CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

WASTE DISCHARGE REQUIREMENTS ORDER R5-2013-0109

FOR

CALIFORNIA DAIRIES, INC.
TIPTON MILK PROCESSING FACILITY
TULARE COUNTY

The California Regional Water Quality Control Board, Central Valley Region, (hereafter Central Valley Water Board), finds that:

1. California Dairies, Inc., (hereafter CDI or Discharger) operates a milk processing facility (Facility) at 11894 Avenue 120 near Tipton in Tulare County, Section 18, T22S, R25E, MDB&M, as shown on Attachment A, which is attached hereto and made part of this Order.

2. CDI is a milk marketing cooperative formed in 1999, which combined and merged California Milk Producers, Danish Creamery Association, and San Joaquin Valley Dairyman. The Facility processes raw milk into milk powder, butter, cream, skim milk, condensed milk, and ultra-filtered whole and skim milk concentrates.

3. The Facility began operation in 1994, processing approximately three million pounds of fluid milk per day. Over the years, the Facility has expanded its operation. Current processing capacity at the Facility is approximately 10 million pounds of fluid milk per day. The Facility is currently regulated by Waste Discharge Requirements (WDRs) Order R5-2008-0114, National Pollutant Discharge Elimination System (NPDES) Permit No. CA0082805, which authorizes the discharge of treated wastewater to percolation ponds and to surface water. Surface water discharges are routed to the Morrison Ditch, which connects to the Casa Blanca Canal operated by the Lower Tule River Irrigation District (District). The District's distribution system is hydraulically connected to the Tule River (a water of the U.S.).

4. The Discharger has a history of violating effluent limitations for flow, electrical conductivity (EC), total suspended solids (TSS), and biochemical oxygen demand (BOD). Self-monitoring reports submitted by the Discharger from 2004 through 2007 show several violations of the 30-day average and daily maximum limits for BOD and TSS of 40 mg/L and 80 mg/L, respectively, for discharges to the Morrison Ditch. In addition, self-monitoring data from 2001 through 2004 also shows that the EC of the wastewater discharged to the unlined ponds exceeded the effluent limit of source water plus 500 umhos/cm (approximately 717 umhos/cm) or 1,000 umhos/cm, whichever is less, with EC levels ranging from 1,158 umhos/cm to 2,769 umhos/cm for discharges to unlined storage Pond 2.

5. On 31 July 2008, The Discharger was issued Cease and Desist Order (CDO) R5-2008-0113 to address violations and threatened violations of its WDRs. The CDO required the Discharger to cease discharging wastes in violation and threatened violation of WDR Order R5-2008-0114, and set a time schedule and tasks to implement proposed upgrades and modifications at its Facility to reduce salinity and increase treatment capacity. The Discharger has since completed the tasks required by the 2008 CDO. As part of these modifications, the Discharger also installed five additional percolation ponds and ceased discharging wastewater to the Morrison Ditch. CDO R5-2008-0113 will be rescinded by a separate Order.

6. With completion of the tasks outlined in CDO R5-2008-0113 and cessation of discharge to surface waters starting in May 2009, WDRs R5-2008-0114, NPDES Permit No. CA0082805, no longer reflect the conditions of the discharge. In addition, WDRs Order R5-2008-0114, NPDES Permit No. CA0082805 expires on 31 July 2013.

7. On 25 February 2013, the Discharger submitted a Report of Waste Discharge (RWD) and technical report to revise WDRs for the Facility. The RWD was prepared by Kennedy/Jenks Consultants and addresses operational changes at the Facility including changes to its Wastewater Treatment System and disposal operations, including cessation of discharge to surface waters.

Facility and Discharge

8. The Facility receives fluid whole milk from its member dairies in Tulare, Kings, Kern, and Fresno Counties. Milk received at the Facility is transferred into stainless steel storage silos. The raw milk is then separated into cream, and skim milk. The cream is pasteurized, stored in silos and either shipped out as cream or churned to create butter. The butter is packaged in bulk containers and placed in cold storage prior to shipment. Skim milk and other fluid milk is processed through evaporators to produce condensed milk products such as dry powdered milk.

9. Condensate from the milk evaporators is cooled and condensed forming “COW” water. The COW water is then stored and reused throughout the Facility, where possible, as makeup or equipment wash down water. COW water is low in organics and salinity with an EC of 5 to 50 umhos/cm and a BOD typically less than 5 mg/L. Excess COW water not reused within the Facility is discharged to the Wastewater Treatment System and blended with higher strength wastewater.

10. Source water for the Facility is provided by two on-site supply wells (SPL-001 and SPL-002). These wells are reported to be about 610 feet deep with perforations from about 370 to 590 feet below ground surface (bgs). Between January 2008 and June 2012, the flow-weighted average EC of the source water ranged from about 198 to 232 umhos/cm, and water usage from SPL-001 and SPL-002 averaged about 8.4 and 9.5 million gallons per month, respectively.

11. The Facility uses clean-in-place processes for cleaning tanker trucks, silos, tanks, pumps, piping, and process equipment. The clean-in-place processes utilize a series of programmed rinses, caustic and acid washes, and disinfection to meet sanitary requirements for food processing operations.

