

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

TENTATIVE ORDER NO. R2-2016-00XX

**GENERAL WASTE DISCHARGE REQUIREMENTS
FOR CONFINED ANIMAL FACILITIES
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. Order No. R2-2016-00XX (hereafter, Order) serves as general waste discharge requirements (WDRs) for discharges of waste from confined animal facilities (CAFs)¹ that meet the terms and conditions of this Order. Dairies currently enrolled under Resolution No. R2-2015-031, Waiver of Waste Discharge Requirements for Existing Dairies (Conditional Waiver), will be required to enroll into Tier 2 of this Order, when the Conditional Waiver expires on June 9, 2020.
2. This Order covers the management of process water, manure, and other organic materials at CAFs, including the application of such materials to land. Other wastes, such as medicines, pesticides, chemicals, and fertilizers must be disposed at appropriately permitted facilities.
3. Owners and operators of CAFs discharging, or proposing to discharge, waste from a CAF 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 Order.
4. This Order applies to commercial CAFs including:
 - a. All existing operating dairies;
 - b. Existing CAFs located within water quality impaired watersheds and identified as a categorical pollutant source in Chapter 7 of the Basin Plan;
 - c. Other, existing CAFs, that the Water Board determines need coverage under this Order due to size, location, and/or threat to water quality;
 - d. CAFs (as described above in 4. a.-c.) that are inactive as of the adoption date of this Order; but are subsequently re-opened as a CAF; and
 - e. New or expanded CAFs² that demonstrate compliance with the provisions of the California Environmental Quality Act (CEQA) in the form of a certified Environmental Impact Report (EIR), Mitigated Negative Declaration, or Negative Declaration.

¹ 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.*”

² New CAFs are new structural facilities not in existence as of the date of Order adoption. An expanded CAF is a facility that requires newly constructed facilities to accommodate an increase in herd size.

5. This Order includes three tiers that are based on CAF type and threat to water quality. The Tiers are defined as follows:
 - a. **Tier 1** applies to CAFs that do not utilize liquid waste retention ponds; such as horse boarding facilities or small-scale sheep dairies. Operators must be able to comply with the discharge prohibitions in this Order at the time of enrollment. Dischargers must certify that their facility is structurally and operationally in compliance with all terms and conditions of this Order within 2 years of submittal of a Notice of Intent.
 - b. **Tier 2** applies to CAFs that utilize liquid waste retention ponds; such as cow dairies or large-scale poultry facilities. Dairies previously enrolled under the Conditional Waiver, must be able to comply with the terms and conditions of this Order at the time of enrollment, and must certify that their facility is structurally and operationally in compliance with the prohibitions and waste discharge specifications in this Order. New Dischargers must certify that their facility is structurally and operationally in compliance with all terms and conditions of this Order within 2 years of submittal of a Notice of Intent.
 - c. **Tier 3** applies to any type of CAF that the Dischargers cannot certify in the Notice of Intent (Attachment F) or Annual Report (Attachment A, Appendix 1) meets the requirements of this Order, or that the Executive Officer determines, due to its complexity, is a threat to water quality or is contributing to adverse water quality impacts.
6. Owners or operators of CAFs that discharge or propose to discharge pollutants 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 this Order³.
7. CAFs that are defined by federal regulations as a large concentrated animal feeding operation (CAFO)⁴ 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 a 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 CAFOs that discharge stormwater from cropland where manure, litter, or process wastewater has been applied may enroll under this Order if they are implementing a Nutrient Management Plan upon enrollment under this Order. Large CAFOs 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 required to enroll under a NPDES permit.

³ 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.

⁴ 40 CFR section 122.23 (b)(4) defines a large CAFO as an operation that stables or confines as many as, or more than, 700 mature dairy cows, whether milked or dry, 10,000 sheep or lambs or 500 horses. The size thresholds for all animal sectors are listed in 40 CFR 122.23(b) and (c).

9. This Order applies to the disposal of waste generated by confined animal facilities and related food-processing activities. Food processing activities, such as cheese-making, that generate additional waste and/or waste water that maybe co-mingled with the animal production waste stream, must be included in the facility's Ranch Water Quality Plan (required for facilities without liquid waste retention ponds) or Waste Management Plan (required for facilities with liquid waste retention ponds), consistent with the technical standards specified in Attachment B or C.
10. This Order **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 on-site or brought onto the facility for disposal or nutrient recycling. Dischargers must apply for coverage under an applicable general or individual waste discharge requirements as determined by the Water Board prior to receiving and/or discharging such wastes.
11. This Order does not address the cleanup of existing degraded surface and groundwater from past CAF 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. CAFs, as described herein, represent a significant source of waste discharges in the Region.
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 46 cow dairies currently operating within the Region, with total herd sizes ranging from 100 to 2200, and averaging 200-300 head.
14. CAFs generate wastes that include, but are not limited to, manure, process waste water, 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. Waste waters may also contain certain chemicals such as detergents, disinfectants, and biocides. Waste 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 and groundwater as a result of waste discharges and activities that result in soil erosion and destruction of riparian habitat.
15. CAF wastes are stored in retention ponds, in corrals, and/or in waste piles. These wastes are then applied to on-site cropland or pastures or transported off-site. The applied wastes are a

source of nutrients to crops and pastures, but, if improperly managed, can create nuisance conditions and cause pollution of surface and ground waters. 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 elevated levels of nitrates and other salts in groundwater.

Background

16. In 2003, the Water Board adopted Order No. R2-2003-0093, General Waste Discharge Requirements for Confined Animal Facilities (2003 General WDRs). The 2003 General WDRs will be rescinded upon adoption of this Order. In 2015, the Water Board renewed a Conditional Waiver of Waste Discharge Requirements for Existing Dairies. The renewed waiver, R2-2015-0031, applies only to operating, Tier 2 dairies. These facilities will be required to enroll into Tier 2 of this Order, when the Conditional Waiver expires on June 9, 2020.
17. Dairies that do not meet the conditions of the 2015 Conditional Waiver are enrolled in the 2003 General WDRs. Upon Order adoption, these facilities will be required to enroll in Tier 3. Tier 3 facilities must implement site-specific water quality monitoring and a short and long-term improvement schedule. These facilities also must obtain professional assistance to complete all management plans.
18. CAFs eligible for Order coverage that do not utilize liquid waste ponds have separate monitoring and waste management planning requirements under Tier 1. These facilities are required to assess their facility for pollution prevention and to develop one comprehensive plan for waste management. Tier 1 facilities are not required to conduct groundwater monitoring.
19. 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.
20. Issuance of these General WDRs 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).
21. The Basin Plan specifies implementation measures for each categorical pollutant source identified as contributing to the water quality impairment in specific watersheds. Livestock grazing lands, and confined animal facilities, including dairies and equestrian facilities, are identified as categorical pollutant sources, in certain watersheds, that are required to implement site-specific management measures to control and reduce animal waste and sediment runoff. This Order implements the Basin Plan by requiring management measures for pollutant sources that will improve water quality in the designated impaired watersheds.

22. 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 (Grazing Waiver). 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. This Order includes similar waste discharge specifications for grazing activities; therefore, CAFs under this Order are not required to have coverage under the Grazing Waiver.
23. This Order includes consideration for potential impacts to groundwater associated with CAFs, including dairies. Since the adoption of the 2003 General WDRs, California 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 Order requires sampling of existing groundwater wells at any CAF facility that utilizes a waste pond to store and manage operational wastes.

Regulatory Framework

24. 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.
25. 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.
26. The Water Board finds that it is appropriate to issue general WDRs for CAFs because:
- a. Waste discharges involve the same or substantially similar types of operations, namely operations where animals are confined and wastes are managed by on-site storage, land application, or removal offsite.
 - b. They discharge the same or similar types of waste, primarily animal waste; state regulations impose the same effluent limitations and operating conditions on CAFs,
 - c. They have many of the same types of potential impacts to surface and groundwater and, therefore, require the same or similar monitoring.

- d. Given the time and resources necessary to effectively regulatory oversight of CAFs in the Region, they are more appropriately regulated under general WDRs rather than individual WDRs.

The Water Board, however, may determine that a specific individual CAF is not appropriately regulated under general WDRs and must obtain individual WDRs.

28. Pursuant to this Order and CWC section 13267, Dischargers must implement a Monitoring and Reporting Program (Attachment A). The Monitoring and Reporting Program is necessary to ensure compliance with this Order's terms and provisions in order to prevent or reduce uncontrolled waste discharges and to protect water quality; it requires regular visual inspections, individual facility water quality sampling, reporting and record-keeping.
29. This Order 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 Water Board Water Quality Control Plans.
30. This Order 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 Order as Attachment K (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 waste discharge requirements.

Water Quality Control Plan for the San Francisco Bay Basin

31. 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 to achieve 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 Board, Office of Administrative Law, and the U.S. EPA, where required.
32. 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 wastes include:
 - a. Municipal and domestic water supply
 - b. Agricultural water supply
 - c. Groundwater recharge
 - d. Estuarine habitat
 - e. Marine habitat
 - f. Preservation of rare and endangered species
 - g. Water contact recreation

- h. Noncontact water recreation
 - i. Shellfish harvesting
 - j. Cold freshwater habitat
 - k. Warm freshwater habitat
 - l. Wildlife habitat
 - m. Preservation of areas of special biological significance.
33. 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 watersheds dominated by agricultural activities, are consistently exceeded or where corrective action is not yet successful in eliminating either short- or long-term water quality problems or threats.

Anti-Degradation

34. 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 comply with WDRs which 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 Order is consistent with these policies.

This Order 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 to 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 Order 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 Order will not degrade existing water quality if the terms and conditions of this Order are met.
35. This Order requires that discharges of waste, as defined in Finding 14, from confined animal facilities shall not cause surface water or groundwater to be further degraded, to exceed water quality objectives, unreasonably affect beneficial uses, or cause a condition of pollution or nuisance. This Order also requires monitoring of surface water and groundwater to demonstrate compliance with water quality objectives.

