient Management Plan, and the Grazing Management Plan; and,
  - c. Any other information deemed necessary by the Executive Officer.

**D. PERMIT REOPENING, REVISION, REVOCATION, TERMINATION AND RE-ISSUANCE**

1. The Water Board may modify or revoke and reissue this Conditional Waiver at any time.
2. An authorization to discharge wastes under this Conditional Waiver is not transferable to any person without written authorization from the Executive Officer. In the event of any change in operation, control, or ownership of land or waste discharge facilities, the Discharger shall notify any succeeding owner/operator of his/her responsibility to comply with this Conditional Waiver by letter at least 60 days in advance of such change. A copy of such letter shall be submitted to the Water Board, along with a Notice of Termination (NOT), in order for the original Discharger to be relieved of its responsibility to comply with this Conditional Waiver.
3. To assume operation under this Conditional Waiver, the succeeding owner/operator must submit a completed Notice of Intent to the Water Board within fifteen days of receipt of such notice and receive approval by the Executive Officer. The succeeding owner/operator is not authorized to discharge under the Conditional Waiver and may be subject to enforcement until written approval of the coverage transfer from the Executive Officer.
4. In the event of closure or change in land use of the Discharger's facility, the Discharger shall file an NOT in the form of a letter that explains the extent of the change in operation, measures taken to close and/or change the operation, and owner/operator contact information. Prior to NOT approval, all manure- and animal waste-impacted soil is to be disposed of in a manner that will not pose a threat to surface water or groundwater quality or create a condition of nuisance.

Conditional Waiver of Waste Discharge Requirements for Existing Dairies  
Resolution No. R2-2015-0031

5. Water Board staff shall review the NOT and determine its appropriateness. The review may include a field staff inspection to verify project completion and water quality protection. The Executive Officer shall notify the Discharger regarding approval or disapproval of the NOT.
6. If more stringent requirements are necessary to implement or be consistent with any TMDL adopted by the Water Board to achieve applicable water quality standards pursuant to CWA section 303, or amendments thereto, the Water Board will revise and modify this Conditional Waiver.
7. This Conditional Waiver may be reopened to address any changes in State or federal plans, policies, or regulations that would affect the quality requirements for the discharges and as authorized by federal and State law.
8. The Executive Officer may at any time terminate coverage under this Conditional Waiver, as to a particular Discharger, where the Discharger fails to comply with this Conditional Waiver; such termination is in the public interest; the Discharger's activities could adversely affect beneficial uses of waters of the State; or the Executive Officer determines, based on changes to the Discharger's facility, that coverage under General WDRs, individual WDRs, or an NPDES permit is more appropriate.

**E. ENFORCEMENT**

1. A Discharger who fails to comply with the terms and conditions of this Conditional Waiver is subject to an enforcement action to the extent allowed by law, including but not limited to, administrative civil liabilities. Discharges that could affect the quality of the waters of the State may commence only in accordance with CWC section 13264(a).
2. Section 13387(e) of the CWC provides that any person who knowingly makes any false statement, representation, or report in any record, report, plan, notice to comply, or other document filed with a Regional Water Board or the State Water Board, or who knowingly falsifies, tampers with, or renders inaccurate any monitoring device or method required under this division shall be punished by a fine of not more than \$25,000, or by imprisonment in State prison for not more than 2 years, or by both.
3. Large CAFOs that discharge stormwater from land application areas without implementing an adequate Nutrient Management Plan are in violation of the CWA and may be fined for the discharge and/or required to enroll under an NPDES permit.
4. CWC section 13350 provides that any person who violates a waiver condition is subject to civil liability of up to \$5,000 per day or \$15,000 per day of violation or, when the violation involves the discharge of pollutants, is subject to civil liability for up to \$10 per gallon, or \$20 per gallon, or some combination thereof, depending on the violation or upon the combination of violations.

**F. REQUIRED REPORTS AND NOTICES**

1. The Discharger must complete the following tasks and submit a certification of completion. Facilities have the option to prepare the Waste Management Plan and the Nutrient Management

Plan through a technical education program, administrated by a qualified professional, as described in Attachment B, General Requirement 2.

a. **Facility Monitoring Program**

The facility's Monitoring and Reporting Program must be developed and implemented consistent with the technical standards specified in Attachment A, **by November 1, 2016**. This is an onsite operational plan to implement visual inspections and associated documentation and water quality monitoring. Preparations must be made in order to begin monitoring during the 2016-17 rainy season.

If the Discharger opts to participate in an Executive Officer approved watershed or group monitoring program in lieu of individual surface water quality testing, confirmation of such participation must be documented in the facility's 2016 Annual Report (Attachment A, Appendix 1) and the program must also be prepared to begin sampling by November 1, 2016, the start of the 2016-17 monitoring period.

b. **Waste Management Plan (WMP).**

A WMP must be updated and/or completed and implemented consistent with the technical standards specified in Attachment B, **by November 30, 2017**.

A copy of the WMP must be kept on the facility site and made available for review by Water Board staff during inspections and upon request by Water Board staff. The Discharger must certify that the WMP is complete, as required. If the WMP was prepared through completing a technical education program, a letter of completion shall be submitted either separately or attached to the facility's Annual Report.

c. **Grazing Management Plan (GMP).**

A GMP must be completed and implemented consistent with the technical standards specified in Attachment D, **by November 30, 2017**.

A copy of the GMP must be kept on the facility site and made available for review by Water Board staff during inspections and upon request by Water Board staff. The Discharger must certify that the GMP is complete, as required, by submitting a letter either separately or attached to the facility's Annual Report.

d. **Nutrient Management Plan (NMP)**

An NMP must be completed and implemented consistent with the technical standards specified in Attachment C, **by November 30, 2019**.

**Large Concentrated Animal Feeding Operations (700 mature cows or more) must implement an NMP prior to enrolling under the Conditional Waiver.**

A copy of the NMP must be kept on the dairy facility and made available for review by Water Board staff during inspections and upon request by Water Board staff. The Discharger must certify that the NMP is complete, as required. If the NMP was prepared through completing a technical education program, a letter of completion shall be submitted either separately or attached to the facility's Annual Report.

2. Annual Report

The Discharger must submit an Annual Report to the Water Board by **November 30 each year**, in accordance to the Monitoring and Reporting Program requirements. The Annual Report shall assess if best management practices for waste containment, nutrient application to land at agronomic rates, and grazing management measures are effective in preventing discharges to surface water and groundwater for the past year (November 1 of the last year through October 31 of the current year). It shall also include documentation that rainy-season preparations have been completed and copies of analytical results for surface water and groundwater samples, if individual monitoring was completed. If participating in a watershed-based or group monitoring program, a statement identifying the group must be included.

3. Noncompliance Reports

- a. The Discharger shall report any noncompliance that endangers human health or the environment within 24 hours of becoming aware of its occurrence. **The incident shall be reported to the Water Board Spill Hotline at (510) 622-2369 and to the California Office of Emergency Services (OES) at (800) 852-7550.** During non-business hours, the Discharger shall leave a message on the Water Board's office voice mail. The message shall include the time, date, and place of the discharge. The OES is operational 24 hours a day. A written report shall be submitted to the Water Board office within five (5) business days of the Discharger becoming aware of the incident. The report shall include complete details of the steps that the Discharger has taken, or intends to take, in order to prevent recurrence. The written submission shall, at a minimum, contain:
  - The approximate date, time, and location of the discharge;
  - A description of the noncompliance and its cause;
  - The flow rate, volume, and duration of the discharge;
  - A description of the noncompliance, its causes, duration, if the noncompliance has been corrected and/or the actual or anticipated time for achieving compliance; and,
  - A time schedule and a plan to implement necessary corrective actions to prevent the recurrence of such discharges.
- b. The Discharger shall take all reasonable steps to minimize any adverse impact to the waters of the State resulting from noncompliance with this Conditional Waiver. Such steps shall include accelerated or additional monitoring as necessary to determine the nature and impact of the noncompliance.
- c. The fact that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the Conditional Waiver shall not be a defense for violations.

4. Reporting Provisions:

- a. The Notice of Intent, all technical reports and/or monitoring program reports submitted to the Water Board shall be accompanied by a cover letter signed by the owner, operator, or duly authorized representative, with the following certification:

Conditional Waiver of Waste Discharge Requirements for Existing Dairies  
Resolution No. R2-2015-0031

*“I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document 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.”*

- b. Any Discharger authorized to discharge waste under this Conditional Waiver shall furnish, within a reasonable time, any information the Water Board may request, to determine whether cause exists for modifying, revoking, reissuing, or terminating its authorization for this Conditional Waiver. The Discharger shall also furnish to the Water Board, upon request, copies of records required to be kept by this Conditional Waiver.
  - c. Except for data determined to be exempt from disclosure under the Public Records Act (California Government Code sections 6275 to 6276), and data determined to be confidential under CWC section 13267(b)(2), all reports prepared in accordance with the terms of this Conditional Waiver and submitted to the Executive Officer shall be available for public inspection at the offices of the Water Board. Knowingly making any false statements on any such report may result in the imposition of criminal penalties as provided for in CWC section 13387.
5. The Discharger shall submit an ROWD to the Water Board at least 140 days prior to any changes or proposed changes in:
    - a. The character, location, volume, or disposal methods of waste discharges;
    - b. The size and/or use of the facilities; and/or
    - c. The size of the animal population, if it increases beyond the existing design capacity of the facility specified in the Waste Management Plan, the Nutrient Management Plan, and/or the Grazing Management Plan.
  6. The filing of a request by the Discharger for modification, revocation, reissuance, or termination of this Conditional Waiver, or notification of planned changes or anticipated noncompliance, does not stay any condition of this Conditional Waiver.
  7. The Discharger may be required to submit technical reports as directed by the Executive Officer in accordance with CWC section 13267.
  8. **Extension Request** - The Discharger may request an extension to deadlines by written request to the Executive Officer at least 30 days prior to the deadlines. This request must include a description of incomplete plan elements, an alternative date of compliance, and assurance of water quality protection in the interim. Any requests for extension are subject to written approval by the Executive Officer.

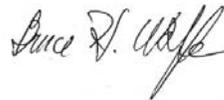
**G. APPLICATION REQUIREMENTS**

1. Dairies that can certify compliance with the terms and conditions of this Conditional Waiver shall apply for coverage by submitting a completed Notice of Intent form (Attachment F) **on or before September 1, 2015.**
2. If the Discharger becomes aware that a relevant fact was omitted in a Notice of Intent, or incorrect information was submitted in a Notice of Intent or in any report to the Water Board, it shall promptly submit the correct facts or information. Completed forms shall be sent to the Water Board at the following address:  

San Francisco Bay Regional Water Quality Control Board  
ATTN: Confined Animal Facility Program  
1515 Clay Street, Suite 1400  
Oakland, CA 94612
3. Coverage under this Conditional Waiver is subject to fees as determined by the State Water Board. The application fee/annual fee schedule is developed by the State Water Board annually.

**This Conditional Waiver expires on June 9, 2020.**

I, BRUCE H. WOLFE Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of the Conditional Waiver of WDRs adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on June 10, 2015.



Digitally signed by Bruce H. Wolfe  
DN: cn=Bruce H. Wolfe,  
o=SWRCB, ou=Region 2,  
email=bwolfe@waterboards.ca.gov,  
c=US  
Date: 2015.06.16 18:12:08 -07'00'

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BRUCE H. WOLFE  
Executive Officer

- Attachment A: Monitoring and Reporting Program No. R2-2015-0031  
Appendix 1 - Annual Report form (template to be provided to enrollees by September 30, 2015)  
Appendix 2 - Sampling and Analysis Reduction Certification form  
(template to be provided to enrollees by September 30, 2015)  
Appendix 3 - Schedule for Activities Required by Conditional Waiver of Waste Discharge Requirements for Existing Dairies

- Attachment B - Waste Management Plan Minimum Requirements  
Attachment C - Nutrient Management Plan Minimum Requirements  
Attachment D - Grazing Management Plan Minimum Requirements  
Attachment E - Definitions  
Attachment F - Notice of Intent Form  
Attachment G - Title 27 of the California Code of Regulations, sections 22560-22565

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**ATTACHMENT A**

**MONITORING AND REPORTING PROGRAM**

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## ATTACHMENT A

California Regional Water Quality Control Board  
San Francisco Bay Region

Conditional Waiver of Waste Discharge Requirements

### **MONITORING AND REPORTING PROGRAM NO. R2-2015-0031 FOR EXISTING DAIRIES**

This Monitoring and Reporting Program (MRP) is issued pursuant to the Conditional Waiver (Resolution R2-2015-0031) and California Water Code (CWC) section 13267. The Discharger shall not implement any changes to this MRP unless, and until, a revised MRP is approved by the Executive Officer.