12. The Facility has two waste streams. The first (Waste Stream 1) consists of COW water, condensate, and “clear water” streams including boiler blow down, cooling tower blow down, vacuum pump seal water, final flushes, and other waste streams that do not contain large concentrations of organic matter. Brine from the Facility’s two water softeners is included with the boiler blow down. The second (Waste Stream 2) consists of process wastewater, which includes wash water from the clean-in-place process systems, and milk product spillage.

13. In 2006, the Discharger installed a caustic recovery system to minimize the amount of caustic wasted through the clean-in-place processes. The caustic recovery system separates spent caustic in the waste stream from caustic that can be recycled and reused. In 2009, as part of its efforts to reduce salinity, the Discharger expanded the capture, storage, conveyance, and control facilities for the caustic recovery system.

14. The Wastewater Treatment System for the Facility consists of a pond system, with a series of four aerated treatment ponds (Ponds A, B, 1A, and 1B), three partial-mix facultative treatment ponds (Ponds 2A, 2B, and 2C), and seven percolation ponds (Ponds 3 through 9). The aerated and facultative treatment ponds are lined with 60 mil high-density polyethylene (HDPE) liners over an engineered subgrade. A Facility Map showing the ponds and a Flow Schematic of the Facility's Wastewater Treatment System are included in this Order as Attachments B and C.

15. Process wastewater (Waste Stream 2) is collected and routed to a pump station. At the pump station, high salinity waste streams are diverted to equalization tanks for the Mechanical Vapor Recompression Evaporator System (wastewater evaporators). The wastewater evaporators, evaporate and then condense the wastewater. The resulting low salinity condensate is returned to the waste stream. Concentrated brine from the wastewater evaporators is stored, loaded onto tanker trucks, and transported to the East Bay Metropolitan Utility District (East Bay MUD) for further treatment and disposal.

16. Process wastewater not diverted to the wastewater evaporators is directed through a splitter box to flow equally between three of the aerated treatment ponds (Ponds A, B, and 1A). The waste stream is re-combined in the final aerated treatment pond (Pond 1B) before discharging into the first of the three facultative treatment ponds (Pond 2A) operated in series. Pond 2A is where "clear" water discharges (Waste Stream 1) including excess COW water and condensate from the wastewater evaporators normally enters the waste stream, though "clear" water discharges can also be added at Ponds 2B and 2C as well.

17. The lined aerated treatment ponds were reconfigured as part of the Facility modifications to incorporate sufficient aeration capacity to reduce BOD and control odors, and the partial-mix facultative treatment ponds were added to provide additional settling prior to discharge to the percolation ponds.

18. After treatment, the wastewater is discharged into one of seven percolation ponds. The percolation ponds have a combined operational capacity of about 64 million gallons with two feet of freeboard. Discharge to the ponds is rotated to allow sufficient loading and resting cycles to enhance nitrification and denitrification in the soil. In addition, the rotation provides sufficient resting periods to dry the bottom of the ponds so that they can be tilled or ripped to remove surface sealing.

19. The Discharger recently added a Dissolved Air Flotation (DAF) system. The DAF system is used to pre-treat wastewater to enhance removal of BOD, fats, oils, and suspended solids in the event of a spill or upset at the Facility, or for polishing to remove excess suspended solids from the treated wastewater prior to discharging to the percolation ponds.

20. Based on data collected from 2009 through 2012, wastewater discharges from the Facility to the percolation ponds range from about 0.43 million gallons per day (mgd) to 1.2 mgd with average monthly flows from 0.45 mgd to 0.94 mgd. The RWD proposes to keep the current flow limits specified in Order R5-2008-0114 of 1.3 mgd (monthly average) and 3.1 mgd (daily maximum).

21. On 8 April 2013, Kennedy/Jenks Consultants submitted a water balance for the Facility on behalf of the Discharger. The water balance modeled treatment and disposal capacity for the Wastewater Treatment System based on the proposed average flow of 1.3 mgd for 365 days a year for both a normal year and a 100-year wet year. Based on the water balance, the Facility has sufficient disposal capacity for wastewater flows and precipitation with a 100-year return period.

22. The following table depicts the chemical makeup of the wastewater discharged to the percolation ponds based on data collected from December 2010 through June 2012 following upgrades to the Wastewater Treatment System to increase treatment capacity and reduce the salinity of the discharge.

Table 1. Effluent Quality

Constituent/Parameter	Minimum	Maximum	Average
pH	7.5	8.5	7.8
EC (umhos/cm)	96	560	445
BOD (mg/L)	2.5	28	14
TSS (mg/L)	10	160	33
Total Dissolved Solids (mg/L)	240	330	297
Fixed Dissolved Solids (mg/L)	180	250	219
Sodium (mg/L)	35	48	40
Chloride (mg/L)	6.6	41	26
Potassium (mg/L)	64	84	71
Sulfate (mg/L)	9.9	12	11
Nitrate as N (mg/L)	0.3	13	8.5
Ammonia as N (mg/L)	0.1	14	3.1
Total Kjeldahl Nitrogen (mg/L)	3.7	19	7.7
Total Nitrogen (mg/L)	12	22	18

23. According to the Operations and Maintenance Manual for the Wastewater Treatment System, solids that collect in the treatment ponds will be removed, as required, in a manner that does not compromise the integrity of the liners. Recovered solids will be disposed of at a permitted off-site disposal facility or composting operation or applied as a soil amendment on nearby farmland.