California Environmental Quality Act

36. The Water Board is the lead agency for these General WDRs (Project) under the California Environmental Quality Act (CEQA) (Public Resources Code section 21000 *et seq.*). The Water Board prepared and circulated a Mitigated Negative Declaration for the Project that was adopted on **DATE, 2016**. The Water Board has considered the Mitigated Negative Declaration, as well as all comments, and finds that there is no substantial evidence that these General WDRs will have a significant effect on the environment. The Water Board further finds that the mitigation measures identified in the Mitigated Negative Declaration to keep impacts to less-than-significant levels, as well as a program for monitoring and reporting on such mitigation measures, are required as conditions of these General WDRs. The Water Board's decision is based on the record as a whole for the Project, which is available at the Board's offices. The Mitigated Negative Declaration reflects the Water Board's independent judgment and analysis.
37. This Order involves the permitting of facilities, which are defined as confined animal facilities, including dairies, that are fully constructed, and operating as of the effective date of this Order, and which have subsequently undergone no expansion in size of their physical facilities, beyond the designed animal holding capacity. This Order is designed to enhance the protection of surface and groundwater resources, and its application to existing facilities is exempt from the provisions of CEQA in accordance with the following categorical exemptions:
- a . CEQA Guidelines Exemption 1 for Existing Facilities (Cal. Code Regs., tit.14, § 15301), which exempts the “operation, repair, maintenance, [and] permitting ... of existing public or private structures, facilities, mechanical equipment, or topographical features” from environmental review. The restoration of, or improvements to, confined animal facility waste management systems to ensure proper function in compliance with this Order will involve minor alterations of existing private facilities.
 - b . 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, this Order may require covered CAFs to replace or reconstruct retention ponds or other structures on the facility to ensure proper function in compliance with this Order.
 - c. 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, this Order may require covered CAFs to make improvements to their facilities that will result in minor alterations to land, water, and/or vegetation.
38. Facilities defined as “new” or “expanding” pursuant to this Order must submit proof of compliance with the provisions of the California Environmental Quality Act (CEQA) in the form of a certified Environmental Impact Report (EIR), Mitigated Negative Declaration, or Negative Declaration, together with an NOI and appropriate fee, to the Executive Officer to

qualify for coverage under this Order. Completing the NOI includes making a demonstration that:

- a. Any potential impacts to wetlands and vernal pools have been addressed in permits pursuant to section 401/404 of the federal Clean Water Act;
- b. A Section 1602 Streambed Alteration has been procured, if necessary;
- c. The Discharger has obtained coverage under the State Water Board's Construction General Stormwater Permit, if necessary;
- d. The Discharger has obtained a Timberland Conversion Permit, if necessary;
- e. The development of the CAF is in compliance with any applicable County regulations and ordinances, including grading, construction, and building ordinances;
- f. That any and all impacts to special-status species have been fully mitigated; and
- g. That all potential impacts to cultural resources will be appropriately addressed and mitigated.

39. 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.

40. Issuance of this General Order is also exempt from CEQA in accordance with California Code of Regulations, title 14, section 15307, which exempts from environmental review actions by regulatory agencies for the protection of natural resources. This action may also be considered exempt from environmental review pursuant to California Code of Regulations, title 14, section 15308, which exempts actions by regulatory agencies for the protection of the environment.

41. The Water Board has satisfied its obligation to address tribal cultural resources under AB 52. The notification and consultation provisions of AB 52 were not triggered because, when the decision occurred to undertake the Project, there were no letters requesting notification and consultation.

Safe Drinking Water Act

42. 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 order promotes that policy by requiring Dischargers to meet water quality objectives, as applicable, designed to protect human health and ensure that water is safe for domestic use.

Public Notice

43. The Water Board has reviewed the contents of this Order and all evidence concerning this matter, written public comments, and testimony provided at the public hearing on **DATE, 2016**, in Oakland, California, and hereby finds that the adoption of this Order is consistent with the Basin Plan, and is in the public interest.
44. The Water Board has publicly notified interested agencies and persons of its intent to issue this Order for discharges of wastes from CAFs (including associated grazing operations), and has provided them with an opportunity for a public meeting and an opportunity to submit comments.

IT IS HEREBY ORDERED that the Dischargers, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, shall comply with the following:

A. DISCHARGE PROHIBITIONS

1. The discharge of waste classified as hazardous, (Cal. Code Regs., tit. 23, §2521(a)), is prohibited.
2. The collection, treatment, storage, discharge or disposal of waste at the CAF 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 CAF which 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 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 the 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. 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 the facilities shall be in accordance with a site-specific Ranch Water Quality Management Plan or Waste Management Plan, consistent with the technical standards specified in Attachment B and C. (Cal. Code Regs., tit. 27, §22562(a).)
- b. In addition to manure waste and waste water 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 on-site slaughtering, solid and liquid waste from on-site 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 or Ranch Water Quality 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 / waste storage areas shall be managed to minimize standing water and maximize the infiltration of water into underlying soils. No standing water should be present 72 hours after the last rainfall.
- 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 (if applicable)

- a. Retention ponds and manured areas at CAFs 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 flows. CAFs existing before November 27, 1984, and that are protected against 100-year peak stream flows must continue to provide such protection. CAFs, 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. All 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 Order's Discharge Prohibitions No. 2 and No. 3. (Cal. Code Regs., tit. 27, §22562(d).)

- c. Retention ponds constructed after adoption of this Order 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 Order must comply with Natural Resources Conservation Service (NRCS) Waste Storage Facility Code 313 including a maximum specific discharge (unit seepage rate) of 1×10^{-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 Water Board 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, in a timely manner and in a manner consistent with the Waste Management Plan and 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 October 31.

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 ground water.
- 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. Discharges to land, shall not exceed the amount needed to meet crop demand and shall be conducted in accordance with the facility's Ranch Water Quality Plan or Nutrient Management Plan, consistent with the technical standards specified in Attachments B or D.
- c. Manure and waste water 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 waste water shall not be applied or stockpiled 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 Order must implement an adequate Nutrient Management Plan (in accordance to technical standards specified in Attachment D) 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, kind 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 E. If all technical standards and provisions of Attachment E are implemented by another management plan, a separate Grazing Management Plan is not required.

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 (Attachment A), and also develop and implement site-specific management plans. All existing plans must be updated and new plans developed in accordance to the technical standards specified in Attachments A, B, C, D and E. **Plans must be completed within the schedule outlined below in Section G. Required Reports and Notices.**

If the Discharger's facility requires additional management practices and/or physical improvements to comply with this Order (Tier 3), a detailed improvement schedule, acceptable to Water Board staff, must be developed and implemented. Improvement progress must also be reported within the Annual Report.

- 3. If the Discharger observes deficiencies, defects, and/or impending failures in any of the manure-contacted water conveyances, controls, 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 facility management plans shall be updated to include corrective management measures needed to avoid a recurrence of the observed condition.

4. If on-site or off-site 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.
5. Manifests are required to be kept on-site to record transfer of waste to outside facilities and must be kept as part of the Nutrient Management Plan or Ranch Water Quality 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 Order, is prohibited. The requirements for such third party agreements are outlined in Attachment D, Nutrient Management Plan Minimum Requirements and Attachment B, Ranch Water Quality Plan Minimum Requirements.
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 Order.
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 Order 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 Order 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 Game Code §§ 2050-2097) or the federal Endangered Species Act (16 U.S.C. §§ 1531-1544). Dischargers shall be responsible for meeting all applicable requirements of the Endangered Species Acts. A discharge which is deleterious to fish, plant life, mammals, or bird life or otherwise in violation of Fish and Game Code section 5650 is not a discharge which is authorized nor in compliance with the terms and conditions of this Order. 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, the Water Board 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 Order
 - b. Access to copy any records that are kept under the conditions of this Order
 - c. To inspect any facility, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order, and
 - d. To photograph, sample, and monitor for the purpose of assuring compliance with this Order.
11. The Discharger shall maintain a copy of this Order and each applicable management plan (i.e., Waste or Ranch Water Quality, Grazing, and Nutrient Management) at the site so as to be available at all times to site-operating personnel. The Discharger shall ensure that all site-operating personnel are familiar with the content of this Order and each management plan.
12. The provisions of this Order are severable, and if any provision of this Order, or the application of any provision of this Order to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this Order shall not be affected thereby. If there is any conflicting or contradictory language between this Order and the associated attachments that outline technical requirements for the Monitoring and Reporting Program, Waste Management Plan, Nutrient Management Plan and Grazing Management Plan or Ranch Water Quality Plan, the language in the Order shall govern over the other documents.
13. Compliance determination with the terms of this Order 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, completed Waste Management Plan, Nutrient Management Plan, Grazing Management Plan, and Ranch Water Quality Plan; and
 - c. Any other information deemed necessary by the Executive Officer.

D. RE-OPENING AN EXISTING BUT DORMANT CAF FACILITY

1. In order to be eligible for coverage under this Order, those seeking to start-up a new CAF operation utilizing an existing but dormant facility must comply with the following conditions prior to start-up and enrollment:
 - a. Dischargers must develop site-specific management plans applicable to each operation, in accordance with technical standards outlined in this Order. Such plans may include a Waste Management Plan or Ranch Water Quality Management Plan for confined areas, a Nutrient Management Plan for lands where manure products are applied and a Grazing Management Plan for grazing lands totaling 50 acres or more. All required plans must be submitted to Water Board for review, either attached to the Notice of Intent (Attachment G) or separately.

- b. Retention ponds must comply with Natural Resources Conservation Service (NRCS) Waste Storage Facility Code 313, including a maximum specific discharge (unit seepage rate) of 1×10^{-6} cm/sec. Such ponds may not be used until the Discharger submits a report verifying that the liner meets this requirement.
- c. Operations must not include more animals than the existing infrastructure is designed to accommodate. The Order does not authorize construction or expansions of facilities.