To allow the Water Board to evaluate compliance with the terms and conditions of the Conditional Waiver, this MRP requires that regular monitoring, sampling, and record-keeping be conducted by dairy owners and operators (hereinafter, Dischargers). The required sampling and analyses are minimum parameters necessary to evaluate if facility operations are contributing to adverse water quality impacts. If sampling data indicate that concentrations are above the benchmarks (based on the Basin Plan), then the Discharger must take immediate action to identify pollutant sources and correct the problem.

This MRP requires preparation of an Annual Report of compliance, to be submitted to the Water Board by November 30 of each year (Appendix 1). The Annual Report shall document required pre-rainy season preparations, individual monitoring data (if not participating in a watershed-based monitoring program), an evaluation of the effectiveness of management practices, and records of any inspections where a water quality problem was identified, as well as the management practices taken to correct these problems.

#### **I. MONITORING PROVISIONS**

Visual inspections and sampling of surface and ground waters are required to assess compliance with conditions of the Conditional Waiver.

##### **A. Visual Inspections**

This MRP requires each Discharger to conduct periodic visual inspections to ensure its facility is operated and maintained in compliance with the Conditional Waiver. Visual inspections shall be done when conditions are safe to do so. Observations of any threats to water quality and corrective actions taken shall be documented and submitted in each Annual Report. All adverse conditions, including discharges that are a threat to human health or the environment, shall be reported to the Water Board within 24 hours. Corrective actions shall be implemented to stop the discharge as soon as possible.

##### **1. Production /Confined Areas**

The Discharger shall conduct **daily** inspections of the production / confined areas, including all retention ponds, pumping equipment, water lines, outdoor animal wash racks, corrals, and nearby surface waters, and document any non-stormwater waste discharges from the property under the control of the Discharger.

## 2. **Retention Pond Freeboard and Integrity**

The Discharger shall measure and document the freeboard in each retention pond **weekly**, during the rainy season (October through March), and **monthly**, during the dry season (April through September). Freeboard is the vertical distance from the pond surface to the lowest elevation of the surrounding berm or the bottom of the spillway. The size of ponds/containment structures needed to contain waste materials and rain water from a 25-year 24-hour storm event will vary from facility to facility. To maintain structural integrity and prevent a discharge, **two (2) feet of freeboard shall be maintained in partially or completely aboveground ponds and one (1) foot of freeboard shall be maintained in pond structures that are completely in ground.** Lesser freeboard may be approved by the Executive Officer if documented by a registered civil engineer that structural integrity and required capacity will not be compromised with the proposed freeboard.

The Discharger shall conduct **weekly** inspections of the manure containment structures for effective capacity, berm integrity, cracking, slumping, excess vegetation, animal burrows, and/or seepage. Repairs shall be made to prevent discharges to surface water and/or groundwater and noted in the Annual Report.

## 3. **Cropland and/or Pasture**

The Discharger(s) shall inspect any cropland on which solid manure or wastewater is applied. Inspections shall occur **at least once daily during each irrigation event and/or spreading event** and shall be documented. Any erosion, conditions of field saturation, runoff from the cropland containing pollutants, or violation of set-back requirements shall be remedied as necessary to protect water quality and prevent nuisance conditions. The following shall be documented:

- a. Descriptions of erosion, field saturation, runoff, set-back violation, or the presence of nuisance conditions in the cropland;
- b. Dates, location, and approximate volume of wastewater and/or solid waste applied to land, in accordance with the Nutrient Management Plan;
- c. Weather conditions at the time of and 24 hours prior to and following waste application; and
- d. Dates, occurrences, location, and estimated amounts of unauthorized releases from the ponds or cropland either off-property or to surface water drainage courses (such releases shall be reported in accordance with the reporting requirements below).

## 4. **Storm Event Preparations**

The following inspections shall be conducted prior to anticipated storm events, during extended storm events, and after actual storm events:

- a. Inspect all retention ponds / structures. These structures shall be inspected for berm integrity, cracking, slumping, excess vegetation, burrowing animals, and seepage.

- b. Inspect the closest receiving water, upstream and downstream of all facilities, and disposal areas to monitor any change in water quality resulting from facility operations. Any change in water quality shall be reported in accordance with the reporting requirements below.
- c. Inspect confined areas to ensure that all pollution prevention measures, as specified in the facility's Waste Management Plan, are implemented and effective.

The Discharger shall document any discharges of stormwater that has commingled with wastewater, litter, or manure and the approximate duration and amount of wastes discharged to surface waters. Such discharges shall be reported in accordance with non-compliance reporting requirements below.

**B. Grazing Operation Monitoring and Reporting (required for grazing lands of 50 acres or more)**

1. The Discharger shall conduct visual inspections of the grazing lands to verify that chosen management practices are being implemented and that the Waste Discharge Specifications for grazing operations in the Conditional Waiver are being met.
2. The Discharger shall, in addition to inspecting the grazing lands, visually inspect the closest receiving water, upstream and downstream of the grazing facility, to monitor any change in water quality resulting from facility operations. These inspections are needed to determine the effectiveness of the management practices implemented at the grazing facility.
3. Inspections shall occur twice during the dry season and at least monthly during the rainy season, preferably before and after a forecasted storm event. One of the dry season inspections shall be conducted in the month of September, prior to the beginning of the rainy season, and shall encompass the entire grazing facility to ensure the facility's readiness for the rainy season. A Discharger is not required to perform inspections during dangerous weather conditions or when a storm begins after scheduled facility operating hours.
4. Pre-storm inspections of the entire grazing facility shall ensure that appropriate management practices are properly installed and maintained; post-storm inspections are to evaluate whether management practices have functioned adequately and whether additional measures or maintenance work is needed.
5. The Discharger shall annually measure and record measurements of residual dry matter (RDM<sup>1</sup>) as specified in the University of California 2002, California Guidelines for Residual Dry Matter Management on Coastal and Foothill Annual Rangelands, Rangeland Monitoring Series Publication 8092. These measurements shall be included in the Annual Report. If minimum RDM levels are not met, the Discharger shall provide an explanation for not meeting the recommendations in the Annual Report.

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<sup>1</sup> As cited in Napa River Sediment TMDL and Sonoma Creek Sediment TMDL.

6. The Discharger shall maintain records of inspections, monitoring observations, and any response taken to eliminate potential sources of sediment, nutrients, and pathogens from the grazing facility. If a water quality problem is found during the inspection, the Discharger shall record the nature of the problem, and the management practices taken to correct it, and report it in the Annual Report.

### **C. Water Quality Testing**

Water quality sampling and reporting is required to allow the Water Board to assess compliance with Basin Plan water quality objectives and to assess the effectiveness of facility management plans. Sampling results shall be used by the Discharger to assess water quality conditions and to make informed decisions regarding management practices. Short-term groundwater well sampling is required in order to assess whether the current management measure and design criteria are protective of groundwater quality. If the initial monitoring results are indicative of adverse water quality impacts, then management measures (contained in the Waste Management Plan and Nutrient Management Plan) must be redesigned accordingly and additional monitoring may be required.

#### **1. Option to Participate in a Watershed or Group Monitoring Program**

Dischargers may satisfy the individual surface water testing requirements by participating in a qualified watershed-based or group monitoring program that meets the standards set-forth below. This program must be developed and administered by a professionally qualified third-party entity approved by the Executive Officer. The program's content, parameters and sampling locations must provide substantially similar monitoring information (as outlined below) for each participant and must also be approved by the Executive Officer prior to implementation. The option to participate in a watershed-based or group monitoring program may be revoked if monitoring data and/or inspection findings indicate that a facility has an increased potential for adverse water quality impacts, thus requiring site-specific water quality monitoring.

#### **2. 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 the watercourse leaves the lands used for the dairy operation. If multiple watercourses flow through the property, the Discharger may submit a written request to the Executive Officer asking for reduced representative sampling locations.

Alternatively, if surface waters flow adjacent to the dairy operation lands but not through it, and are located such that they could be impacted by the operation, the grab samples shall be collected downstream of the areas closest to the property, assuring legal access for Discharger or third party sampling. In the event downstream, representative grab samples show exceedances above benchmark values, the Discharger, or representative third party sampling group representative, will collect additional grab surface water samples upstream, or at other representative locations, to bracket and isolate the problem so that the Discharger can take corrective action.

Sampling shall take place during or directly following each of three major storm events after at least 1 inch of rain per 24 hours. Sampling will occur in the winter rainy season, which generally begins in October and ends in March, with the first samples to be collected starting October 2016. Sampling events shall be at least 14 days apart. Sampling shall be done when conditions are safe to do so. Visual observations, such as changes in surface water color or turbidity, must be recorded at the time of surface water sampling and reported in or submitted with the Annual Report.

a. **Sampling Parameters:**

Temperature, pH, and specific conductance shall be measured onsite with a handheld data sonde or comparable field equipment. Total ammonia nitrogen shall be measured either with a field test kit (colorimetric field kits are acceptable) or by a certified laboratory. These laboratory analyses shall be conducted in accordance with the Title 40 Code of Federal Regulations Part 136 (Guidelines Establishing Test Procedures for the Analysis of Pollutants) or other test methods approved by the Executive Officer. One (1) sample to be tested for total ammonia nitrogen, pH, specific conductance, and temperature shall be collected at each location. Data collection for pH, specific conductance, and temperature parameters must comply with the Surface Water Ambient Monitoring Program Quality Assurance Program Plan (QAPP) at [http://www.waterboards.ca.gov/water\\_issues/programs/swamp/tools.shtml](http://www.waterboards.ca.gov/water_issues/programs/swamp/tools.shtml).

b. **Constituents and Benchmarks:**

Constituents	Units	Benchmarks
Specific conductance	µS/cm	Below 2000
Total ammonia nitrogen (NH <sub>3</sub> + NH <sub>4</sub> <sup>+</sup> )	mg/L	Below 1 ppm and meets calculated unionized ammonia benchmark below
Unionized ammonia (NH <sub>3</sub> ) as calculated <sup>2</sup>	mg/l	0.025 mg/l
pH		6.5-8.5
Temperature	°C	none

3. **Groundwater Well Sampling**

a. **Sampling Parameters:**

Any existing representative wells located at the confined animal facility, including

<sup>2</sup> The toxicity level of unionized ammonia is directly affected by pH and temperature. The higher the pH and temperature of the water, the higher the proportion of total ammonia that exists in toxic form. The Central Valley Regional Water Board has developed clear procedures for using Total Ammonia field test kits and for using field sampling results to calculate unionized ammonia values. This guidance can be found at: [http://www.waterboards.ca.gov/centralvalley/water\\_issues/dairies/general\\_order\\_guidance/sampling\\_analysis/field\\_analysis\\_final\\_rpt.pdf](http://www.waterboards.ca.gov/centralvalley/water_issues/dairies/general_order_guidance/sampling_analysis/field_analysis_final_rpt.pdf)

domestic and agricultural supply wells, shall be sampled four (4) times total, approximately six (6) months apart. A sample must be collected in: (1) Fall 2016, (2) Spring 2017, (3) Fall 2017, and (4) Spring 2018. Results of groundwater samples collected consistently with the sampling protocols and within these time frames for another purpose (e.g., for a county health department or by the county milk inspector) may be submitted to the Executive Officer instead of collecting additional samples. The sample must be representative of groundwater well conditions (i.e., not disinfected).

Groundwater samples from domestic wells shall be collected from the tap before the pressure tank and after water has been pumped from this tap for 10 to 20 minutes. If the sample cannot be collected prior to a pressure tank, the well must be purged at least twice the volume of the pressure tank. Groundwater samples from agricultural supply wells shall be collected after the pump has run for a minimum of 30 minutes or after at least three well volumes have been purged from the well. Alternatives to this protocol may be approved by the Executive Officer. Groundwater samples shall be analyzed by a laboratory certified by the State Department of Public Health or a laboratory pre-approved by the Executive Officer.