E. OPENING A NEW OR EXPANING FACILITY

1. In order to be eligible for coverage under this Order, those constructing a new or expanding facility must comply with the following conditions prior to start-up:
 - a. Dischargers must submit proof of compliance with the provisions of the California Environmental Quality Act (CEQA) in the form of a certified Environmental Impact Report (EIR), Mitigated Negative Declaration, or Negative Declaration;
 - b. Dischargers must demonstrate that all local, State and federal permits have been obtained for the construction by completing and submitting a Notice of Intent for New or Expanding Facilities (Attachment H);
 - c. Dischargers must develop site-specific management plans applicable to each operation, in accordance with technical standards outlined in this Order. Such plans may include a Waste Management Plan or Ranch Water Quality Management Plan for confined areas, a Nutrient Management Plan for lands where manure products are applied and a Grazing Management Plan for grazing lands totaling 50 acres or more. All required plans must be submitted to Water Board for review, either attached to the Notice of Intent (Attachment G) or separately.
 - d. Retention ponds must comply with Natural Resources Conservation Service (NRCS) Waste Storage Facility Code 313, including a maximum specific discharge (unit seepage rate) of 1×10^{-6} cm/sec. Such ponds may not be used until the Discharger submits a report verifying that the liner meets this requirement.

F. PERMIT REOPENING, REVISION, REVOCATION, TERMINATION AND RE-ISSUANCE

1. The Board may modify, revoke and/or reissue this Order at any time.
2. An authorization to discharge wastes under this Order 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 its responsibility to comply with this Order 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 Order.
3. To assume operation under this Order, the succeeding owner/operator must submit a completed Notice of Intent (Attachment F) 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 Order 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 a 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 Discharger contact information (if changed). Prior to NOT approval, all manure and 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.
5. The 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(s) regarding approval or disapproval of the NOT.
6. If more stringent requirements are necessary to implement or be consistent with any total maximum daily load adopted by the Board to achieve applicable water quality standards pursuant to section 303 of the federal CWA, or amendments thereto, the Water Board will revise and modify this Order.
7. This Order 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 Order as to a particular Discharger if the Discharger fails to comply with this Order; such termination is in the public interest; the 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 individual WDRs or an NPDES permit is more appropriate.
9. A Discharger designated to Tier 3 may request approval for a transfer to Tier 1 or 2 (as applicable) following a minimum of three consecutive years of compliance with this Order and proof of completion of one educational program approved by the Executive Officer. A shorter demonstration period may be approved by the Executive Officer, given circumstances that merit special consideration.

F. ENFORCEMENT

1. A Discharger who fails to comply with the terms and conditions of this Order 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 13260 *et seq.*
2. Section 13387(e) of the CWC provides that any person who knowingly makes any false statement, representation, or certification 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 two 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. Section 13350 of the CWC provides that any person who violates WDRs or a provision of the CWC is subject to civil liability of up to \$15,000 per day of violation, or up to \$20 per gallon of waste discharged. Alternatively, administrative civil liability may be imposed up to \$5,000 per day of violation or \$10 for each gallon of waste discharged, depending on the violation or combination of violations.
5. If it is determined that a Tier 1 or Tier 2 facility does not meet the Order requirements and/or the Minimum State Standards (Title 27), due to a failure to implement effective pollution prevention management practices or structural deficiencies that can be corrected within 30 days, a short term improvement plan and schedule must be prepared and implemented. Tier 3 facilities must prepare, implement, and submit for Water Board review, a site-specific work-plan that delineates a short and long-term improvement schedule for bringing all facilities into compliance with this Order. Tier 3 facilities must also obtain professional assistance to assess the potential causes for non-compliance, and to develop complete and effective management plans.
6. If a Tier 1 facility, due to its complexity, cannot comply with all conditions and provisions of the General WDRs within 2 years, the Executive Officer may designate the facility into Tier 3. Within 1 year from this designation, the RWQP must be revised and updated by a qualified professional and all facility improvements must be completed within 2 years.

G. REQUIRED REPORTS AND NOTICES

1. The Discharger must complete the following tasks and submit a certification of completion either separately or attached to the Annual Report. If tasks are completed and certification was previously submitted, indicate this in the Annual Report.

2. Monitoring and Management Plan

- a. **Tier 1 Dischargers - CAFs without liquid waste retention ponds:**

Facility Monitoring Program

The facility's Monitoring and Reporting Plan must be completed and implemented consistent with the technical standards specified in Attachment A, within one year from General WDRs' enrollment (submittal of a Notice of Intent), but no later than November 1, before the first monitoring period. 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 rainy season monitoring within one year.

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 first Annual

Report (Attachment A, Appendix 1) and the program must also be prepared to begin sampling by November 1, before the first monitoring period.

Ranch Water Quality Plan (RWQP)

The RWQP must be completed, and implemented consistent with the technical standards specified in Attachment B, within two years of submittal of a Notice of Intent.

Tier 1 dischargers have the option to prepare their own, with or without the assistance of a qualified professional, as described in Attachment B, General Requirement 2.

A copy of the RWQP must be kept at the confined animal facility and made available upon request by Water Board staff during inspections.

b. Tier 2 Dischargers - Dairies and other CAFs with liquid waste retention ponds:

When the Conditional Waiver expires in June 2020, dairies must have completed all reporting and monitoring requirements stipulated by the Conditional Waiver, prior to enrolling into Tier 2. Completed plans shall be updated when necessary to account for changes to the facility or operation.

Dischargers eligible for Tier 2 coverage, not previously enrolled under the Conditional Waiver, must complete the following tasks:

Facility Monitoring Program

The facility's Monitoring and Reporting Plan must be completed and implemented consistent with the technical standards specified in Attachment A, by within one year of General WDRs enrollment (submittal of a Notice of Intent), but no later than November 1, before the first monitoring period. 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 rainy season monitoring within one year.

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 first Annual Report (Attachment A, Appendix 1) and the program must also be prepared to begin sampling by November 1, before the first monitoring period.

Waste Management Plan (WMP)

A WMP must be updated or completed and implemented consistent with the technical standards specified in Attachment C, within two years of submittal of a Notice of Intent.

Tier 2 dischargers have the option to prepare the entire WMP, including containment structure specifications, through a technical education program, administered by a qualified professional, as described in Attachment C. General Requirement 2.

A copy of the WMP must be kept at the confined animal facility and made available upon request by Water Board staff during inspections.

Grazing Management Plan (GMP)

If grazing occurs on 50 acres or more, a GMP must be completed and implemented consistent with the technical standards specified in Attachment E, within two years of submittal of a Notice of Intent. If all technical standards and provisions of Attachment E are included in the WMP or NMP, a separate GMP is not required.

A copy of the GMP must be kept on the facility site and made available upon request by Water Board staff during inspections.

Nutrient Management Plan (NMP)

If waste is applied to land, an NMP must be completed and implemented consistent with the technical standards specified in Attachment D, within four years of submittal of a Notice of Intent.

Tier 2 dischargers may develop their own NMP, with the assistance of a qualified professional, as described in Attachment D.

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

A copy of the NMP must be kept on the confined animal facility and made available upon request by Water Board staff during inspections.

c. **Tier 3 Dischargers – Designated by the Executive Officer due to site complexity or threat to water quality:**

Facility Monitoring Program

Tier 3 dischargers must implement an individual monitoring program, including on-site surface water (all dischargers) and ground water (those with liquid retention ponds only) quality sampling, and may not participate in a watershed or group monitoring program.

The facility's Monitoring and Reporting Plan must be completed and implemented consistent with the technical standards specified in Attachment A, within one year of Tier 3 designation or submittal of a Notice of Intent, but no later than November 1, before the first monitoring period. 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 rainy season monitoring within one year.

Ranch Water Quality Management Plan or Waste Management Plan

A RWQP (facilities without liquid waste retention ponds) or WMP (facilities with liquid waste retention ponds) must be prepared by a qualified professional⁵ and

⁵ 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

submitted to the Water Board for review. It must also be kept on the CAF site and made available for review by Water Board staff during inspections.

The RWQP or WMP must be completed and implemented consistent with the technical standards specified in Attachment B (RWQP) or Attachment C (WMP) within one year of Tier 3 designation or submittal of a Notice of Intent.

Grazing Management Plan (GMP)

If grazing occurs on 50 acres or more, a GMP must be developed and submitted to the Water Board for review. It must also be kept on the CAF site and made available for review by Water Board staff during inspections.

The GMP must be completed and implemented consistent with the technical standards specified in Attachment E, within one year of Tier 3 designation or submittal of a Notice of Intent. If all technical standards and provisions of Attachment E are included in the RWQP, WMP or NMP, a separate GMP is not required.

Nutrient Management Plan (NMP)

If liquid waste is applied to land, a NMP must be must be prepared by a qualified professional and submitted to the Water Board for review. It must also be kept on the CAF site and made available for review by Water Board staff during inspections.

The NMP must be completed, and implemented consistent with the technical standards specified in Attachment D, within two years of Tier 3 designation or submittal of a Notice of Intent.

3. Notice of Non-Applicability

A CAF owner or operator that meets any of the following conditions may apply for an exclusion from coverage under this Order by completing a Notice of Non-Applicability (NONA) (Attachment I):

- a. Number of animals within confined areas is minimal and poses no potential for adverse water quality impact;
- b. Primary means for feeding and containing animals is on pasture lands (coverage under a Grazing Waiver may be required);
- c. Animals are rarely confined and fed in areas devoid of vegetation, especially during the rainy season;
- d. Stormwater does not contact manure or waste materials within the facility's confined areas and all waste is disposed lawfully off-site.

These facilities may need to obtain coverage under this Order in the future if conditions or operations change or the potential for water quality impacts are found.

4. Annual Reporting

The Discharger must submit an Annual Report (Attachment A, Appendix 1) to the Water Board by **November 30 each year**, in accordance with the Monitoring and Reporting Program requirements. The Annual Report shall assess whether BMPs 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, results of water quality sampling (if individual monitoring was required), updates regarding any schedules for compliance and other data, as described in the Monitoring and Reporting Program. If participating in a watershed-based or group monitoring program, a statement identifying the group must be included.

5. 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 (510) 622-2369 and to the California Office of Emergency Services (OES) (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. The discharger shall submit a written report to the Water Board within five (5) business days of becoming aware of the incident. The report shall include complete details of the steps that the Discharger has taken or intends to take, to correct the condition and 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 Order. 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 Order shall not be a defense for violations.

6. Reporting Provision

- a. 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:

“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 Order shall furnish, within a reasonable time, any information the Water Board may request, to determine whether cause exists for modifying, revoking, and reissuing, or terminating coverage under this Order. The Discharger shall also furnish to the Water Board, upon request, copies of records required to be kept by this Order.
 - 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 Section 13267(b)(2) of the California Water Code, all reports prepared in accordance with the terms of this Order 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 section 13387 of the CWC.
7. The Discharger shall submit a 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;
 - c. The animal population, if it increases beyond the existing design capacity of the facility specified in the Ranch Water Quality Plan, Waste Management Plan, Nutrient Management Plan, and/or Grazing Management Plan.
8. The filing of a request by the Discharger for modification, revocation, reissuance, or termination of this Order, or notification of planned changes or anticipated noncompliance, does not stay any condition of this Order.
9. The Discharger may be required to submit technical reports as directed by the Executive Officer in accordance with CWC section 13267.

10. Extension Request

The Discharger may request an extension to deadlines by written request to the Executive Officer of the Water Board 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 approval by the Executive Officer and a written response from the Water Board will be issued granting or denying the request.

H. APPLICATION REQUIREMENTS

1. In order for existing facilities to obtain coverage under this Order, Dischargers shall apply for coverage by submitting a completed Notice of Intent form (Attachment F) on or before **DATE**, 2016.
2. Prior to operating an existing dormant CAF, Dischargers shall certify that all requirements listed in Section D. are completed by submitting a Notice of Intent for Re-opening Dormant Facilities (Attachment G).
3. Prior to operating a new or expanding CAF, Discharges must certify that all requirements listed in Section E. are completed and all local, State and federal construction permits have been obtained, by completing and submitting a Notice of Intent for New or Expanding Facilities (Attachment H).
4. Dairies currently enrolled under the Conditional Waiver, will be required to enroll into Tier 2 of this Order, when the Conditional Waiver expires on June 9, 2020. In order to obtain coverage under this Order, dairy owners or operators shall submit a completed Notice of Intent form by September 1, 2020.
5. Other existing dischargers that the Executive Officer subsequently determines need coverage under this Order, shall submit a complete Notice of Intent and associated required information, within 90 days of being notified to comply with this Order.
6. 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
7. Coverage under this Order 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.
8. Facilities that are certified under a Quality Assurance Program, approved by the State Board or under a county regulatory program approved by the appropriate Regional Board, currently receive a 50 percent fee reduction. If the Water Board issues a Notice of Violation for an off-property discharge, the facility's certification and fee reduction will be revoked. The fee reduction will be revoked for a minimum of one billing cycle, and for all subsequent billing cycles, until all corrective actions are complete as determined by the Water Board and the facility's certification is restored.

9. Order No. R2-2003-0093 is hereby rescinded.

I, BRUCE H. WOLFE Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on **DATE**, 2016.

BRUCE H. WOLFE
Executive Officer

Attachment A - Monitoring and Reporting Program No. R2-2016-00XX
 Appendix 1 - Annual Report (to be provided)
 Appendix 2 - Sampling and Analysis Reduction Certification (to be provided)
Attachment B - Ranch Water Quality Plan (RMP)
Attachment C - Waste Management Plan (WMP)
Attachment D - Nutrient Management Plan (NMP)
Attachment E - Grazing Management Plan (GMP)
Attachment F - Notice of Intent
Attachment G - Notice of Intent for Re-opening Dormant Facilities
Attachment H - Notice of Intent for New or Expanding Facilities
Attachment I - Notice of Non-Applicability
Attachment J - Definitions
Attachment K - Title 27 of the California Code of Regulations, sections 22560-22565

ATTACHMENT A

California Regional Water Quality Control Board
San Francisco Bay Region

Revised General Waste Discharge Requirements

MONITORING AND REPORTING PROGRAM NO. R2-2016-00XX FOR CONFINED ANIMAL FACILITIES

This Monitoring and Reporting Program (MRP) is issued pursuant to Order No. R2-2016-00XX (Order) 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 Order, this MRP requires that regular monitoring, sampling, and record-keeping be conducted by confined animal facility (CAF) owners and operators (hereinafter, Dischargers). The required sampling and analyses are minimum parameters necessary to evaluate if CAF operations are contributing to adverse water quality impacts. If sampling data indicate that concentrations are above the benchmarks (based on the San Francisco Bay 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 or group monitoring program), compliance schedule progress, an evaluation of water quality sampling data, 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. DISCHARGER TIER REQUIREMENTS

The level of requirements for water quality testing and reporting for each Discharger is dependent on each Discharger's designated tier (as defined in Order No. R2-2016-00XX, Finding 5). While all facilities must implement the provisions of this MRP, the tier-specific requirements are as follows:

A. Tier 1 Dischargers (CAFs without liquid waste retention ponds):

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 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. Site Specific Monitoring

Each facility is required to conduct individual visual inspections, and grazing operation monitoring and reporting (for grazing lands of 50 acres or more), as specified below in sections II, A and B. Groundwater well testing is not required.

3. Reporting

A Ranch Water Quality Plan must be completed within the schedule outlined in the Order. The plan is to be kept onsite and is not required to be submitted to the Water Board for approval. A letter certifying that the plan is complete must be submitted, by the owner / operator or responsible professional who helped prepare the plan, either separately or attached to the facility's Annual Report. A copy of the plan must be made available for review by Water Board staff during inspections.

B. Tier 2 Dischargers (CAFs with liquid waste retention ponds):

1. Option to Participate in a Watershed 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. Site Specific Monitoring

Each facility is required to conduct individual visual inspections, grazing operation monitoring and reporting (for grazing lands of 50 acres or more) and groundwater well testing, as specified below in sections II A, B (as applicable), and C.

3. Reporting

- a. Management plans must be updated or completed within the schedule outlined in the Order, but are not required to be submitted for approval. A letter certifying that each plan is complete, must be submitted, by the owner /operator (if prepared through a technical education program) or responsible professional who helped

prepare the plan, either separately or attached to the facility's Annual Report. Copies of each management plan must be made available for review by Water Board staff during inspections.

- b. Site-specific water quality monitoring results (i.e. groundwater monitoring) are required to be submitted in the Annual Report. If participating in a watershed-based monitoring program, all other results will be submitted in a group monitoring report.

C. Tier 3 Dischargers (Designated by the Executive Officer due to site complexity or threat to water quality):

1. Individual Monitoring Program Required

Dischargers within Tier 3 must implement a site-specific water quality monitoring program that includes all elements described below.

2. Reporting

- a. Management plans must be developed by a qualified professional and completed within the accelerated schedule outlined in the Order. Plans must be submitted to Water Board Executive Officer for review and approval. Additionally, copies of each management plan must be kept on-site and made available for review by Water Board staff during inspections.
- b. Dischargers must include a schedule for improvements and updates within each Annual Report.
- c. Dischargers must include all individual water quality monitoring data within each Annual Report.

II. MONITORING PROVISIONS

Visual inspections and sampling of surface and ground waters are required to assess compliance with conditions of this Order.

A. Visual Inspections

This MRP requires all dischargers to conduct periodic visual inspections to ensure the CAF is operated and maintained in compliance with the Order. 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-storm water waste

discharges from the property under the control of the Discharger.

2. **Retention Pond Freeboard and Integrity (if applicable)**

The Discharger(s) 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 above ground 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 (if applicable)**

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 to 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 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 or Ranch Water Quality Plan, are implemented and effective.

The Discharger shall document any discharges of storm water 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 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 ranch 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 (RDM¹), prior to fall rains, 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 standards

¹ As cited in Napa River Sediment TMDL and Sonoma Creek Sediment TMDL.

- (included in the guidelines) are not met, the Discharger shall provide an explanation for not meeting the recommendations in the Annual Report.
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 (specified by the management plans) must be redesigned accordingly and additional monitoring may be required.

1. 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 1 year after submitting a Notice of Intent. 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 on-site 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 (QAPrP) at 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 ₃ + NH ₄₊)	mg/L	Below 1 mg/l and meets calculated unionized ammonia benchmark below
Unionized ammonia (NH ₃) as calculated ¹	mg/l	0.025 mg/l
pH		6.5-8.5
Temperature	°C	none

2. **Groundwater Well Sampling (CAFs with liquid waste retention ponds)**

a. **Sampling Parameters:**

Any existing representative wells located at the confined animal facility, including domestic and agricultural supply wells, shall be sampled four (4) times total, approximately six (6) months apart. A sample must be collected in: (1) Fall 2017, (2) Spring 2018, (3) Fall 2018, and (4) Spring 2019. 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

¹ 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

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 Health Services or a laboratory pre-approved by the Water Board staff.

b. Constituents and Benchmarks:

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

Constituents	Units	Benchmarks (municipal supply)
Nitrate	mg/l	45.0 mg/l
Total Coliform Bacteria	MPN/100ml	1.1 MPN/100ml ²

3. 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 United States Environmental Protection Agency 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.
- 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.

² 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).

- 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.

4. Request for Sampling Reduction

Dischargers in Tier 1 or 2 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 6 consecutive sampling events at or below benchmarks, and
- b. The Discharger is in full compliance with the requirements of this Order and has updated, certified and submitted all documents, data, and reports required by this Order during the time period in which samples were collected.

III. 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 Order must be submitted to the Water Board in an Annual Report due each **November 30**. The annual reporting period is November 1 through October 31. Water Board staff will review the Annual Report and provide comments if necessary for the facility to meet the Order requirements. If the Water Board provides comments on the Annual Report or any technical report, the Discharger will be required to address those comments. 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 October 31** 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 storm water 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 Order. Where appropriate, sketches of pollution prevention measures implemented since the previous Annual Report may also be submitted.
4. A status report for any improvement schedules implemented, as required by the Ranch Water Quality Plan (WDRs Attachment B) or Waste Management Plan (WDRs Attachment C).
5. 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 this Order 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 (510) 622-2369** and to the **California Office of Emergency Services (OES) (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 this Order 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 Order 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

Or email to: R2ConfinedAnimals@waterboards.ca.gov

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 Executive Officer will be issued granting or denying the request. A staff inspection may be necessary.