**b. Constituents and Benchmarks:**

One (1) sample from each well shall be tested for the following parameters:

<b>Constituents</b>	<b>Units</b>	<b>Benchmarks (municipal supply)</b>
Nitrate	mg/l	45.0 mg/l
Total Coliform Bacteria	MPN/100ml	1.1 MPN/100ml <sup>3</sup>

**4. Sampling Protocol**

- a. The Discharger shall use clean sample containers and sample handling, storage, and preservation methods that are accepted or recommended by the selected analytical laboratory or, as appropriate, in accordance with approved U.S. EPA analytical methods.
- b. All samples collected shall be representative of the volume and nature of the material being sampled.
- c. All sample containers shall be labeled and records maintained to show the time and date of collection as well as the person collecting the sample and the sample location.

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<sup>3</sup> In groundwater with a beneficial use of municipal and domestic supply, the median of the most probable number of coliform organisms over any seven-day period shall be less than 1.1 most probable number per 100 milliliters (MPN/100 mL) (based on multiple tube fermentation technique; equivalent test results based on other analytical techniques as specified in the National Primary Drinking Water Regulation, 40 CFR, Part 141.21 (f), revised June 10, 1992, are acceptable).

- d. All samples collected for laboratory analyses shall be preserved and submitted to the laboratory within the required holding time appropriate for the analytical method used and the constituents analyzed.
- e. All samples submitted to a laboratory for analyses shall be identified in a properly completed and signed Chain of Custody form.
- f. Field test instruments used for electrical conductivity, pH, temperature, and total ammonia nitrogen may be used provided:
  - The operator is trained in the proper use and maintenance of the instruments;
  - The instruments are field calibrated prior to each monitoring event;  
and
  - Instruments are serviced and/or calibrated by the manufacturer at the recommended frequency.
- g. Alternative sampling protocols may be proposed and shall be approved by the Executive Officer.

#### **5. Request for Sampling Reduction**

Dischargers that conduct individual facility surface water quality sampling may request a reduction in the sample frequency and/or number of locations sampled. In order to be eligible for a sampling reduction each facility must submit a Sampling and Analysis Reduction Certification (Appendix 2) to the Water Board documenting the following:

- a. Results from at least six consecutive sampling events at or below benchmarks;  
and
- b. The Discharger is in full compliance with the requirements of the Conditional Waiver and has updated, certified, and submitted all documents, data, and reports required by the Conditional Waiver during the time period in which samples were collected.

## **II. REPORTING PROVISIONS**

### **A. Documentation and Annual Reporting**

The objective of the Annual Report (MRP Appendix 1) is to provide the Water Board updates (using photographs and narrative text) on new management practices and the effectiveness of existing management practices to control pathogen and nutrient sources at the CAF. Documentation of compliance with conditions of the Conditional Waiver must be submitted to the Water Board in an Annual Report due each **November 30** starting in 2015. The annual reporting period is November 1 through October 31. A copy of the Annual Report including photo documentation must be kept at the facility for Water Board review during inspections. The contents of the Annual Report shall include:

1. Photos shall be taken each year **by November 30** and submitted to the Water Board to confirm that:
  - a. The liners of the retention ponds are protective of water quality (free of weeds and

- cracks that may disturb the liner); and
- b. The retention ponds have sufficient storage capacity prior to the rainy season.
2. Photos of other pollution prevention measures to protect surface and groundwater must also be submitted with the Annual Report. Examples of pollution prevention measures include:
    - a. Cleaning up of pollutants from areas where stormwater runoff occurs,
    - b. Covering of manure, compost, and feed storage areas,
    - c. Installing impermeable ground covering in manure storage areas,
    - d. Protecting watercourses from erosion and wastes, and
    - e. Any other best management practices or control measures for water quality protection.

Photos of permanent and/or structural pollution prevention measures only need to be submitted once as long as the measures remain operational and effective.

3. A narrative summary of measures taken to protect surface and groundwater and to meet conditions of the Conditional Waiver. Where appropriate, sketches of pollution prevention measures implemented since the previous Annual Report may also be submitted.
4. Analytical results of surface water and groundwater samples (if required). If participating in a watershed or group monitoring effort pre-approved by the Executive Officer, surface water sampling results can be included in the group monitoring report. If results of groundwater samples collected for another purpose are submitted to meet these MRP requirements, an explanation is required in the Annual Report.

If sample results exceed Basin Plan water quality objectives or other public health standards, the Discharger shall note the noncompliance in the Annual Report and describe any corrective measures that were taken and/or needed. The Executive Officer may require additional corrective actions and additional monitoring.

## **B. Noncompliance Reporting**

The Discharger shall report any spill, discharge, or other type of noncompliance that violates the conditions of the Conditional Waiver and/or endangers human health or the environment within 24 hours of becoming aware of its occurrence. The incident shall be reported to the **Water Board Spill Hotline at (510) 622-2369 and to the California Office of Emergency Services (OES) at (800) 852-7550**. During non-business hours, the Discharger shall leave a message on the Water Board's office voice mail. The OES is operational 24 hours a day. The message shall include the time, date, place, and description of the discharge.

A written Noncompliance Report shall be submitted to the Water Board office within fourteen (14) business days of the Discharger becoming aware of the incident. The report shall include complete details of the steps that the Discharger has taken, or intends to take, in order to prevent recurrence. The written submission shall, at a minimum, contain:

1. The approximate date, time, and location of the discharge;
2. A description of the noncompliance and its cause;
3. The flow rate, volume, and duration of the discharge;
4. Whether the noncompliance has been corrected and/or the actual or anticipated time for achieving compliance; and
5. A time schedule and a plan to implement necessary corrective actions to prevent the recurrence of such discharges.

The Discharger shall notify the Water Board by letter when it returns to compliance with the time schedule. Violations may result in enforcement action, including Water Board or court orders requiring corrective action or imposing civil monetary liability, or in terminating the applicability of the Conditional Waiver to a specific facility or Discharger.

If during the performance of Discharger and/or Water Board staff inspections, deficiencies, defects, and/or impending failures are observed in any of the manure-contacted water conveyance, control, and/or retention structures, the Discharger shall take immediate action to correct and/or prevent any unauthorized release. The corrective action(s) must be documented and these records attached to the Noncompliance Report.

### **C. Record-Keeping**

The Discharger shall create, maintain for five years, and make available to the Water Board during inspections and upon request by the Water Board, any reports or records required by the Conditional Waiver including those required under this MRP.

### **D. Signature and Submittal.**

Each Annual Report and Noncompliance Report shall be signed by the Discharger or a duly authorized representative and shall contain the following statement:

*“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.”*

Reports shall be submitted to:

California Regional Water Quality Control Board  
San Francisco Bay Region  
1515 Clay Street, Suite 1400  
Oakland, CA 94612  
Attention: Confined Animal Facility Program

### **E. Extension Request**

The Discharger may request an extension to MRP deadlines by written request to the

Executive Officer at least 30 days prior to the deadlines. This request must include a description of incomplete plan elements, an alternative date of compliance, and assurance of water quality protection in the interim. A letter from the Water Board will be issued granting or denying the request. A staff inspection may be necessary.

#### APPENDIX

1. Annual Report (template to be provided to enrollees by September 30, 2015)
2. Sampling and Analysis Reduction Certification (template to be provided to enrollees by September 30, 2015)
3. Schedule for Activities Required by the Conditional Waiver of Discharge Requirements for Existing Dairies

# **MONITORING AND REPORTING PROGRAM**

## **APPENDIX 1 Annual Report Form**

**&**

## **APPENDIX 2 Sampling and Analysis Reduction Certification Form**

**(Templates to be provided to enrollees by September 30, 2015)**

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# **MONITORING AND REPORTING PROGRAM**

## **APPENDIX 3**

### **Schedule for Activities Required by Conditional Waiver of Waste Discharge Requirements for Existing Dairies**

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**MONITORING AND REPORTING PROGRAM - APPENDIX 3**  
**Schedule for Activities Required by**  
**Conditional Waiver of Waste Discharge Requirements for Existing Dairies**

<b>Timeline of Requirements for the CAF Waiver</b>					
Year	NOI	Facility Monitoring Plan	Waste Management Plan	Grazing Management Plan	Nutrient Management Plan
2015	X*				
2016		X**			
2017			X	X	
2018					
2019					X
			* NOI Due September 1.		
			** Facility Monitoring Plan completed and implemented by November 1.		
			All other requirements must be completed by November 30.		

<b>Activity</b>	<b>Repeating Requirements</b>	
	Frequency of Activity	
Production/Confined Area Inspection	Daily	
Retention Pond (Freeboard) Inspection & Measurement	Wet Season - Weekly	Dry Season - Monthly
Cropland/Pasture Inspection	Daily during irrigation/application of manure	
Storm Event Preparations	Conducted prior to anticipated storm events, and during extended storm events	
Grazing Operation Monitoring	Wet Season - Monthly	Dry Season - Twice (including once in September)
Surface water Sampling	At least three times during the wet season	
Groundwater Sampling	Four samples starting Fall 2016 seperated by aproximately six months	
Pre rainy Season Storm Event Preparation and photos	Before rainy season not later than November 30	
Retention Ponds Must be Clean	Before rainy season not later than November 30	
Uncovered Feeding/Confined Areas Must be Scraped	Before rainy season not later than November 30	
Annual Report	Due annually November 30	

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## **ATTACHMENT B**

# **WASTE MANAGEMENT PLAN MINIMUM REQUIREMENTS**

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## ATTACHMENT B

California Regional Water Quality Control Board  
San Francisco Bay Region

### Conditional Waiver of Waste Discharge Requirements

#### **Waste Management Plan Minimum Requirements**

Resolution No. R2-2015-0031 (hereafter, Conditional Waiver) requires the preparation and implementation of a Waste Management Plan (WMP) for the confined animal facility (CAF) production areas including, but not limited to, the milk parlor, corrals, barns, feed storage area, compost piles, retention ponds, dry manure storage areas, animal wash areas, and onsite ancillary operations such as food processing.

The purpose of the WMP is to ensure that the CAF is designed, constructed, operated, and maintained so that wastes, nutrients, and contaminants generated by the facility are managed to prevent adverse impacts to surface water and groundwater quality.

The WMP must evaluate existing facilities and pollutant sources/problems and describe how these sources are controlled utilizing Best Management Practices (BMPs). Most existing dairies previously covered under expired Resolution No. R2-2003-0094, will continue to implement a site-specific WMP, which may need to be updated in accordance with the requirements below.

**If it is determined that the existing facility does not meet the Conditional Waiver requirements and/or the Minimum State Standards (Title 27) due to inadequate structural facilities and/or a failure to implement effective pollution prevention management practices, a detailed improvement plan and schedule must be included within the WMP.**

#### **A. General Requirements:**

1. The facility WMP must be kept on the CAF site and must be made available for review by Water Board staff during inspections. Temporary controls must be in place to prevent waste discharges to surface water and groundwater prior to implementation of the completed plan.
2. Dischargers have the option to prepare the entire WMP, including containment structure specifications, through a technical education program administered by a qualified professional. Examples of these professionals include, but are not limited to, registered professional engineers (PE), or the qualified staff of the Natural Resource Conservation District (NRCS), Resource Conservation Districts (RCDs), the University California Cooperative Extension, or technical service providers (TSPs) certified by the NRCS. The Executive Officer may approve the use of alternative specialists.
3. The WMP must include a statement from the owner/operator or responsible professional that the WMP was developed in accordance with the requirements of the Conditional Waiver, that it includes all necessary documentation (including calculations), and that all

contents of the WMP (and NMP) were done consistent with requirements of the Conditional Waiver and Title 27. Within three years of submitting an NOI, this statement must be submitted to the Executive Officer by separate letter or as an attachment to the Annual Report.

4. Wellheads must be protected to prevent movement of contaminants to groundwater. The WMP must discuss the manner by which wellheads are protected. The WMP must contain documentation from a trained professional (i.e., a person certified by the American Backflow Prevention Association, an inspector from a State or local governmental agency who has experience and/or training in backflow prevention, or a consultant with such experience and/or training) that there are no cross-connections that would allow the backflow of waste into a well. The Executive Officer may approve the use of alternative specialists. If testing or modification of the well and/or associated piping is recommended by a responsible professional, then all testing and modifications are to be completed within 90 days from the time of the recommendation.
5. Water Wells, Section 8, Par II, in the *California Well Standards, Supplemental Bulletin 74-90 (June 1991)*, and *Bulletin 94-91 (December 1981)*, California Department of Water Resources (DWR), contains well setback standards. A setback of 100 feet is required between supply wells and animal enclosures in the production area. A minimum setback of 100 feet, or other control structures (such as housing, berming, grading), shall also be required for the protection of existing wells or new wells installed in the cropland. If a county or local agency adopts more stringent setback standards than that adopted by DWR, then these local standards shall carry precedence over the DWR Well Standards, and the Discharger shall comply with the more stringent standards.