APPENDIX

1. Annual Report
2. Sampling and Analysis Reduction Certification

ATTACHMENT B

California Regional Water Quality Control Board
San Francisco Bay Region

Revised General Waste Discharge Requirements

Ranch Water Quality Plan

Minimum Requirements

(Dischargers without liquid waste retention ponds within Tiers 1 or 3)

Order No.R2-2016-00xx (hereafter, General WDRs) requires owners and operators of confined animal facilities (CAF) that do not utilize liquid waste retention ponds, to prepare and implement a Ranch Water Quality Plan (RWQP) for activities within the production and/or confined areas including, but not limited to, the corrals, barns, feed storage area, compost piles, dry manure storage areas, animal wash areas, and onsite ancillary operations such as food processing. The RWQP must also include pollution prevention measures for grazing activities and pasture land activities such as grazing and solid manure applications. The complexity of a RWQP depends on each facility's activities, location, size of operation, intensity of land use, etc.

The level of regulatory oversight is dependent upon each discharger's designated water quality risk (as defined in General WDRs, Finding 5). Tier specific requirements are described below.

Tier 1 (CAFs without liquid waste retention ponds):

1. Dischargers have the option to prepare their own RWQP, with or without the assistance of 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 Service (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.
2. The RWQP shall be completed and implemented within two years of submitting an NOI. A statement attesting that the RWQP is complete must be submitted to the Executive Officer by separate letter or as an attachment to the Annual Report within this two year period.
3. The RWQP must include a statement from the owner/operator or responsible professional that the RWQP was developed in accordance with the requirements of the General WDRs, that it includes all necessary documentation (including calculations), and that all contents of the RWQP were done consistent with requirements of the General WDRs and Title 27.
4. The RWQP 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.

Tier 3 (Designated by Executive Officer due to site complexity or threat to water quality):

1. The RWQP must be prepared by a qualified professional, as described above in Requirement A.1.
2. Within one year of Tier 3 designation or submittal of a Notice of Intent, the RWQP must be completed and submitted to the Water Board for review. A copy must also be kept on the CAF site and 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.
3. The RWQP must include a professional assessment of the overall facility, evaluating any conditions or problems preventing compliance with the State’s minimum standards and/or requirements of the General WDRs (i.e., overgrazed areas, erosion problems, condition of waste collection system, proximity of confined areas to waterways, etc.).
4. The RWQP must include an improvement schedule, including short-term corrective measures to immediately address identified pollutant sources, and needed corrective measures that may require a long-term schedule due to logistics and economic considerations. Such a schedule shall not exceed 3 years.
5. If a Tier 1 facility, due to its complexity, cannot comply with all conditions and provisions of the General WDRs within 2 years, the Executive Officer may designate the facility into Tier 3. Within 1 year from this designation, the RWQP must be revised and updated by a qualified professional and all facility improvements must be completed within 2 years.

A. Minimum Pollution Prevention Standards

The purpose of the RWQP 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 RWQP must evaluate existing facilities and pollutant sources/problems and describe how these sources are controlled utilizing Best Management Practices (BMPs) depending on the type and size of the confined animal facility. At a minimum, the plan must demonstrate how the facility complies with or will comply with the following:

1. Facility Design and Management

- a. Animal confinement areas (barns, corrals, stalls, wash racks, etc.) and storage areas for manure, feed, 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.
- b. The animal confinement areas are designed, constructed, and operated to minimize stormwater contact with manure or waste materials and to collect and divert all wastewater away from surface waters and groundwater wells. If a retention pond must be used to prevent contaminated stormwater from discharging to surface waters,

- then the CAF is defined as a Tier 2 facility and must comply with Tier 2 requirements.
- 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. Where practicable, these areas should be covered to prevent stormwater 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. 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.
 - f. 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.

2. Pasture and Land Management

The RWQP must include pollution prevention measures and/or BMPs that reduce nonpoint source pollution due to grazing, trail use, on-site roads, etc. 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. An effective plan for pasture and land management shall 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.

3. Application of Manure to Land

If manure or manure-laden debris is applied to land as fertilizer, BMPs must be in place to prevent discharges to surface and groundwater and to comply with the General WDRs Discharge Prohibitions and Waste Discharge Specifications, as follows:

- a. The collection, treatment, storage, or application of manure or process water shall not:
 - Degrade surface water or groundwater,
 - Contaminate or pollute surface water or groundwater, or
 - Create a 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.

- b. The application of manure and/or wastewater 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.
- c. Manure and wastewater discharges to land 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. Land application areas that receive dry manure and/or process water shall be managed to minimize erosion.
- e. 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 anticipated maximum time between land application events (i.e., the storage period) shall be used to determine the needed storage capacity.
- f. Discharges to land of solid or liquid waste shall be applied 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.
- g. Manure, manured bedding and process water shall not be stored or 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 RWQP.

4. Flood Protection

The RWQP shall contain documentation (engineering report or a copy of flood zone map) that the concentrated confined areas have 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.”

B. RWQP Outline

1. Facility Description / Map

- a. Facility Name and Address.
- b. Assessor’s Parcel Number, and Township, Range, Section(s), and Baseline Meridian of the property where the CAF is located.
- c. The name(s), address(es), and telephone number(s) of the property owner(s), facility operator(s), and the contact person for the facility.
- d. 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).
- e. Maximum animal population categories as listed in the Notice of Intent (General WDRs Attachment F, G or H).
- f. A site map (or maps) of appropriate scale to show property boundaries, all existing and proposed land-use designations (crops, grazed areas, CAF facilities, pastures, covered and uncovered confined areas, feeding areas, etc.) and the following in sufficient detail:
 - ✓ 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.
 - ✓ 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.
 - ✓ 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
 - ✓ The location of pasture lands and the pathways which animals travel to and from the production areas (if applicable).

2. Facility Evaluation and Improvement Plan

Each operator must assess their own facility and identify if problem areas exist that will contribute to adverse water quality impacts. If additional minor structural or management

measures are required in order to ensure compliance with the terms of the General Permit, a schedule for improvement must be included within the RWQP and must not exceed 2 year.

3. Operation and Maintenance Best Management Practices

The RWQP shall describe ongoing facility operation and maintenance activities that demonstrate compliance with the discharge prohibitions and specifications of the General WDRs. The plan must describe how the operator complies with the Minimum Pollution Prevention Standards listed above, including the management practices and stormwater pollution prevention measures for the following:

- ✓ Confined area stormwater management
- ✓ Waste storage/composting/transferring/onsite use
- ✓ Pasture management
- ✓ Design and maintenance for roads, trails, and stream crossings
- ✓ Erosion and sediment control

The plan may include daily, monthly or yearly operational check lists, and must also include, but not be limited to:

- a. A description of pollution prevention measures for confined areas including heavily used areas devoid of vegetation, such as travel lanes, corrals and feed racks. Uncovered feeding and/or confined loafing areas must be scraped / cleaned of manure prior to the start of the rainy season, but no later than October 31. These areas should not be used during the rainy season, if they are a source of polluted stormwater discharges.
- b. 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.
- c. 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.
- d. The plan must describe the methods by which manure and any process water are applied to land application areas and describe the BMPs that are implemented to protect surface water and groundwater.
- e. A description of all surface water or potential conduits to surface water that are within 100 feet of any area where manure is applied as a fertilizer. Operators must take appropriate actions to protect water quality, such as utilizing vegetated buffers and setbacks from surface waters.
- f. A description of pollution prevention measures for all non-manure waste or wastewater streams including, but not limited to, silage leachate, compost 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 is prohibited. The Discharger must dispose of dead animals in compliance with all applicable federal, State, county, and local laws and regulations.
- g. A detailed description of any onsite activities or operations that may generate additional waste and/or wastewater that may discharge off-site (such as onsite cheese-making operations or animal wash water). 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 waste and/or waste water is contained.
 - h. Manifests are required to be kept onsite to record transfer of waste to outside facilities and must be kept as part of the RWQP. 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.
 - i. 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.
 - j. Wellheads must be protected to prevent movement of contaminants to groundwater. The RWQP must discuss the manner by which wellheads are protected. The RWQP 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.
 - k. 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.

ATTACHMENT C

California Regional Water Quality Control Board
San Francisco Bay Region

Revised General Waste Discharge Requirements

Waste Management Plan Minimum Requirements

(Only dischargers with liquid waste retention ponds within Tier 2 or Tier 3)

Order No.R2-2016-00xx (hereafter, General WDRs) requires owners and operators of dairies and other confined animal facilities (CAF) that utilize liquid waste retention ponds, to prepare and implement a Waste Management Plan (WMP) for activities within the production and/or confined areas including, but not limited to, the 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) depending on the type and size of the confined animal facility. The plan must detail how the facility operator maintains compliance with General WDRs discharge prohibitions and discharge specifications for all confined areas and retention ponds.

The level of regulatory oversight is dependent upon each discharger's designated water quality risk (as defined in General WDRs, Finding 5). Tier specific requirements are described in Sections A and B below.

A. Tier 2 (CAFs with liquid waste retention ponds):

1. Dischargers have the option to prepare the entire WMP, including containment structure specifications, through a technical education program administrated 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.
2. 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 General WDRs, that it includes all necessary documentation (including calculations), and that all contents of the WMP were done consistent with requirements of the General WDRs and Title 27. Within two 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.
3. 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.

B. Tier 3 (Dairies and other CAFs with liquid waste retention ponds):

1. The WMP must be prepared by a qualified professional, as described above in Requirement A.1. Portions of the plan related to manure and/or waste containment and structural facility specifications shall be certified by a civil engineer who is registered pursuant to California law or another person as may be permitted under the provisions of the California Business and Professions Code to assume responsible charge of such work.
2. Within one year of Tier3 designation or submittal of a Notice of Intent, the WMP must be completed and submitted to the Water Board for review. It must also be kept on the CAF site and 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.
3. The WMP must include a professional assessment of the overall facility, evaluating any conditions or problems preventing compliance with the State's minimum standards and/or requirements of the General WDRs (i.e., overgrazed areas, erosion problems, condition of waste collection system, proximity of confined areas to waterways, etc.).
4. The WMP must include an improvement schedule, including short-term corrective measures to immediately address identified pollutant sources, and needed corrective measures that may require a long-term schedule due to logistics and economic considerations. Such a schedule shall not exceed 3 years.
5. If a Tier 1 facility, due to its complexity, cannot comply with all conditions and provisions of the General WDRs within 2 years, the Executive Officer may designate the facility into Tier 3. Within 1 year from this designation, the WMP must be revised and updated by a qualified professional and all facility improvements must be completed within 2 years.