The plan must contain the following site-specific information:

**B. Facility Description**

1. Facility Name and Address.
2. Assessor's Parcel Number, and Township, Range, Section(s), and Baseline Meridian of the property where the CAF is located.
3. The name(s), address(es), and telephone number(s) of the property owner(s), facility operator(s), and the contact person for the facility.
4. A description of all activities and operations on the facility (type of animals, where and how are the animals housed and/or confined, type of waste containment facilities used, other onsite food processing operations such as cheese-making).
5. Maximum animal population categories as listed in the Notice of Intent (Conditional Waiver Attachment F).
6. A site map (or maps) of appropriate scale to show property boundaries, all existing and proposed land-use designations (crops, grazed areas, dairy facilities, pastures, covered

and uncovered confined areas, feeding areas, etc.) and the following in sufficient detail:

- a. Structures used for animal housing, milk production, food processing, and other buildings; corrals and ponds; solids separation facilities (settling basins or mechanical separators); other areas where animal wastes are deposited or stored; feed storage areas; drainage flow directions and nearby surface waters; all water supply wells (domestic, irrigation, and barn wells) and groundwater monitoring wells.
- b. Process wastewater conveyance structures, discharge points, and discharge/mixing points with irrigation water supplies; pumping facilities and flow meter locations; upstream diversion structures, drainage ditches and canals, culverts, drainage controls (berms/levees, etc.), and drainage easements; and any additional components of the waste handling and storage system.
- c. The basic location and features of all land application areas under the Discharger's control (total acres of each field, whether it is owned, rented, or leased) to which manure or process wastewater from the production area is or may be applied for nutrient recycling. A separate map with land application details is required in the Nutrient Management Plan (NMP, Conditional Waiver Attachment C).
- d. The location of pasture lands and the pathways which animals travel to and from the production areas (if applicable).

### **C. Waste Containment Capacity**

1. The WMP must contain an analysis of the existing facility's waste containment capacity. The report shall include calculations of average daily volumes of manure and waste water generated (liquids and solids), showing that the existing containment structures are capable of retaining all the process water generated by the facility, together with all precipitation on and drainage through manured areas or waste/feedstock storage areas that are likely to accumulate up to and during a 25-year, 24 hour storm event.
2. The determination of the necessary pond storage volume shall reflect:
  - a. The maximum period of time (storage period) anticipated between land application events based on the NMP;
  - b. The volume of manure and all process wastewater accumulated during the storage period;
  - c. Normal precipitation or normal precipitation times a factor of one and a half (1.5), less evaporation on the surface area during the entire storage period. If normal precipitation is used in the calculation of necessary storage volume, the WMP shall include a Contingency Plan, as specified below;
  - d. Runoff from production and manure storage areas resulting from normal precipitation (or runoff due to normal precipitation times a factor of one and a half) during the storage period. If normal precipitation runoff is used in the calculation of necessary storage volume, the WMP shall include a Contingency Plan, as specified below;
  - e. 25-year, 24-hour precipitation on the facility's retention pond surface(s) (at the required design storage volume level);

- f. 25-year, 24-hour runoff from the area of the facility draining to the retention pond;
  - g. Residual solids after liquids have been removed; and
  - h. To maintain structural integrity in all ponds and protect water quality, two feet of freeboard shall be maintained in partially or completely aboveground ponds and one (1) foot of freeboard shall be maintained in pond structures that are completely in ground. Freeboard shall be measured vertically, from the water surface up to the point on the surrounding berm or dike having the lowest elevation, and shall be designed and constructed to prevent overtopping as a result of windy storm conditions. Lesser freeboard may be approved by the Executive Officer for soil and clay lined ponds if documented by a registered civil engineer that structural integrity and required capacity will not be compromised with the proposed freeboard.
3. Existing retention ponds must, at a minimum, be lined with, or underlain by, soils which contain at least ten (10) percent clay and not more than ten (10) percent gravel or artificial materials or materials with equivalent impermeability or include additional lining materials necessary to comply with the Conditional Waiver's Discharge Prohibitions.
  4. Retention ponds (or expanded ponds) constructed after adoption of this Resolution must comply with NRCS Waste Storage Facility Code 313 including a maximum specific discharge (unit seepage rate) of  $1 \times 10^{-6}$  cm/sec. Such ponds may not be used until the Discharger submits a report verifying that the liner meets this requirement. Waste shall not be placed into the retention pond until after Water Board staff notifies the Discharger in writing that the report is acceptable.

#### **D. Facility Design**

1. Animal confinement areas and storage areas for manure, feeds, soil amendments, and other potential sources of contaminants shall be designed, constructed, operated and maintained to retain all waste, wastewater, and stormwater contacting these areas that are likely to accumulate up to and during a 25-year, 24 hour storm event. The following features shall be included:
  - a. The production facility is designed, constructed, and operated to minimize infiltration of manure into the underlying soils and to collect and divert all wastewater to the retention pond(s);
  - b. Corrals and other animal housing is designed and constructed to divert all water that has contacted manure or wastewater to a retention pond(s) or other type of containment;
  - c. Storage areas for manure, soil amendments, feed and other materials are designed and constructed to minimize infiltration of leachate and to divert clean stormwater runoff away from these areas unless all runoff from these areas is discharged to the retention pond(s). Where practicable, these areas should be covered to prevent storm water contact;
  - d. All precipitation and clean surface drainage outside of manured and waste storage

areas, including that from roofed areas and tributary drainages, shall be diverted away from manured and waste storage areas, unless such drainage is fully contained in a retention pond and is included in the calculation of retention pond storage volume requirements. Covers shall be used where practical during precipitation to reduce leaching and runoff.

- e. All animal confinement areas, and feed and waste storage areas, shall be managed to minimize standing water as of 72 hours after the last rainfall and the infiltration of water into underlying soils.

## **E. Flood Protection**

1. The WMP shall contain documentation (engineering report or a copy of flood zone map) that the production area has adequate flood protection in accordance with the following Title 27 requirement:

*“Retention ponds and manured areas at CAFs in operation on November 27, 1984, shall be protected from inundation or washout by overflow from any stream channel during 20-year peak flows. CAFs existing before November 27, 1984, and that are protected against 100-year peak stream flows must continue to provide such protection. New CAFs, or portions thereof, that began operating after November 27, 1984, shall be protected against 100-year peak stream flows.”*

2. Retention ponds must be in conformance with NRCS Waste Storage Facility Code 313 which states that: *“Waste storage facilities must be planned, designed, and constructed to meet all federal, state, and local laws and regulations. To minimize the potential for contamination of streams, waste storage facilities should be located outside of floodplains, however, if site restriction require location within a floodplain, they shall be protected from inundation or damage from a 25-year flood event, or larger if required by laws, rules and regulations.”*

## **F. Operation and Maintenance**

A detailed Operations and Management Plan shall be developed in order to comply with all Discharge Prohibitions, Waste Discharge Specifications, and Provisions of Resolution No. R2-2015-0031. This plan shall also include, but not be limited to, the following:

1. A description of all erosion and sediment control measures implemented at the CAF to protect surface water. Such measures may include, but are not limited to, installation of bridges, culverts, or armored crossings, fencing, barriers, vegetative buffers, vegetative cover and/or other control measures to protect surface waters and water quality. Feeding and locating water troughs, shade, and salt/nutrient blocks away from the watercourses may also be appropriate and are encouraged wherever possible.
2. A description of pollution prevention measures for confined areas including heavily used areas devoid of vegetation, such as travel lanes and feed racks. Uncovered feeding and/or confined loafing areas must be scraped / cleaned prior to the start of the rainy season, but no later than November 30. These areas should not be used during the rainy season, unless all storm water contacting these areas is contained.

3. A determination of the facility's overall animal capacity with respect to existing facility design and which will prevent the discharge of animal waste or polluted stormwater to waters of the State.
4. An evaluation of any areas where animals may have access to creek channels and identification of pollution prevention measures both currently used and needed in the future to restrict animal access. All confined animals shall be fenced or excluded from any surface water or perennial streams passing through the confined area. Creek crossings shall be bridged in a manner that prevents animal waste from entering the waterway.
5. A description of pollution prevention measures for all non-manure waste or wastewater streams including, but not limited to, silage leachate, dead animals, waste milk, veterinary medical waste, solid and liquid waste from onsite slaughtering, solid and liquid waste from onsite food processing (such as cheese), spoiled feed, bedding, and any precipitation contacting these materials. The disposal of dead animals at the facility or in any liquid manure or wastewater retention pond is prohibited. The Discharger must dispose of dead animals in compliance with all applicable federal, State, county, and local laws and regulations.
6. A detailed description of any onsite activities or operations that may generate additional waste and/or wastewater that maybe co-mingled with the animal production waste stream (such as onsite cheese-making operations). Such a description must include, at a minimum, an analysis of all waste constituents and concentrations, estimates of daily volumes generated, pollution prevention management measures for such activities, and documentation that the existing waste containment system has the capacity to include such wastes.
7. The operation and maintenance for retention ponds must ensure that:
  - a. Corrals and/or pens are designed and maintained to direct all process water and stormwater to the retention pond(s);
  - b. The production facilities (e.g., barn, shed, milk parlor) are designed and maintained to direct all process wastewater and stormwater that has contacted manure, feedstocks, or soil amendments to the retention pond(s);
  - c. All ponds must be managed to prevent nuisances (odors, breeding of mosquitoes, etc.), damage from burrowing animals, damage from equipment during removal of solids, embankment settlement, erosion, seepage, excess weeds, algae, and other vegetation;
  - d. Retention ponds must provide necessary storage volume prior to winter storms, maintain capacity considering buildup of solids, and comply with the minimum freeboard. For ponds designated to contain the runoff from a 25 year /24 hour storm event, it is recommended that a depth marker be placed within the retention pond that clearly indicates the minimum capacity necessary to contain the runoff and

- direct precipitation from a 25 year/ 24 hour storm;
- e. The removal of solids from any lined pond must prevent damage to the pond liner; and
  - f. Retention pond inspections and clean-out shall be conducted prior to the start of the rainy season, but no later than **November 30** of each year to ensure design storage capacity.
8. A contingency plan is required if the necessary calculated storage volume is based on normal precipitation and/or runoff rather than precipitation or runoff from normal precipitation times a factor of one and a half. This plan shall describe how the excess precipitation will be managed and also shall outline emergency response options for situations such as loss of freeboard due to higher than normal precipitation, pipeline breaks, power outage, earthquake and/or flood. The contingency plan shall include names and numbers for emergency waste haulers and pump rental companies, and alternative waste disposal options, such as nearby waste ponds with adequate capacity or municipal waste treatment facilities willing to accept wastewater in an emergency situation.
  9. Manifests are required to be kept onsite to record transfer of waste to outside facilities and must be kept as part of the WMP. The application of manure or process water to lands not owned, leased, or controlled by the Discharger without written permission from the landowner is prohibited. The requirements for such third party agreements are outlined in Attachment C. Nutrient Management Plan Minimum Requirements.
  10. Chemicals, including, but not limited to pesticides, herbicides, fungicides, cleaning products, equipment/machinery fluids, fertilizers and other contaminants at the facilities must be used according to manufacturer's directions and in accordance with federal, State, county, and local regulations. Chemicals must not be disposed of in any manure or process water, or stormwater storage or treatment system, unless the unit is specifically designed to treat such chemicals and other contaminants. The use of disinfectants per label directions is allowed. The WMP must identify which chemicals are used within the production facility, including the volume and frequency of use.
  11. The WMP must contain an emergency spill prevention plan (SPP) detailing measures to be taken in the case of a discharge or threatened discharge of manure, chemicals, sediment, nutrients, or pathogens to surface water or groundwater. Personnel training, first response actions, and emergency contacts must be described in the SPP. The SPP must be kept onsite and made accessible to CAF personnel. A copy of the SPP must be included in the WMP for review by Water Board staff during inspections.

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**ATTACHMENT C**

**NUTRIENT MANAGEMENT PLAN  
MINIMUM REQUIREMENTS**

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## ATTACHMENT C

California Regional Water Quality Control Board  
San Francisco Bay Region

Conditional Waiver of Waste Discharge Requirements

### **Nutrient Management Plan Minimum Requirements**

Resolution No. R2-2015-0031 (hereafter, Conditional Waiver) requires the preparation and implementation of a Nutrient Management Plan (NMP) for those who apply manure and/or process water to land as a soil amendment or source of nutrients. Manure and process water cannot be applied to land for the purpose of disposal. Manure and process water that are wastes must be disposed at an appropriately permitted disposal facility.

In accordance with federal regulations, dairies with over 700 mature dairy cows (milked or dry) that discharge stormwater from cropland where manure, litter, or process wastewater has been applied may enroll under this Conditional Waiver if they are implementing a Nutrient Management Plan upon enrollment.

#### **A. NMP Purpose and Implementation**

The purpose of the NMP is to identify the management practices used at the facility to minimize adverse impacts to surface water and groundwater from runoff and leaching from land application areas. The NMP is specific for a particular facility and considers crops, soil types, climate, local conditions, sources of nutrients, and the non-nutrient salts applied to each field. All nutrient applications to land, including applications to pasture, must be made in accordance with an NMP. Implementation of the NMP is closely linked to each facility's waste management system, monitoring program, and environmental conditions. The NMP must be updated in response to changing conditions and the results of monitoring.

The NMP shall be developed by Dischargers with the assistance of specialists such as those that are appropriately certified or licensed such as a professional soil scientist, agronomist, crop advisor, University of California Cooperative Extension (UCCE) service advisor or technician, or a technical service provider certified by the Natural Resources Conservation Service (NRCS). In particular, Dischargers shall get assistance from these specialists in completing the nutrient budget calculations. The Executive Officer may approve the use of alternative specialists.

The most current version of the NMP must be kept at the facility and must be made available for review by Water Board staff during inspections. The NMP shall be submitted to the Water Board upon request.

The NMP shall be revised within 30 days when discharges from a land application area result in an exceedance of water quality objectives. The NMP shall be revised within 90 days when any of the following occur:

1. Site-specific information becomes available to replace default values used in the initial NMP,
2. Changes in operating practices result in the production of nutrients that are not addressed by the NMP,

3. Crops will be grown that are not covered by the NMP,
4. There is a change of 15% or more in the acreage used for land application, or
5. The NMP is not effective in preventing periodic discharges of manure or process water to waters of the United States (US).

The Discharger shall review the NMP annually and revise it if changes in conditions or practices at the facility require changes in the NMP. The review/revision date must be noted in the NMP. Records on the timing and amounts of manure and process water applied to land and information developed through a Monitoring and Reporting Program (MRP) for the facility must be considered when making decisions related to nutrient management.

## **B. Management of Manure and Process Water**

During the development of a complete NMP, land application best management practices (BMPs – see Section E) must be in place to prevent discharges to surface waters and to comply with the Conditional Waiver’s Discharge Prohibitions:

1. The collection, treatment, storage, or application of manure or process water shall not result in:
  - a. Degradation of surface water or groundwater,
  - b. Contamination or pollution of surface water or groundwater, or
  - c. Condition of nuisance (as defined by the California Water Code section 13050).

This requirement applies to any degradation products or any constituents of soil mobilized by the interactions between applied materials and soil or soil biota.

2. The application of manure and process water shall not violate any applicable local, State, or federal laws or regulations or contribute to an exceedance of any applicable water quality objective in the Basin Plan or of any applicable State or federal water quality criteria.
3. The discharge of process water to surface water is prohibited.
4. For large dairies (more than 700 mature cows) the discharge of stormwater to surface water from land where manure or process water has been applied is prohibited unless all applications to land are in accordance with an NMP.

## **C. Contents of NMP**

The NMP must contain, at a minimum, the following components:

1. **Contact Information:** The name, mailing address, and phone number of (a) the owner, (b) the operator (if different), and (c) any specialist who participated in the development of the NMP.
2. **Specific dates:** The date that the NMP was completed and documentation of subsequent updates.
3. **Maps:** One or more United States Geological Survey quadrangle maps or equivalent showing the location of the facility and all areas under the Discharger’s control, whether owned, rented, or leased, to which manure or process water may be applied. If suitable, an aerial photo with

appropriate notations may be utilized. The map(s), aerial photos, and/or drawings (see next section) should show the locations of all the following that exist at the facility:

- a. Surface water courses and conveyances,
  - b. Pipelines (above or underground), where process water is mixed with irrigation water or discharged,
  - c. Drainage flows for the production area and each field,
  - d. Drainage ditches and drainage easements,
  - e. Drainage controls (berms, levees, etc.) for tailwater and stormwater,
  - f. Extent of subsurface (tile) drainage systems and associated discharge points,
  - g. Pumping facilities and flow meters,
  - h. Wells and type (domestic, industrial, agricultural, or monitoring),
  - i. Stormwater discharge points,
  - j. Any septic systems,
  - k. Total acreage of each field,
  - l. Crops grown and rotations, if any, for each application area,
  - m. Where types of waste are applied (solids, waste water, and/or both),
  - n. All water quality sampling points, and
  - o. A map legend.
4. **Nutrient Budget Calculations:** The NMP must include calculations showing all sources of nutrients used by the facility and demonstrating that nutrients are applied at rates that are protective of water quality. These calculations must be reviewed annually and updated if there are any significant changes in conditions or practices at the facility that necessitate changes in the NMP. These calculations may be reviewed by Water Board staff during inspections. The details of the nutrient budget are discussed below in Section D.
5. **Land application practices and water quality protection:** The NMP must describe the methods by which manure and process water are applied to land application areas and describe the BMPs that are implemented to protect surface water and groundwater.
6. **Sampling and analysis program:** The NMP must describe the associated sampling program including sampling locations, sampling frequency, and sample collection and preservation procedures.

#### **D. Nutrient Budget Calculations**

The Discharger shall develop a nutrient budget that establishes the nutrient application practices for each crop in each land application area. The initial nutrient budget may be based on default values if site-specific information is not available<sup>1</sup>. Subsequent nutrient budgets shall be based on site-

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<sup>1</sup> Crop nutrient needs may be based on recommendations from the University of California or the Western

specific analytical data for soil, manure, process water, irrigation water, other sources of nutrients, and plant tissue. The nutrient budget for all sources of nutrients (nitrogen, phosphorus, potassium) shall include the following:

1. The rate of nutrient applications (e.g., pounds of nitrogen per acre) based on default values or site-specific analytical data in order to meet each crop's needs for nitrogen and phosphorus without exceeding the application rates that will protect water quality. The rate of nutrient applications shall be based on realistic yield goals for each crop in each land application area. For new crops or varieties, industry yield expectations may be used until site-specific yield information is available.
2. The quantity of manure, soil amendments, and/or process water to be applied shall be based on the nutrient content of the material, the characteristics of the material (e.g., the amount of organic nitrogen), and the site conditions (e.g., if a pasture is not grazed or mowed, the amount of residual nutrients in soil will be higher). In determining the quantity to apply, the Discharger shall consider all sources of nutrients including irrigation water, commercial fertilizers, and previous crops.
3. The timing of applications shall be based on seasonal and climatic conditions, the growth stage of the crop, and the availability of water. The anticipated maximum time between land application events (i.e., the storage period) shall be used to determine the needed storage capacity for manure and process water.
4. The method of manure, soil amendment, and process water application for each crop in each land application area shall be based on site-specific conditions and shall minimize the discharge of sediments, nutrients, and salts from the application area.

Nutrient application rates shall not approach a site's maximum ability to contain one or more nutrients through soil adsorption. If the nutrient budget shows that the nutrients generated by the facility exceed the amount needed by crops in the land application area, then the Discharger must implement management practices that will prevent impacts to surface water or groundwater due to application of excess nutrients. Such practices may include obtaining access to additional land for nutrient application, exporting manure, or reducing the number of animals at the facility.

Supplementary commercial fertilizers and/or soil amendments may be added when the application of nutrients contained in manure and process water alone is not sufficient to meet the crop needs. Specific nutrients are discussed below.

**Nitrogen:** Total Ammonia Nitrogen ( $\text{NH}_3 + \text{NH}_4^+$ ) and Total Nitrogen will be measured at the facility through water and soil sampling. Nitrogen application rates shall not result in total nitrogen applied to the land application areas exceeding the nitrogen application in each location as recommended by UCCE, NRCS, other local information, or 1.4 times the anticipated nitrogen removal in forage.

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Fertilizer Handbook (9th Edition). Acceptable default values for the nutrient content of materials include values recognized by the American Society of Agricultural and Biological Engineers (ASABE), the Natural Resources Conservation Service (NRCS), and/or the University of California. The nutrient content of commercial fertilizers shall be California Department of Food and Agriculture published values.

If application of total nitrogen to a land application area exceeds the budgeted application rate for the specific land application area, the Discharger shall either revise the nutrient budget to prevent such exceedance in the future or demonstrate and record that the application rates have not contaminated surface or ground water. Applications of nitrogen exceeding the initial recommendations are allowable if the following conditions are met:

1. Soil Plant Available Nitrogen (PAN) testing or plant tissue testing has been conducted and indicates that additional nitrogen is required to obtain crop yield estimates typical for the soils and other local conditions;
2. The amount of additional nitrogen applied is based on the soil or tissue testing; and is consistent with UCCE or NRCS guidelines or written recommendations from a nutrient management specialist or Certified Crop Advisor;
3. The form, timing, and method of application facilitates timely nitrogen availability to the crop; and
4. Records are maintained documenting the need for the additional applications.

**Phosphorus and Potassium:** Application of these nutrients at agronomic levels, along with reasonable erosion control and runoff control measures, will normally prevent water quality problems. In some instances, other best management practices may need to be included in the NMP.

#### **E. Land Application Practices**

Discharges to land of solid or liquid waste shall be at rates that are reasonable for crop, soil, climate, special local situations, management system and type of manure. The total nutrient loading shall not exceed the amount needed to meet crop demand and shall be in accordance with the nutrient budget calculations. The timing of nutrient application must correspond as closely as possible with plant nutrient uptake characteristics, while considering cropping system limitations, weather and climatic conditions, and land application area accessibility.

The NMP must identify all surface water or potential conduits to surface water that are within 100 feet of any land application area and take appropriate actions to protect water quality. The following sections discuss practices that reduce the potential for pollutants from land application areas to reach surface water:

1. **Setbacks, vegetated buffers:** A setback is a specified distance that separates land application areas from surface water or a potential conduit to surface water, and where manure and process water may not be applied, but where crops may be grown. A vegetated buffer is a relatively narrow (approximately 35 feet), permanent strip of dense vegetation where no crops are grown and which is established perpendicular to the dominant slope of a land application area for the purposes of slowing water runoff, enhancing water infiltration, trapping pollutants bound to sediment, and minimizing the risk of pollutants reaching surface waters. A berm is another alternative to prevent runoff from reaching surface water.

Manure and process water shall not be applied within a 100-foot setback to any down-gradient surface water unless a 35-foot wide vegetated buffer or physical barrier (i.e., a berm) is substituted for the 100-foot setback; or an alternative conservation practice or field-specific

condition that provides pollutant reductions equivalent to or better than achieved by the 100-foot setback. Any alternative practice utilized must be described in the NMP.

Practices for establishing and maintaining vegetated buffers include:

- a. Limiting removal of vegetation within the buffers and promoting plant growth in the buffer;
- b. Maintaining the recommended height for the plant species;
- c. Establishing plant density for adequate filtering capacity;
- d. Improving soil conditions to reduce erosion and increase infiltration; and
- e. Preventing erosion channels and gullies from forming.

**2. Best Management Practices to protect surface water:**

- a. Manure and wastewater discharges to land, including spray irrigation, shall be conducted during non-rainy or non-saturated conditions, must not result in runoff to surface waters and must infiltrate completely within 72 hours after application.
- b. Land application areas that receive dry manure and/or process water shall be managed to minimize erosion.
- c. Spray irrigation applications must be accurately timed and consistently monitored in order to prevent discharges to surface waters and/or beyond the property line.

**3. Avoiding conduits that can transport pollutants:** Manure and process water shall not be applied closer than 100 feet to open tile line intake structures, sinkholes, or well heads unless the NMP contains a statement from a professional explaining that an alternative practice will be as protective as the 100-foot separation. This professional must be a registered or certified engineering geologist or hydrogeologist, or a responsible professional with experience in manure containment and structural facility specification. Documentation from initial wellhead construction may be acceptable upon review by Water Board staff.