The plan must contain the following site-specific information:

C. **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 (General WDRs Attachment F, G or H).
6. A site map (or maps) of appropriate scale to show property boundaries, all existing and

proposed land-use designations (crops, grazed areas, CAF 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, General WDRs Attachment D).
- d. The location of pasture lands and the pathways which animals travel to and from the production areas (if applicable).

D. 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

water into underlying soils.

F. 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.”*

G. 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 the General WDRs. 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 October 31. 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 may be 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 **October 31** 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 D. 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.
12. 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.
13. 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.

ATTACHMENT D

California Regional Water Quality Control Board
San Francisco Bay Region

Revised General Waste Discharge Requirements

Nutrient Management Plan Minimum Requirements

(Only dischargers with liquid waste retention ponds within Tier 2 or Tier 3)

Order No. R2-2016-00XX (hereafter, General WDRs) requires the preparation and implementation of a Nutrient Management Plan (NMP) for facilities that require the use of liquid waste retention ponds and that 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, facilities defined as a large Concentrated Animal Feeding Operation (CAFO)¹, that discharge stormwater from cropland where manure, litter, or process wastewater has been applied may enroll under the General WDRs 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. If the facility is designated as a Tier 3 facility, the NMP shall be submitted to the Water Board for review, within 2 years of Tier 3 designation or submittal of an NOI.

¹ 40 CFR section 122.23 (b)(4) defines a large CAFO as an operation that stables or confines as many as, or more than, 700 mature dairy cows, whether milked or dry, 10,000 sheep or lambs, or 500 horses. The size thresholds for all animal sectors are listed in CFR 122.23(b) and (c).

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 General WDRs 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 CAFOs 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 available². Subsequent nutrient budgets shall be based on site-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.

² Crop nutrient needs may be based on recommendations from the University of California or the Western 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.

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.

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 this information is in the MRP (General WDRs, 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

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 CAF 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 E

California Regional Water Quality Control Board
San Francisco Bay Region

Revised General Waste Discharge Requirements

Grazing Management Plan Minimum Requirements

Order No. R2-2016-00XX 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 or.

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 Order, 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

Facility Name:	Owner Name & Address (if different):
Address:	Nearest Water Body:
Operator Name & Address:	Number of Animals:
Operator Telephone Number:	Type of Animals:
Facility's Assessor's Parcel Number:	

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.

Pastures	Yes	No
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?		
Crop Fields		
Do crop-fields have rill or other signs of surface erosion?		
Are crop-fields clean cultivated so that all plant residue is tilled under?		
Road Erosion		
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: _____

Suggestions for correcting problems indicated by yes answers above: _____

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: _____

Other types of animal waste pollution noted: _____

Suggestions for correcting problems indicated by yes answers above: _____

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: _____

SECTION IV. FACILITY INFORMATION

A. Facility Name: _____ _____ _____ Former Facility Name (if applicable): _____ _____ _____		County: _____ _____ _____							
Physical Address: _____ _____ _____		Contact E-mail: _____ _____ _____							
City: _____ _____ _____		State: C I A	Zip Code: _____ _____ _____						
Contact Person: _____ _____ _____		Contact Phone: _____ _____ _____							
Provide Latitude and Longitude of confined areas only if facility does not have a valid street address	<table style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center; border-bottom: 1px solid black;"><u>Degree/minutes/seconds</u></th> <th style="text-align: center; border-bottom: 1px solid black;"><u>Decimal Form</u></th> </tr> </thead> <tbody> <tr> <td style="padding: 2px;">Latitude: _____° _____' _____"</td> <td style="padding: 2px;">_____ . _____</td> </tr> <tr> <td style="padding: 2px;">Longitude: _____° _____' _____"</td> <td style="padding: 2px;">_____ . _____</td> </tr> </tbody> </table>			<u>Degree/minutes/seconds</u>	<u>Decimal Form</u>	Latitude: _____° _____' _____"	_____ . _____	Longitude: _____° _____' _____"	_____ . _____
<u>Degree/minutes/seconds</u>	<u>Decimal Form</u>								
Latitude: _____° _____' _____"	_____ . _____								
Longitude: _____° _____' _____"	_____ . _____								
Provide Assessor Parcel Number(s) for entire operation; indicate if owned or leased (Grazing parcels provided separately in Section IV k.)	_____ _____ _____ _____								
B. Size of Herd: _____ Mature Milked/Dry Cows _____ Heifer/Calf _____ Sheep, milking ewes _____ Lambs _____ Goats _____ Horses _____ Other _____ Total	C. Operation Type: (check one) 1. <input type="checkbox"/> Cow Dairy 2. <input type="checkbox"/> Goat Dairy 3. <input type="checkbox"/> Sheep Dairy 4. <input type="checkbox"/> Horse Boarding 5. <input type="checkbox"/> Other (list animal type) _____ D. Start Date of Current Operations: ____/____/____		E. Maximum design capacity of current confined facility. Report in # of animals: _____ _____ _____ _____						
F. Do your facilities have 700 or more mature cows, 500 horses, or 10,000 or more sheep? Yes _____ No _____ Is a Nutrient Management Plan (NWP) complete? Yes _____ No _____ Date of completion: ____/____/____									
G. Type of containment structure(s) for waste including: manure, litter, silage leachate, process waste or wastewater (including stormwater contacting waste): _____ Total storage capacity of above structure(s): _____ tons/gallons (circle one)									
H. Does the facility have any food processing activities that would contribute to the waste stream and volume? Yes _____ No _____	I. Total acres under the control of the discharger available for land application of manure, litter, or process wastewater: _____ Acres								
J. Is your dairy California Dairy Quality Assurance Program (CDQAP) certified? Yes _____ No _____ Not applicable _____ Date of most recent certification: ____/____/____									
K. Does the facility maintain a grazing operation on lands encompassing 50 acres or greater? Yes _____ No _____ If the answer is yes, please list the Assessor's Parcel Numbers for the grazing operation below (owned and/or leased): _____ _____									

SECTION V. RECEIVING WATER INFORMATION

Does your facility's clean stormwater flow directly and/or indirectly into waters of the State (a stream, river, lake, ocean, etc.)? (circle one)

If it is indirect explain: (for example, "stormwater is diverted to ditch that travels 100 yards to offsite ditch that eventually drains to San Antonio Creek".)

Explanation: _____

Closest receiving waterbody is: _____

SECTION VI. IMPLEMENTATION OF ORDER PROVISIONS

A. STATEWIDE MINIMUM STANDARDS FOR CONFINED ANIMAL FACILITIES (*check if true*)

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)

Liquid waste retention ponds and/or manure storage facilities are designed to accommodate the waste water flow and stormwater contacting confined manured areas, that is likely to accumulate up to and during a 25-year, 24-hour storm event.

Liquid waste retention ponds and manure storage facilities are managed in accordance with the waste discharge specifications for the General WDRs.

All non-manure wastes and/or waste water such as silage leachate, dead animals, waste milk, veterinary medical waste, spoiled feed, bedding, animal wash water, etc., are contained and managed in accordance with the waste discharge specifications for the General WDRs.

All direct and indirect discharges of waste and/or manure, including stormwater contacting waste and/or manure, from the animal confinement areas are contained and prevented from entering any surface water, or tributary thereof.

All confined animals are fenced or excluded from any surface water or perennial streams passing through the confined area.

SECTION VII. MONITORING PROGRAM

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:

The facility will participate in group surface water monitoring

The facility will perform individual surface water monitoring

SECTION VIII. CERTIFICATION

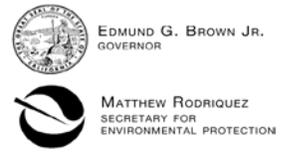
"I certify under penalty of law that this document and all attachments were prepared under my direction and supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage 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 Order, including the implementation of a Monitoring Program Plan, will be complied with."

Owner or Authorized Representative Printed Name*: _____

Owner or Authorized Representative Signature: _____ Date: _____

Telephone Number: _____ Email: _____

* A duly authorized person designated by the owner of the confined animal facility, as having responsibility for the overall operation of the regulated facility. The authorized representative may be the confined animal facility operator or operator's duly authorized designee.



EDMUND G. BROWN JR.
GOVERNOR

MATTHEW RODRIGUEZ
SECRETARY FOR
ENVIRONMENTAL PROTECTION

San Francisco Bay Regional Water Quality Control Board

**NOTICE OF INTENT for
Re-opening of Dormant Confined Animal Facilities
TO COMPLY WITH THE TERMS OF ORDER NO. R2-2016-00XX
GENERAL WASTE DISCHARGE REQUIREMENTS FOR CONFINED ANIMAL FACILITIES**

SECTION I. GENERAL WASTE DISCHARGE REQUIREMENT TIER

Instructions: If you are reopening an existing dormant confined animal facility (CAF) you must complete this Notice of Intent (NOI) form to seek coverage under Order No. R2-2016-00xx. . This NOI applies to existing, dormant CAFs that are re-opened after June 8, 2016.

Check the tier below that describes your CAF facility. Unless the Water Board Executive Officer has already designated your tier, you must self-designate.

Mail completed NOI to: San Francisco Regional Water Quality Control Board; 1515 Clay Street, Suite 1400; Oakland, CA 94612, Attn: Confined Animal Program. Or email to: R2ConfinedAnimals@waterboards.ca.gov

Tier 1: CAF that does not utilize liquid waste retention ponds. Facility must currently comply with the Order's discharge prohibitions and waste discharge specifications. To qualify for coverage, the Discharger must demonstrate completion of the following:

MANAGEMENT PLANS: Prior to start-up, the Discharger must develop a site-specific Ranch Water Quality Plan applicable to each operation, in accordance with technical standards outlined in the Order. Check which of the following apply:

YES NO

Is your Ranch Water Quality Plan complete?