**4. Wetland Protection:** Wetlands are waters of the State and are protected under State regulations by provisions of the California Water Code. Wetlands are also protected as waters of the U.S. under the federal Clean Water Act. The beneficial use of wetlands must be protected against water quality degradation. Discharges of manure and process water to wetlands with standing water must be addressed in the NMP. Wetlands containing standing water shall be protected through animal exclusion and the exclusion of manure or process water application.

**F. Sampling, Analysis, and Calculations**

Soil, manure, soil amendments, process water, irrigation water, and plant tissue shall be monitored, sampled, and analyzed, in accordance to U.S. Department of Agriculture, Natural Resource Conservation Service, 590-Practice Procedures for Nutrient Management, or an alternative sampling and analysis program developed by technical education administrator (as described above in Section A), and approved by the Executive Officer. The analytical results shall be used during the development, implementation, and revision of the NMP.

Samples of soils and crop tissues shall be analyzed for available phosphorus at least once every five years. Sampling results shall be reviewed to verify that phosphorus levels do not exceed limits needed to maintain acceptable crop yields and prevent adverse impacts to water quality. If this review determines that a buildup of phosphorus threatens water quality, application rates must be decreased until the situation is corrected.

Nutrient credit from previous legume crops shall be determined by methods acceptable to the UCCE, the NRCS, Resource Conservation District, or a technical service provider that is NRCS-certified in developing NMPs.

The NMP must identify the analytical laboratory utilized and the analyses to be conducted for soil, manure, soil amendments, process water, irrigation water, plant tissue, etc. If that information is in the MRP (Conditional Waiver, Attachment A), the NMP can reference that MRP. The laboratory utilized must be certified and use the analysis methods identified in California Analytical Methods Manual for Dairy General Order Compliance – Nutrient Management Plan Constituents:

[http://anlab.ucdavis.edu/docs/uc\\_analytical\\_methods.pdf](http://anlab.ucdavis.edu/docs/uc_analytical_methods.pdf)

#### **G. Field Risk Assessment**

Dischargers are required to sample discharges of stormwater from land application areas to surface water, as detailed in the MRP. The analytical results for those samples shall be used by the Discharger to assess water quality conditions and to inform management practices. If results indicate a potential for adverse impacts to receiving waters, the Discharger shall modify its NMP to reduce such movement and collect additional samples to assess the effectiveness of the modifications.

Land application areas must be managed to prevent contamination of crops grown for human consumption. When crops grown for human consumption without processing (berries, nut trees, etc.) are grown near to land application areas, the Discharger shall take appropriate actions to prevent movement of pathogens that could cause adverse impacts to human health.

#### **H. Manifests and Third-Party Agreements**

Manifests are required to be kept onsite to record transfer of waste to outside facilities and must be kept as part of the NMP. The application of manure or process water to lands not owned, leased, or controlled by the Discharger without written permission from the landowner is prohibited. The Discharger shall have a written agreement with each third party that receives process wastewater from the Discharger for its own use. The written agreement(s) shall be effective until the third party is covered under waste discharge requirements or a waiver of waste discharge requirements. The written agreement shall:

1. Clearly identify:
  - a. The Discharger and dairy facility from which the process wastewater originates,
  - b. The third party that will control the application of the process wastewater to cropland,
  - c. The Assessor's Parcel Number(s) and the acreage(s) of the cropland where the process wastewater will be applied, and

2. Include an agreement by the third party to:
  - a. Use the process wastewater at agronomic rates appropriate for the crops to be grown, and
  - b. Prevent the runoff to surface waters of wastewater, stormwater, or irrigation supply water that has come into contact with manure or is blended with wastewater.

## **I. Record-Keeping**

The Discharger must maintain records for five years, for each land application area and use the records as a basis for revisions to the NMP. In addition to the manifest records described above, records shall include:

1. All analyses of manure, process wastewater, irrigation water, soil, plant tissue, discharges (including tailwater discharges), surface water, stormwater, subsurface (tile) drainage, and groundwater.
2. All records for nutrient management and land application areas including:
  - a. Expected and actual crop yields (or estimated yields if crop is grazed);
  - b. Identification of crop, acreage, and dates of planting and harvest for each field;
  - c. Dates, locations, and approximate weight and moisture content of manure applied to each field;
  - d. Dates, locations, and volume of process wastewater applied to each field;
  - e. Whether precipitation occurred, or standing water was present, at the time of manure and process wastewater applications and for 24 hours prior to and following applications;
  - f. Test methods and procedures for soil, manure, process wastewater, irrigation water, and plant tissue sampling;
  - g. Results from manure, process wastewater, irrigation water, soil, plant tissue, discharge (including tailwater), and stormwater sampling;
  - h. Explanation for the basis for determining manure or process wastewater application rates;
  - i. Calculations showing the total nitrogen, total phosphorus, and potassium to be applied to each field, including sources other than manure or process wastewater (Nutrient Budget);
  - j. Total amount of nitrogen, phosphorus, and potassium actually applied to each field, including documentation of calculations for the total amount applied (Nutrient Application Calculations);
  - k. The method(s) used to apply manure and/or process wastewater; and
  - l. Records documenting any corrective actions taken to correct deficiencies noted as a result of the inspections required in the Monitoring Requirements above. Deficiencies not corrected in 30 days must be accompanied by an explanation of the factors preventing immediate correction.

**ATTACHMENT D**

**GRAZING MANAGEMENT PLAN  
MINIMUM REQUIREMENTS**

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## ATTACHMENT D

California Regional Water Quality Control Board  
San Francisco Bay Region

Conditional Waiver of Waste Discharge Requirements

### **Grazing Management Plan Minimum Requirements**

Resolution No. R2-2015-0031 requires the preparation and implementation of a Grazing Management Plan (GMP) for confined animal facilities (CAFs) with grazing operations on grazing lands that encompass an area of 50 acres or more or encompass an area smaller than 50 acres and are identified by the Executive Officer as posing a threat to water quality. The purpose of the GMP is to identify the necessary site-specific grazing management measures to reduce animal waste and sediment runoff. In selecting what management practices to use at the facility, the Discharger shall take in consideration the vegetation, terrain, kind of livestock, and general ranch facility operation procedures. Dischargers have the option to combine the GMP elements with the facility's Nutrient Management Plan.

#### **A. General Requirements:**

The Discharger is required to have a completed GMP kept onsite and available for review by Water Board staff during inspections. Elements of the GMP shall include:

1. A ranch facility map, or aerial photo on a 1:12,000 scale;
2. An inventory of grazing resources based on visual observations and/or existing reports;
3. An assessment of facility conditions, per the checklist titled *Checklist Form For Assessing Grazing Operations\*(attached)*, identifying controllable discharge points for pathogens, nutrients, and sediment;
4. Identification of sediment legacy discharge points, if appropriate;
5. An annual assessment of residual dry matter (RDM) as specified in the University of California 2002, California Guidelines for Residual Dry Matter Management on Coastal and Foothill Annual Rangelands, Rangeland Monitoring Series Publication 8092; and
6. A description of the of the GMP's objectives.

\* The checklist is intended to guide the Discharger in the inventory of resources and the preparation of the GMP. Alternative checklists may be used, provided the Executive Officer approves of them in writing.

#### **B. Best Management Practices**

1. The GMP must include pollution prevention measures and/or best management practices (BMPs) that reduce nonpoint source pollution due to grazing and protect water quality. In selecting what BMPs to use at the facility, the Discharger must take in consideration the vegetation, terrain, kind of livestock, and general facility operation procedures. A complete and effective GMP will accomplish the following:

- a. Minimize delivery of sediment from ranching lands to surface waters.
  - b. Minimize delivery of pathogens and nutrients from ranching lands to surface waters.
  - c. Establish manure management operations designed to minimize runoff from entering watercourse.
  - d. Manage animal use areas to minimize sediment/pathogen/nutrient runoff to water course(s).
  - e. Construct and maintain access and ranch roads to minimize erosion.
  - f. Manage existing grazing operations to prevent additional erosion of legacy sediment delivery sites.
  - g. Manage and design animal crossings to minimize pathogen/sediment/nutrient runoff into watercourses.
  - h. Protect vegetation along flowing watercourses from overgrazing to maintain natural water temperatures and protect stream banks.
2. The GMP shall also include:
- a. A description of all management practices currently implemented at the facility;
  - b. A schedule for implementation of newly-selected management practices to comply with the above BMPs;
  - c. An implementation schedule for management of grazing activities, structural improvements, livestock management, and land treatments necessary to comply with the above BMPs; and
  - d. An implementation schedule for road-erosion control and prevention actions and actions to avoid increases in erosion of existing unstable areas due to grazing practices to comply with the above BMPs.
3. The implementation schedules shall be included in the GMP and may be updated yearly thereafter.
4. A list of potential BMPs may be found in the Natural Resource Conservation Service Field Office Technical Guide or equivalent rangeland management guidance documents. The Conservation Service Field Office Technical Guide can be obtained at local offices of the USDA Natural Resources Conservation Service or the Conservation District office.

### **C. Special Requirements for Walker Creek Watershed**

In selecting BMPs that reduce nonpoint source pollution due to grazing, Dischargers in the Walker Creek watershed, downstream of the Gambonini Mine, must choose BMPs that will minimize the discharge of mercury or the production of methylmercury. Any proposed BMPs that involve work within the floodplain, or any proposal to implement BMPs that may have the potential for increasing the discharge of mercury or the production methylmercury, must be reviewed by Water Board staff prior to implementation. This review is typically made as part of required review and approval for other relevant permits.

If Water Board staff determine that the proposed management practice/control measure does have the potential to increase the discharge of mercury or the production of methylmercury, then the management practice/control measure will not be covered by this waiver of WDRs, and a separate Report of Waste Discharge, pursuant to CWC section 13260 shall be submitted by the Discharger.

**Checklist Form  
 For Assessing Grazing Operations**

**Date:** \_\_\_\_\_ **Weather:** \_\_\_\_\_

**Name of Person Completing checklist:** \_\_\_\_\_

**Facility Information**

<b>Facility Name:</b>	<b>Owner Name &amp; Address (if different):</b>
<b>Address:</b>	<b>Nearest Water Body:</b>
<b>Operator Name &amp;Address:</b>	<b>Number of Animals:</b>
<b>Operator Telephone Number:</b>	<b>Type of Animals:</b>
<b>Facility's Assessor's Parcel Number:</b>	

**Erosion and Sediment Sources**

Sediment from Sheet, Rill, and Gully Erosion: Sheet and rill erosion generally occurs on crop-fields or overgrazed pastures and corrals. Gullies can occur from these same conditions, or can be caused by natural occurrences, such as from burrowing animals.

<b>Pastures</b>	<b>Yes</b>	<b>No</b>
Upon close inspection, is bare soil visible in pastures?		
At a distance of 20 feet, can you distinguish small objects such as roots and cow pies?		
Are there gullies or headcuts in pastures?		
<b>Crop Fields</b>		
Do crop-fields have rill or other signs of surface erosion?		
Are crop-fields clean cultivated so that all plant residue is tilled under?		
<b>Road Erosion</b>		
Do ranch roads show signs of surface erosion such as rills or gullies?		
Are there any gullies caused by unprotected culverts?		
Are drainage ditches eroding?		
Do road surfaces consist of bare soil?		

Other types of erosion noted: \_\_\_\_\_

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Suggestions for correcting problems indicated by yes answers above: \_\_\_\_\_

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### Nutrients and Pathogens

**Pollution from animal waste:** This generally occurs where animals congregate or are confined, or where animals have access to creeks. Nutrient pollution problems are best evaluated during the rainy season when water testing can be used to locate problems.

	Yes	No
Are there possible sources of nutrients and pathogens from direct animal access to creeks?		
Are feeding areas, water troughs, or salting areas near creeks?		
Are manure stock piles located where runoff could flow into creeks?		

Locations of problem areas: \_\_\_\_\_

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Other types of animal waste pollution noted: \_\_\_\_\_

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Suggestions for correcting problems indicated by yes answers above: \_\_\_\_\_

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### Riparian Areas

**Condition of Creek and Streams:** Riparian areas are sensitive to damage from livestock. Livestock should be excluded from or carefully managed in riparian areas. Condition of riparian areas can be evaluated at any time of the year.

	Yes	No
Do creek banks lack good cover of grasses trees and shrubs?		
Are creeks exposed to full sun?		
Is there excessive growth of algae in creeks?		
Are creek banks actively eroding or trampled?		
Do livestock have access to riparian areas?		
Do livestock congregate in riparian areas?		
Are waterway crossings secure and bermed?		
Are water troughs located away from riparian areas?		