If no, please provide an explanation:

YES NO

Does the CAF include more animals than the existing infrastructure is designed to accommodate? The Order does not authorize construction or expansions of facilities.

Please provide an explanation:

Tier 2: CAF that utilizes liquid waste retention ponds. Facility must currently comply with the Order's discharge prohibitions and waste discharge specifications. To qualify for coverage, the Discharger must demonstrate completion of the following:

MANAGEMENT PLANS: Prior to start-up, the Discharger must develop site-specific management plans applicable to each operation, in accordance with technical standards outlined in the Order. Such plans must include a Waste Management Plan for confined areas, a Nutrient Management Plan for lands where manure products are applied and a Grazing Management Plan for grazing lands totaling 50 acres or more. Check which of the following apply:

YES NO

Waste Management Plan complete?

Nutrient Management Plan complete?

Grazing Management Plan complete?

If no, please provide an explanation:

RETENTION PONDS: Prior to start-up, retention ponds must comply with Natural Resources Conservation Service (NRCS) Waste Storage Facility Code 313, including a maximum specific discharge (unit seepage rate) of 1 x 10⁻⁶ cm/sec. Such ponds may not be used until the Discharger submits a report verifying that the liner meets this requirement.

<p>Provide Assessor Parcel Number(s) for entire operation; indicate if owned or leased (Grazing parcels provided separately in Section IV k.)</p>	<hr/> <hr/> <hr/>	
<p>B. Size of Herd:</p> <p>_____ Mature Milked/Dry Cows</p> <p>_____ Heifer/Calf</p> <p>_____ Sheep, milking ewes</p> <p>_____ Lambs</p> <p>_____ Goats</p> <p>_____ Horses</p> <p>_____ Other</p> <p>_____ Total</p>	<p>C. Operation Type: (check one)</p> <p>1. <input type="checkbox"/> Cow Dairy</p> <p>2. <input type="checkbox"/> Goat Dairy</p> <p>3. <input type="checkbox"/> Sheep Dairy</p> <p>4. <input type="checkbox"/> Horse Boarding</p> <p>5. <input type="checkbox"/> Other (list animal type)</p> <p>_____</p> <p>_____</p> <p>D. Start Date of Current Operations:</p> <p>____/____/____</p>	<p>E. Maximum design capacity of dormant confined facility. Report in # of animals: _____</p> <p>_____</p> <p>F. Maximum design capacity of re-opened confined facility. Report in # animals: _____</p> <p>_____</p> <p>_____</p>
<p>G. Do your facilities have 700 or more mature cows, 500 horses, or 10,000 or more sheep? Yes _____ No _____</p> <p>Is a Nutrient Management Plan (NWP) complete? Yes _____ No _____ Date of completion: ____/____/____</p>		
<p>H. Type of containment structure(s) for waste including: manure, litter, silage leachate, process waste or wastewater (including stormwater contacting waste): _____</p> <p>Total storage capacity of above structure(s): _____ tons/gallons (circle one)</p>		
<p>I. Does the facility have any food processing activities that would contribute to the waste stream and volume?</p> <p>Yes _____ No _____</p>	<p>J. Total acres under the control of the discharger available for land application of manure, litter, or process wastewater:</p> <p>_____ Acres</p>	
<p>K. Is your dairy California Dairy Quality Assurance Program (CDQAP) certified? Yes _____ No _____ Not applicable _____</p> <p>Date of most recent certification: ____/____/____</p>		
<p>L. Does the facility maintain a grazing operation on lands encompassing 50 acres or greater? Yes _____ No _____</p> <p>If the answer is yes, please list the Assessor's Parcel Numbers for the grazing operation below (owned and/or leased):</p> <p>_____</p>		

SECTION V. RECEIVING WATER INFORMATION

<p>Does your facility's clean stormwater flow <u>directly</u> and/or <u>indirectly</u> into waters of the State (a stream, river, lake, ocean, etc.)? (circle one)</p> <p>If it is indirect explain: (for example, "stormwater is diverted to ditch that travels 100 yards to offsite ditch that eventually drains to San Antonio Creek".)</p> <p>Explanation: _____</p> <p>_____</p> <p>_____</p> <p>Closest receiving waterbody is: _____</p>

SECTION VI. IMPLEMENTATION OF ORDER PROVISIONS

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

SECTION VII. MONITORING PROGRAM

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

SECTION VIII. CERTIFICATION

<p>"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 Order, including the implementation of a Monitoring Program Plan, will be complied with."</p> <p>Owner or Authorized Representative Printed Name*: _____</p> <p>Owner or Authorized Representative Signature: _____ Date: _____</p> <p>Telephone Number: _____ Email: _____</p>
--

* A duly authorized person designated by the owner of the confined animal facility, as having responsibility for the overall operation of the regulated facility. The authorized representative may be the confined animal facility operator or operator's duly authorized designee.

San Francisco Bay Regional Water Quality Control Board

**NOTICE OF INTENT for
New or Expanding Confined Animal Facilities**
TO COMPLY WITH THE TERMS OF ORDER NO. R2-2016-00XX
GENERAL WASTE DISCHARGE REQUIREMENTS FOR CONFINED ANIMAL FACILITIES

Instructions:

Facilities defined as “new” or “expanding” pursuant to the Order must submit proof of compliance with the provisions of the California Environmental Quality Act (CEQA) in the form of a certified Environmental Impact Report (EIR), Mitigated Negative Declaration, or Negative Declaration, together with completion of this Notice of Intent (NOI) and appropriate fee, to the Executive Officer to qualify for coverage under the Order.

Mail completed NOI to: San Francisco Regional Water Quality Control Board; 1515 Clay Street, Suite 1400; Oakland, CA 94612, Attn: Confined Animal Program.

Or email to: R2ConfinedAnimals@waterboard.ca.gov

SECTION I. CALIFORNIA ENVIRONMENTAL QUALITY ACT AND REGULATORY COMPLIANCE

California Environmental Quality Act (CEQA) - Demonstration of Completion

YES NO

Has a certified Environmental Impact Report (EIR), Mitigated Negative Declaration (MND), or Negative Declaration been completed?

Please attach a copy of the EIR, MND, or ND to this NOI.

Environmental Compliance Assessment

Yes No **Will development of your CAF result in impacts to wetlands and vernal pools?**

If yes, attach a copy of the Army Corps Section 404 Permit or justification for use of a Nationwide Permit along with any required 401 Certification issued by the San Francisco Bay Regional Water Board to this NOI.

Yes No **Will development of your CAF:**

- Divert or obstruct the natural flow of, or substantially change, any river, stream, or lake?
- Utilize material from the bed, channel, or bank of any river, stream, or lake?
- Deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake?

If yes to any, attach a copy of the Section 1602 Streambed Alteration Agreement, along with a copy of the receipt for the regulatory fee paid to the California Department of Fish and Wildlife to this NOI.

Yes No **Will development of your CAF disturb one or more acres of soil, or is it part of a larger common plan of development that, in total, will disturb one or more acres?**

If yes, attach a copy of the submitted Notice of Intent to enroll in the Construction General Stormwater Permit, State Water Board Order No. 2009-0009-DWQ, to this NOI.

Yes No **Will development of your CAF result in the removal of commercial tree species?**

If yes, attach a copy of any exemption (e.g., Conversion Exemption, a Public Agency, Public and Private Utility Right of Way Exemption, a Notice of Exemption from Timberland Conversion Permit for Subdivision) or an Application for Timberland Conversion Permit to this NOI.

Yes [] No [] **If you are constructing a structure, have the construction plans been approved by the appropriate local building department?**

Not applicable- no structure is being built []

If yes, attach all relevant correspondence and approvals from the local building department.

IF “NO” THE BOARD CANNOT ENROLL YOUR SITE UNDER THIS GENERAL ORDER.

Yes [] No [] **Is the development of your CAF in compliance with any applicable County regulations and ordinances, including grading, construction, and building ordinances?**

If yes, attach a County Grading Permit and any required Erosion Control Plan to this NOI.

Yes [] No [] **Have you completed a biological site assessment (BSA) prepared by a qualified wildlife biologist for the project site?**

If Yes attach a copy of the BSA that describes whether there are any sensitive biological resources such as wetlands, streams, or habitats for special status species and that maps all biological constraints on site development plans to this NOI.

IF “NO” THE BOARD CANNOT ENROLL YOUR SITE UNDER THIS GENERAL ORDER.

Yes [] No [] **Did the BSA determine that special-status species could be affected by site development activities?**

IF “YES” THE BOARD CANNOT ENROLL YOUR SITE UNDER THIS GENERAL ORDER. YOU MUST SUBMIT AN INDIVIDUAL RWD TO THE BOARD TO RECEIVE REGULATORY COVERAGE AND ADDITIONAL CEQA COMPLIANCE MAY BE REQUIRED.

Yes [] No [] **Have you completed a cultural resources inventory by a qualified cultural resources professional?**

If yes, attach a copy of the Cultural Resources Inventory Report to this NOI.

IF “NO” THE BOARD CANNOT ENROLL YOUR SITE UNDER THIS GENERAL ORDER.

Yes [] No [] **Have you required that all construction contractors that will perform ground-disturbing activities implement inadvertent discovery measures for cultural resources? Inadvertent discovery measures must include procedures for discovery and protection of cultural resources during construction.**

If yes, attach a copy of your Inadvertent Discovery Workplan to this NOI that includes discovery measures that require all construction or ground-disturbing activities be halted within 100 feet of a cultural resources discovery until a qualified professional archaeologist can evaluate the find. If known or suspected human remains are discovered, the County Coroner will immediately be notified, and if the remains are of Native American origin, the Native American Heritage Commission will be notified within 24 hours.

IF “NO” THE BOARD CANNOT ENROLL YOUR SITE UNDER THIS GENERAL ORDER.

Space provided for additional explanation for any answers selected above:

SECTION II. Check the Tier below that describes your CAF Operation

Tier 1: CAF that does not utilize liquid waste retention ponds. Facility must currently comply with the Order's discharge prohibitions and waste discharge specifications. To qualify for coverage, the Discharger must demonstrate completion of the following:

MANAGEMENT PLANS: Prior to start-up, the Discharger must develop a site-specific Ranch Water Quality Plan applicable to each operation, in accordance with technical standards outlined in the Order. Check which of the following apply:

YES NO

Is your Ranch Water Quality Plan complete?

If no, please provide an explanation:

YES NO

Does the CAF include more animals than the existing infrastructure is designed to accommodate? The Order does not authorize construction or expansions of facilities.

If no, please provide an explanation:

Tier 2: CAF that utilizes liquid waste retention ponds. Facility must currently comply with the Order's discharge prohibitions and waste discharge specifications. To qualify for coverage, the Discharger must demonstrate completion of the following:

MANAGEMENT PLANS: Prior to start-up, the Discharger must develop site-specific management plans applicable to each operation, in accordance with technical standards outlined in the Order. Such plans may include a Waste Management Plan or Ranch Management Plan for confined areas, a Nutrient Management Plan for lands where manure products are applied and a Grazing Management Plan for grazing lands totaling 50 acres or more. Check which of the following apply:

YES NO

Waste Management Plan complete?

Nutrient Management Plan complete?

Grazing Management Plan complete?

Please provide an explanation for any "no" answers selected above:

RETENTION PONDS: Prior to start-up, retention ponds must comply with Natural Resources Conservation Service (NRCS) Waste Storage Facility Code 313, including a maximum specific discharge (unit seepage rate) of 1×10^{-6} cm/sec. Such ponds may not be used until the Discharger submits a report verifying that the liner meets this requirement.

YES NO

Do retention ponds meet Natural Resources Conservation Service (NRCS) Waste Storage Facility Code 313, including a maximum specific discharge (unit seepage rate) of 1×10^{-6} cm/sec.?

YES NO

Does the CAF include more animals than the existing infrastructure is designed to accommodate?
The Order does not authorize construction or expansions of facilities.

Send Correspondence to : Facility Owner Address (Section II) Lessee/Operator Address (Section III) Facility Address (Section IV)

<p>B. Size of Herd:</p> <p>_____ Mature Milked/Dry Cows</p> <p>_____ Heifer/Calf</p> <p>_____ Sheep, milking ewes</p> <p>_____ Lambs</p> <p>_____ Goats</p> <p>_____ Horses</p> <p>_____ Other</p> <p>_____ Total</p>	<p>C. Operation Type: (check one)</p> <p>1. <input type="checkbox"/> Cow Dairy 2. <input type="checkbox"/> Goat Dairy 3. <input type="checkbox"/> Sheep Dairy</p> <p>4. <input type="checkbox"/> Horse Boarding 5. <input type="checkbox"/> Other (list animal type)</p> <p>_____</p> <p>D. Start Date of Current Operations:</p> <p> ___/___/___</p>	<p>E. Maximum design capacity of dormant confined facility. Report in # of animals: _____</p> <p>_____</p> <p>_____</p> <p>_____</p>
<p>F. Do your facilities have 700 or more mature cows, 500 horses, or 10,000 or more sheep? Yes _____ No _____</p> <p>Is a Nutrient Management Plan (NWP) complete? Yes _____ No _____ Date of completion: ___/___/___</p>		
<p>G. Type of containment structure(s) for waste including: manure, litter, silage leachate, process waste or wastewater (including stormwater contacting waste): _____</p> <p>Total storage capacity of above structure(s): _____ tons/gallons (circle one)</p>		
<p>H. Does the facility have any food processing activities that would contribute to the waste stream and volume?</p> <p>Yes _____ No _____</p>	<p>I. Total acres under the control of the discharger available for land application of manure, litter, or process wastewater:</p> <p>_____ Acres</p>	
<p>J. Is your dairy California Dairy Quality Assurance Program (CDQAP) certified? Yes _____ No _____ Not applicable _____</p> <p>Date of most recent certification: ___/___/___</p>		
<p>K. Does the facility maintain a grazing operation on lands encompassing 50 acres or greater? Yes _____ No _____</p> <p>If the answer is yes, please list the Assessor's Parcel Numbers for the grazing operation below (owned and/or leased):</p> <p>_____</p>		

SECTION VI. RECEIVING WATER INFORMATION

<p>Does your facility's clean stormwater flow <u>directly</u> and/or <u>indirectly</u> into waters of the State (a stream, river, lake, ocean, etc.)? (circle one)</p> <p>If it is indirect explain: (for example, "stormwater is diverted to ditch that travels 100 yards to offsite ditch that eventually drains to San Antonio Creek".)</p> <p>Explanation: _____</p> <p>Closest receiving waterbody is: _____</p>

SECTION VII. IMPLEMENTATION OF ORDER PROVISIONS

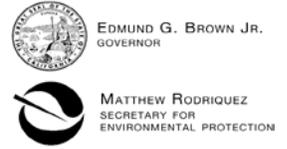
<p>A. STATEWIDE MINIMUM STANDARDS FOR CONFINED ANIMAL FACILITIES (<i>check if true</i>)</p> <p><input type="checkbox"/> Facility is currently operating in compliance with Statewide Minimum Standards for Discharges of Animal Waste (Title 27, see Attachment G)</p>
<p>B. FACILITY / OPERATION MANAGEMENT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

SECTION VIII. MONITORING PROGRAM

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

<p>"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 Order, including the implementation of a Monitoring Program Plan, will be complied with."</p> <p>Owner or Authorized Representative Printed Name: _____</p> <p>Owner or Authorized Representative Signature: _____ Date: _____</p> <p>Telephone Number: _____ Email: _____</p>



San Francisco Bay Regional Water Quality Control Board

NOTICE OF NON-APPLICABILITY

OF COVERAGE UNDER REGIONAL WATER BOARD ORDER R2-2016-00X
GENERAL WASTE DISCHARGE REQUIREMENTS FOR CONFINED ANIMAL FACILITIES
WITHIN SAN FRANCISCO BAY REGION
(General WDRs)

Submission of this Notice of Non-Applicability constitutes notice by the landowner and/or operator of the Confined Animal Facility (CAF) identified on this form that they should not be required to comply with Water Board Order R2-2016-X at this time. Only landowners/operators that are not filing a Notice of Intent (NOI) for coverage under the General WDRs should file this form. If you are unsure whether your CAF is required to comply with the General WDRs, please contact the Water Board, San Francisco Bay Region at 510-622-2508 or email at R2ConfinedAnimals@waterboard.ca.gov.

Note: If the information provided in this form is inaccurate or incomplete, or if the activity at the CAF has changed, this Notice may no longer apply. Further, the information provided shall in no way release the landowner or operator of the CAF from any liability which may result from noncompliance with the requirements of the General WDRs, should they apply. The on-going accuracy of the information provided may be subject to verification by inspection by Water Board staff.

I. LANDOWNER INFORMATION

NAME: _____

MAILING ADDRESS: _____

CITY: _____ STATE: _____ ZIP: _____ PHONE: _____

EMAIL: _____

II. OPERATOR INFORMATION (If different than landowner above)

NAME: _____

MAILING ADDRESS: _____

CITY: _____ STATE: _____ ZIP: _____ PHONE: _____

EMAIL: _____

III. FACILITY INFORMATION

BUSINESS NAME: _____

ASSESSOR PARCEL NUMBER(S) (APN): _____

FACILITY ADDRESS: _____

CITY: _____ STATE: _____ ZIP: _____ PHONE: _____

TYPE OF BUSINESS CONDUCTED AT THE FACILITY: _____

IV. BASIS OF NON-APPLICABILITY

Check each that apply and provide an explanation for each in Section V. below.

_____ 1. This facility is not a commercial confined animal facility.

Title 27 of the California Code of Regulations, section 20164, defines a confined animal facility 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."

_____ 2. This facility was considered a confined animal facility operation. The facility is now closed and all materials and waste associated with the business have been removed or cleaned-up.

Date of closure ___/___/___ Date of completed clean-up ___/___/___

_____ 4. The number of animals within this facility's confined areas is minimal and poses no potential for adverse water quality impact.

_____ 5. The primary means for feeding and containing animals within this facility, is on pasture lands (coverage under a Grazing Waiver may be required).

_____ 6. The animals within this facility are rarely confined and fed in areas devoid of vegetation, especially during the rainy season (explain and estimate number of days/year confined in Section V.).

_____ 7. Stormwater does not contact manure or waste materials within the facility's confined areas and all waste is disposed lawfully off-site.

V. EXPLANATION OF BASIS OF NON-APPLICABILITY

Please include an explanation to support the appropriate category checked in Section IV above. A thorough and complete explanation will streamline the review process relative to any requirements of the General WDR. Attach additional documentation if necessary.

VI. CERTIFICATION

I certify under penalty of law that the identified facility is not required to be covered under Water Board Order R2-2016-X., or that I am not the landowner/operator of the facility. I understand that the submittal of this Notice of Non-Applicability does not release a landowner/operator from liability for any violations of the California Water Code.

Owner or Authorized Representative Printed Name: _____

Owner or Authorized Representative Signature: _____ Date: _____

Telephone Number: _____ Email: _____

Mail	FAX	Email
San Francisco Regional Water Quality Control Board ATTN: Confined Animal Facility Program 1515 Clay Street, Suite 1400 Oakland, CA 94612	San Francisco Bay Regional Water Quality Control Board ATTN: Confined Animal Facility Program (510) 622-2460 (fax)	R2ConfinedAnimals@waterboard.ca.gov

ATTACHMENT J

California Regional Water Quality Control Board - San Francisco Bay Region Revised General 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.

Authorized representative: a duly authorized person designated by the owner of the confined animal facility, as having responsibility for the overall operation of the regulated facility. The authorized representative may be the confined animal facility operator or operator's duly authorized designee.

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 that 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 operator of an existing confined animal facility subject to 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 confined animal facility 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 F,G or H.

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 confined animal facility property or to water bodies that run through or adjacent to the property.

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 stormwater 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 confined animal facility that is 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 stormwater. 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 stormwater 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 stormwater 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 K

California Regional Water Quality Control Board
San Francisco Bay Region

Revised General 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