Location of problem areas: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Other types of riparian areas degradation noted: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Suggestions for correcting problems indicated by yes answers above: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**ATTACHMENT E**

**DEFINITIONS**

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## ATTACHMENT E

### California Regional Water Quality Control Board San Francisco Bay Region

#### Conditional Waiver of Waste Discharge Requirements

#### Definitions

**25-year, 24-hour rainfall event:** precipitation event with a probable recurrence interval of once in twenty five years as defined by the National Weather Service in Technical Paper No. 40, "Rainfall Frequency Atlas of the United States," May 1961, or equivalent regional or State rainfall probability information developed from this source.

**Animal Feeding Operation (AFO):** a lot or facility where the following conditions are met: 1. Animals have been, are, or will be stabled or confined and fed or maintained for a total of 45 days or more in any 12-month period, and 2. Crops, vegetation, forage growth, or post-harvest residues are not sustained in the normal growing season over any portion of the lot or facility (Federal CAFO regulations).

**Agricultural stormwater discharge:** where the manure, litter or process wastewater has been applied in accordance with site specific nutrient management practices that ensure appropriate agriculture utilization of the nutrients in the manure, litter, or process wastewater, a precipitation-related discharge of manure, litter, or process wastewater from land application areas is an agricultural stormwater discharge (**40CFR 122.23(e)**).

**Agonomic rates:** the land application of irrigation water and nutrients (which may include animal manure, bedding, litter, or process wastewater) at rates of application in accordance with a nutrient management plan that will enhance soil productivity and provide the crop or forage with needed nutrients for optimum health and growth.

**Aquifer:** ground water that occurs in a saturated geologic unit that contains sufficient permeability and thickness to yield significant quantities of water to wells or springs.

**Catastrophic rainfall event:** a rainfall event greater than the 25-year, 24-hour rainfall event, and includes events like tornadoes, hurricanes or other catastrophic conditions that would cause an overflow.

**Concentrated Animal Feeding Operation (CAFO), Large, Medium and Small:** A facility is defined as a Concentrated Animal Feeding Operation (CAFO) if it is either large (e.g., 700 or more mature dairy cows, 500 or more horses, 10,000 or more sheep/lambs), medium (e.g., 200-699 mature dairy cows, 150-499 horses, 3000-9999 sheep/lambs, and which discharges pollutants to waters of the United States as specified), or small (e.g., less than 200 mature dairy cows, less than 150 horses, less than 3000 sheep/lambs and which has been specifically designated as discharging pollutants to waters of the United States). The size thresholds for all animal sectors are listed in CFR 122.23(b) and (c).

**Confined area:** the area where cows are confined within the production area.

**Cropland:** the land application area where dry or solid manure and/or process wastewater is recycled for the purpose of beneficially using the nutrient value of the manure and/or process wastewater for crop production.

**Degradation:** any measurable adverse change in water quality.

**Design volume:** includes allowances for the volume of manure, process wastewater, and other wastes accumulated during the storage period; volume of “normal precipitation” minus evaporation; volume of runoff from the facility’s drainage area during normal rainfall events; volume of precipitation from the 25-yr, 24-hr storm event on the storage structure area; volume of runoff from the facility’s drainage area for the 25-yr, 24-hr storm event; volume of solids; necessary freeboard requirements; and any additional storage requirements, such as to meet management goals, or the minimum treatment volume for anaerobic lagoons.

**Discharge:** the discharge or release of waste to land, surface water, or ground water. The Federal Pollution Control Act states that “**discharge**” includes, but is not limited to, any spilling, leaking, pumping, pouring, emitting, emptying or dumping;

**Discharger:** the property owner and/or the operator of an existing milk cow dairy subject to Conditional Waiver or General Permit requirements.

**Existing facility:** a facility that is constructed and operating as of date of adoption, and which has subsequently undergone no expansion in size of its physical facilities. Physical facilities include the roofed structures, such as stall barns, that limit the size of the animal herd.

**Fecal coliform:** means the bacterial count (Parameter 1) at 40 CFR 136.3 in Table 1A which also cites the approved methods of analysis.

**Field moisture capacity:** the upper limit of storable water in the soil once free drainage has occurred after irrigation or precipitation.

**Freeboard:** the elevation difference between the process wastewater (liquid) level in a pond and the lowest point of the pond embankment before it can overflow.

**Grazing Operation:** are those ranches where animals are fed or maintained on irrigated vegetation or rangeland, animals forage for a total of 45 days or more in any 12-month period, and vegetation forage growth is sustained over the parcel or ranch during the normal growing season. A Grazing Operation includes auxiliary appurtenances such as roads, reservoirs, etc.

**Grazing Lands:** are lands encompassing an area of 50 acres or more, where Dischargers conduct grazing, such as ranchlands, riparian areas, and pasturelands.

**Groundwater:** water stored underground in rock crevices and in the pores of geologic materials that make up the earth’s crust; and water that flows downward and saturates soil or rock, supplying wells and springs. The upper surface of the saturated zone is called the water table.

**Incorporation into soil:** the complete infiltration of process wastewater into the soil, the disking or rotary tiller mixing of manure into the soil, shank injection of slurries into soil, or other equally effective methods.

**Irrigation return flow:** has the same meaning as return flow from irrigated agriculture in Section 502 (14) of the federal Clean Water Act, and is defined as surface and subsurface water that leaves a field following application of irrigation water, where the irrigation water is not a wastewater and

when such irrigation water has been applied in accordance with a site specific nutrient management plan. "Tailwater" may be considered an irrigation return flow if it meets the conditions in this paragraph.

**Irrigation water:** water that is applied to fields to grow crops.

**Land application:** the application of manure, litter, or process wastewater onto or incorporated into the soil.

**Land application area:** land under control of the cow dairy owner or operator, whether it is owned, rented, or leased, to which manure or process wastewater from the production area is or may be applied for nutrient recycling.

**Liquid manure handling system:** a system that collects and transports or moves waste material with the use of water, such as in washing of pens and flushing of confinement facilities. This would include the use of water impoundments for manure and/or wastewater treatment.

**Manure:** the fecal and urinary excretion of livestock and other commingled materials. Manure may include litter, bedding, compost, raw materials, and waste feed.

**Manured solids:** manure that has sufficient solids content such that it will stack with little or no seepage.

**Method Detection Limit (MDL):** the minimum concentration of a substance that can be measured and reported with 99 percent confidence that the analyte concentration is greater than zero, as defined in: Title 40 of the Code of Federal Regulations, Part 136, Attachment B, revised as of July 3, 1999.

**Minimum Level (ML):** is the concentration at which the entire analytical system must give a recognizable signal and acceptable calibration point. The ML is the concentration in a sample that is equivalent to the concentration of the lowest calibration standard analyzed by a specific analytical procedure, assuming that all the method specified sample weights, volumes, and processing steps have been followed.

**New Source:** defined in the federal regulations as "*any building, structure, facility, or installation from which there is or may be a 'discharge of pollutants,' the construction of which commenced: (a) After promulgation of standards of performance under section 306 of CWA which are applicable to such source, or (b) After proposal of standards of performance in accordance with section 306 of CWA which are applicable to such source, but only if the standards are promulgated in accordance with section 306 within 120 days of their proposal.*" (40 C.F.R. § 122.2) Further, a facility is a "new source" if (1) the facility is constructed at a site where no other facility is located, (2) the facility totally replaces the process or production equipment that causes the discharge of pollutants at the existing facility, or (3) the facility process is substantially independent of an existing facility at the same site. (40 C.F.R. §122.29 (b)).

**Non-Point Source:** Diffuse discharges of waste throughout the natural environment which are a major cause of water pollution. Difficult to pinpoint physically, but often classified by type: such as, urban runoff, agriculture, mining, septic tank leach fields, silviculture, construction, etc.

**Not Detected (ND):** are those sample results less than the laboratory's MDL.

**Notice of Intent (NOI):** is a form submitted by the owner/operator applying for coverage under a general permit. It requires the applicant to submit the information necessary for adequate program implementation, including, at a minimum, the legal name and address of the owner or operator, the facility name and address, type of facility or discharges, and the receiving stream(s). See Attachment A.

**Notice of Termination:** is a letter or email to the Regional Board stating that the facility is no longer operating as a confined animal facility. This notice must contain all information related to facility closure such as dates of closure, any changes in facility ownership or management, tasks performed to remediate manured areas and to prevent erosion, a schedule for animal removal, and a schedule for waste removal, treatment and/or storage. Regional Board staff will review the submittal and verify that all manure and animal waste impacted soil has been disposed of appropriately so as not to pose a threat to surface water or groundwater quality or create a condition of nuisance.

**Normal Precipitation:** the long-term average precipitation based on monthly averages over the time that data has been collected at a particular weather station. Normal precipitation is usually taken from data averaged over a 30-year period (e.g.1971 to 2000) if such data is available.

**Nuisance:** is defined in section 13050 of the Porter-Cologne Water Quality Control Act as "*...anything which meets all of the following requirements:*

*(1) Is injurious to health, or is indecent or offensive to the senses, or an obstruction to the free use of property, so as to interfere with the comfortable enjoyment of life or property.*

*(2) Affects at the same time an entire community or neighborhood, or any considerable number of persons, although the extent of the annoyance or damage inflicted upon individuals may be unequal.*

*(3) Occur during, or as a result of, the treatment or disposal of wastes."*

**Nutrient:** is any element taken in by a plant which is essential to its growth and which is used by the plant in elaboration of its food and tissue.

**Nutrient Management Plan (NMP):** is a description of site-specific nutrient management practices that ensure appropriate agricultural utilization of manure, litter, or process water, as specified in MRP, Appendix 2, NMP.

**Nutrient recycling:** the application of nutrients at agronomic rates for crop production.

**Off-property discharge:** the discharge or release of waste beyond the boundaries of the property of the dairy's production area or the land application area or to water bodies that run through the production area or land application area.

**Overflow:** the discharge of manure or process wastewater resulting from the filling of wastewater or manure storage structures beyond the point at which no more manure, process wastewater, or storm water can be contained by the structure.

**Persistent pollutants:** are substances for which degradation or decomposition in the environment is nonexistent or very slow.

**Physical facility:** is defined as the roofed structure, such as the stall barn, that limits the size of the animal herd. No expansion of the physical facility (roofed structure that houses the cows, such as the stall barn) is allowed under this permit. If roofed structures need replacing/repair during permit coverage, it must be similar size and location. Limited alterations are allowed, such as converting corrals to freestalls, as long as these alterations do not increase the capacity of the physical facilities.

**Point-Source:** discernible, confined and discrete conveyance such as a pipe, ditch or channel, tunnel, conduit, well container, concentrated animal feeding operation or vessel, from which pollutants are or may be discharged. Does not include agricultural stormwater discharges and return flows from irrigated agriculture.

**Pollutant:** is defined in Title 40 Code of Federal Regulations Section 122.2 as “...*dredged spoil, solid waste, incinerator residue, filter backwash, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials (except those regulated under the Atomic Energy Act of 1954, as amended (42 U.S.C. 2011 et seq.)), heat, wrecked or discarded equipment, rock, sand, cellar dirt and industrial, municipal, and agricultural waste discharged into water.*”

**Pollution:** is defined in Section 13050(l)(1) of the Porter-Cologne Water Quality Control Act as “...*an alteration of the quality of the waters of the state by waste to a degree which unreasonably affects either of the following: (A) The waters for beneficial uses. (B) Facilities which serve these beneficial uses.*” "Pollution" may include "contamination".

**Pollution Prevention:** any action that causes a net reduction in the use or generation of a hazardous substance or other pollutant that is discharged into water and includes, but is not limited to, input change, operational improvement, production process change, and product reformulation (as defined in Water Code section 13263.3). Pollution prevention does not include actions that merely shift a pollutant in wastewater from one environmental medium to another environmental medium, unless clear environmental benefits of such an approach are identified to the satisfaction of the State or Regional Water Board.

**Pond:** retention ponds, storage ponds, settling ponds, or any structures used for the treatment, storage, disposal, and recycling of process wastewater. Ponds are differentiated from sumps, which are structures in a conveyance system used for the installation and operation of a pump.

**Process water:** water directly or indirectly used in the operation of a confined animal facility for any or all of the following: spillage or overflow from animal watering systems; washing, cleaning, or flushing pens, barns, manure pits, or other facilities; washing or spray cooling of animals; on-site slaughtering; or dust control, and includes any water or precipitation and precipitation runoff which comes into contact with any raw materials, products, or byproducts including manure, feed, milk, or bedding. Process water may also include waste water streams from ancillary on-site operations such as cheese-making.

**Propose to Discharge:** is defined as a dairy facility being designed, constructed, operated, or maintained such that a discharge to waters of the United States will occur.

**Production area:** is that part of a confined animal facility that includes the animal confinement

area, the manure storage area, wastewater, litter, waste containment area, the raw materials storage area such as feed, silage, and bedding materials. The animal containment area includes but is not limited to open lots, housed lots, feedlots, confinement houses, stall barns, free stall barns, milkrooms, milking centers, cowyards, barnyards, medication pens, walkers, animal walkways, animal wash areas and stables. The manure storage area includes but is not limited to lagoons, runoff ponds, storage sheds, stockpiles, under house or pit storages, liquid impoundments, static piles, and composting piles. The waste containment area includes but is not limited to settling basins, and areas within berms and diversions which separate uncontaminated storm water. The raw materials storage area includes but is not limited to feed silos, silage bunkers, and bedding materials. Also included in the definition of production area is any area used in the storage, handling, treatment, or disposal of mortalities.

**Residual Dry Matter (RDM):** is a term referring to the accumulation of dead plant material and is used in rangelands as a monitoring tool to indicate watershed health and rangeland productivity.

**Retention Pond:** means a constructed holding pond for temporary storage of solid and liquid animal manure, prior to cropland application.

**Salt:** sodium chloride and any added minerals (such as calcium, phosphorus, potassium, sulfur, iron, selenium, copper, zinc, or manganese) in the animal ration. Salts commonly break up into cations (sodium, calcium, etc.) and anions (chloride, sulfate, etc.) when dissolved in water. Total dissolved solids is generally measured as an indication of the amount of salts in a water or wastewater.

**Setback:** a specified distance from waters of the United States or potential conduits to waters of the United States where manure, litter, and process wastewater may not be land applied. Examples of conduits to surface waters include but are not limited to: Open drainage ditches, tile drainage lines, intake structures, sinkholes, and agricultural well heads.

**Significant quantity:** the volume, concentrations, or mass of a pollutant that can cause or threaten to cause pollution, contamination, or nuisance; adversely impact human health or the environment; and/or cause or contribute to a violation of any applicable water quality standards for the receiving water.

**Significant storm event:** a precipitation event that results in continuous runoff of storm water for a minimum of one hour, or intermittent discharge of runoff for a minimum of three hours in a 12-hour period.

**Source of Drinking Water:** any water designated or potentially suitable as municipal or domestic supply (MUN) in the Water Quality Control Plan for the North Coast Basin (Basin Plan).

**State:** the State of California.

**State Water Board:** the State Water Resources Control Board.

**Stormwater:** stormwater runoff, snowmelt runoff, and storm water surface runoff and drainage.

**Subsurface (tile) drainage:** water generated by installing and operating drainage systems to lower the water table below irrigated lands. Subsurface drainage systems, deep open drainage ditches, or drainage wells can generate this drainage.

**Surface water:** includes essentially all water that is on the Earth's surface, such as in a stream, lake, river, reservoir, or ocean. Surface waters include waters of the United States and their tributaries such as interstate waters and their tributaries, intrastate waters, all impoundments of these waters, and all wetlands hydrologically connected to lakes, streams, or rivers. Manure ponds are not considered surface waters in the context of this Regional Water Board Order.

**Tailwater:** the runoff of irrigation water from an irrigated field.

**Vegetated buffer:** a narrow, permanent strip of dense perennial vegetation established parallel to the contours of and perpendicular to the dominant slope of the field for the purposes of slowing water runoff, enhancing water infiltration, and minimizing the risk of any potential nutrients or pollutants from leaving the field and reaching waters of the United States.

**Waste:** is set forth in Water Code Section 13050(d), and includes manure, leachate, process wastewater and any water, precipitation or rainfall runoff that came into contact with raw materials, products, or byproducts such as manure, compost piles, feed, silage, milk, or bedding. The Basin Plan states that "waste" includes sewage and any and all other substances, liquid, solid, gaseous, or radioactive, associated with human habitation, or of human or animal origin, or from any producing, manufacturing, or processing operation of whatever nature, including such waste placed within containers of whatever nature prior to, and for purposes of, disposal.

**Wastewater:** is the same as "process water" as defined above.

**Waters of the State:** is defined in Section 13050 of the California Water Code as "...*any surface water or groundwater, including saline waters, within the boundaries of the state.*" Note this includes isolated wetlands.

**Waters of the United States:** is defined in 40 CFR § 122.2 as (a) All waters which are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide; (b) All interstate waters, including interstate "wetlands;" (c) All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, "wetlands," sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds the use, degradation, or destruction of which would affect or could affect interstate or foreign commerce including any such waters: (1) Which are or could be used by interstate or foreign travelers for recreational or other purposes; (2) From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or (3) Which are used or could be used for industrial purposes by industries in interstate commerce; (d) All impoundments of waters otherwise defined as waters of the United States under this definition; (e) Tributaries of waters identified in paragraphs (a) through (d) of this definition; (f) The territorial sea; and (g) "Wetlands" adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (a) through (f) of this definition.

Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of CWA (other than cooling ponds as defined in 40 CFR § 423.11(m) which also meet the criteria of this definition) are not waters of the United States. This exclusion applies only to manmade bodies of water which neither were originally created in waters of the United States (such as disposal area in wetlands) nor resulted from the impoundment of waters of the United States. Waters of the United States do not include prior converted cropland.

**Wetland:** For regulatory purposes under the Clean Water Act, the term wetlands means "those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs and similar areas."

**ATTACHMENT F**

**NOTICE OF INTENT FORM**

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**SECTION V. IMPLEMENTATION OF WAIVER CONDITIONS**

A. STATEWIDE MINIMUM STANDARDS FOR CONFINED ANIMAL FACILITIES ( <i>check if true</i> ) <input type="checkbox"/> Facility is currently operating in compliance with Statewide Minimum Standards for Discharges of Animal Waste (Title 27, see Attachment G)
B. FACILITY / OPERATION MANAGEMENT (check if true) <input type="checkbox"/> Manure ponds and containment facilities are designed to accommodate the waste water flow and stormwater contacting manured areas, that is likely to accumulate in the wettest winter that may occur in a 25-year, 24-hour storm event. <input type="checkbox"/> Manure ponds and containment facilities are managed in accordance with the waste discharge specifications for the Waiver of WDRs. <input type="checkbox"/> All non-manure wastes such as silage leachate, dead animals, waste milk, veterinary medical waste, spoiled feed, bedding, etc., are contained and managed in accordance with the waste discharge specifications for the Waiver of WDRs. <input type="checkbox"/> All direct and indirect discharges of waste, including storm water contacting wastes, from the animal production or housing area are contained and prevented from entering any surface water, or tributary thereof. <input type="checkbox"/> All confined animals are fenced or excluded from any surface water or perennial streams passing through the confined area.

**SECTION VI. MONITORING PROGRAM**

<input type="checkbox"/> The Monitoring and Reporting Program will be reviewed and all tasks will be conducted as required (check if true) Please check one regarding required surface water sampling: <input type="checkbox"/> The dairy will participate in group surface water monitoring <input type="checkbox"/> The dairy will perform individual surface water monitoring
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**SECTION VII. CERTIFICATION**

"I certify under penalty of law that this document and all attachments were prepared under my direction and 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 person or 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. In addition, I certify that the provisions of the waiver, including the implementation of a Monitoring Program Plan, will be complied with."	
Printed Name: _____	Signature: _____
Title: _____	Date: _____

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**ATTACHMENT G**

**TITLE 27**

**STATEWIDE WATER QUALITY REGULATIONS  
FOR CONFINED ANIMAL FACILITIES**

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## ATTACHMENT G

California Regional Water Quality Control Board  
San Francisco Bay Region

Conditional Waiver of Waste Discharge Requirements

### Statewide Water Quality Regulations for Confined Animal Facilities

**Title 27. Environmental Protection; Division 2 - Solid Waste**  
**Subdivision 1. Consolidated Regulations for Treatment, Storage, Processing, or Disposal of Solid Waste**  
**Chapter 7. Special Treatment, Storage, and Disposal Units**  
**Subchapter 2. Confined Animals**  
**Article 1. SWRCB - Confined Animal Facilities**

*[Note: Regulations in this article were promulgated by the State Water Resources Control Board (SWRCB), are administered by the appropriate Regional Water Quality Control Board (RWQCB) through the issuance of waste discharge requirements (WDRs), and are applicable to the owner or operator of a waste management unit (Unit) for the treatment, storage, or disposal of animal waste at confined animal facilities.]*

#### **22560. SWRCB - Applicability. (Ch-15: Section 2560)**

(a) **General** — This article prescribes statewide minimum standards for discharges of animal waste at confined animal facilities. These standards shall either be implemented in any WDRs issued for a particular animal waste facility or shall be made a condition to the waiver of such requirements.

(b) **ROWD** — A discharger required to submit a report of waste discharge shall provide the following general information and shall report any material changes as defined in Section 2210 of Title 23 of this code:

- (1) average daily volume of facility wastewater and volume or weight of manure;
- (2) total animal population at the facility, and types of animals;
- (3) location and size of use or disposal fields and retention ponds, including animal capacity; and
- (4) animal capacity of the facility.

(c) **Regulations Are Minimum Standards** — The RWQCB shall impose additional requirements, if such additional requirements are necessary to prevent degradation of water quality or impairment of beneficial uses of waters of the state.

#### **Note:**

**Authority cited:**  
*Section 1058, Water Code.*

**Reference:**  
*Sections 13140-13147, 13260 and 13263, Water Code; Section 43103, [Public Resources Code](#).*

**22561. SWRCB - General Standard For Surface Water. (Ch-15: Section 2561)**

The discharger shall prevent animals at a confined animal facility from entering any surface water within the confined area.

**Note:****Authority cited:**

Section 1058, Water Code.

**Reference:**

Sections 13140-13147, 13260 and 13263, Water Code; Section 43103, [Public Resources Code](#).

**22562. SWRCB - Wastewater Management. (Ch-15: Section 2562)**

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

(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 (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.

(c) **Design Storm (for Flood Protection).**

(1) Retention ponds and manured areas at confined animal facilities in operation on or after November 27, 1984, shall be protected from inundation or washout by overflow from any stream channel during 20-year peak stream flows.

(2) 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.

(3) The determination of peak stream flows shall be from data provided by a recognized federal, state, local, or other agency.

(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.

(e) **Discharge To Disposal/Use Fields** — The RWQCB shall allow the discharge of facility wastewater and of collected precipitation and drainage waters to use or disposal fields only if such discharge is in accordance with section 22563. Absent an NPDES permit for discharge to surface waters, the only other allowable discharge is to wastewater treatment facilities approved by the RWQCB.

**Note:**

**Authority cited:**

Section 1058, Water Code.

**Reference:**

Sections 13172, Water Code; Section 43103, [Public Resources Code](#).

**22563. SWRCB - Use or Disposal Field Management. (Ch-15: Section 2563)**

(a) **Reasonable Soil Amendment Rate** — Application of manure and wastewater to disposal fields or crop lands shall be at rates which are reasonable for the crop, soil, climate, special local situations, management system, and type of manure.

(b) **Run-Off & Percolation** — Discharges of facility wastewater to disposal fields shall not result in surface runoff from disposal fields and shall be managed to minimize percolation to ground water.

**Note:**

**Authority cited:**

Section 1058, Water Code.

**Reference:**

Section 13172, Water Code; Section 43103, [Public Resources Code](#).

**22564. SWRCB - Management of Manured Areas. (Ch-15: Section 2564)**

Manured areas shall be managed to minimize infiltration of water into underlying soils.

**Note:**

**Authority cited:**

Section 1058, Water Code.

**Reference:**

Section 13172, Water Code; Section 43103, [Public Resources Code](#).

**22565. SWRCB - Monitoring. (Ch-15: Section 2565)**

The RWQCB can require confined animal facility operations to undertake a monitoring program as a condition to the issuance or waiver of WDRs.

**Note:**

**Authority cited:**

Section 1058, Water Code.

**Reference:**

Sections 13172 and 13267, Water Code.

Source: <http://www.calrecycle.ca.gov/laws/regulations/Title27/>  
8/17/11

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