Site-Specific Conditions

24. The Facility is on the floor of the San Joaquin Valley in the southern portion of Tulare County. Surface topography slopes gently to the southwest with surface elevations at the site ranging from 270 to 275 feet above mean sea level.

25. Federal Emergency Management Agency (FEMA) maps show that the Facility and the percolation ponds are not within a 100-year flood plain.

26. Storm water runoff from the Facility is collected in sumps and directed to the headworks of the Wastewater Treatment System or to Pond 3, one of the unlined percolation ponds. The Discharger is not required to obtain coverage under a National Pollutant Discharge Elimination System Industrial Storm Water Permit for the discharge because all storm water runoff is retained on-site and does not discharge into a water of the U.S.

27. United States Department of Agriculture, Natural Resources Conservation Service (NRCS), soil survey maps characterize approximately the top six feet of soil. Soils in the vicinity of the site consist of Tagus loam. Tagus loam is described as a Class 1 soil that is well-drained with a hydraulic conductivity between 0.6 and 2 inches per hour. Permeability tests run on soils within the percolation ponds ranged from about 0.2 to 2.7 inches per hour.

28. The climate in the Tipton area is characterized by hot dry summers and mild winters. The rainy season generally extends from November through April. Occasional rains occur during the spring and fall months, but summer months are dry. Based on publications from the Department of Water Resources and the Western Regional Climate Center, the average annual rainfall for the area is about 7.23 inches, with a 100-year-return-period wet year rainfall of about 17 inches. From the California Irrigation Management System (CIMIS), the mean reference evapotranspiration rate (ETo) for the nearby Delano station is about 57.06 inches per year.

29. Land use in the vicinity of the site is primarily agricultural. Crops grown in the area include field and orchard crops such as silage, alfalfa, hay, cereal grains, cotton, corn, walnuts, grapes, and almonds.

30. Domestic wastewater generated at the site is discharged to an on-site septic system regulated by Tulare County.

Groundwater Considerations

31. According to Department of Water Resources Groundwater Elevation Maps (Spring 2010), first-encountered groundwater in the vicinity of the site occurs in an unconfined or semi-confined aquifer at about 140 to 160 feet bgs, and flows to the southwest. The Corcoran Clay, a major confining unit which restricts the vertical movement of groundwater, is encountered at about 300 feet below grade in the vicinity of the site.

32. In 2006, the Discharger installed three monitoring wells (MW-1 through MW-3) at the site. The monitoring wells were completed to depths of 160 to 168 feet bgs. Monitoring well MW-1 was installed to the southeast of the treatment ponds, and monitoring wells MW-2 and MW-3 were installed immediately adjacent to percolation ponds 3 and 4. In 2010, three additional

monitoring wells (MW-4 through MW-6) were installed at the site to expand the monitoring well network. Monitoring wells MW-4 and MW-5 were installed up-gradient of the Facility and the percolation ponds, while monitoring well MW-6 was installed along the southern boundary of the site, down-gradient of the treatment and percolation ponds.

33. Table 2 presents groundwater quality data for constituents of concern:

Table 2. Groundwater Quality

Constituent/Parameter	MW-1[1]	MW-2[1]	MW-3[1]	MW-4[2]	MW-5[2]	MW-6[2]
pH	7.5	7.0	7.2	7.7	7.7	7.2
EC (umhos/cm)	444	856	840	168	251	776
TDS (mg/L)	266	500	488	106	156	456
Alkalinity (mg/L)	197	476	456	88	118	398
Nitrate as N (mg/L)	5.1	2	2	0.7	2	4
Ammonia as N (mg/L)	0.4	0.4	0.3	<0.2	<0.2	<0.2
Calcium (mg/L)	55	94	82	24	33	91
Magnesium (mg/L)	7.9	14	13	2.8	4.4	12
Sodium (mg/L)	31	84	92	7.3	12	63
Chloride (mg/L)	16	33	36	2.9	7.5	33
Sulfate (mg/L)	17	10	9.3	2	5.5	7.1
Iron (mg/L)	0.12	0.3	0.34	0.13	0.16	0.09
Manganese (mg/L)	0.02	0.01	0.07	0.01	<0.01	<0.01
Arsenic (mg/L)	0.004	0.003	0.004	0.004	0.003	0.003
Total Organic Carbon (mg/L)	2	1.2	1.6	1.1	0.5	0.6

1. Average constituent concentrations from May 2006 through May 2012
2. Average constituent concentrations from July 2010 through May 2012

34. Groundwater data from up-gradient monitoring wells MW-4 and MW-5 indicates that the groundwater in the area is of good quality with respect to salinity and nitrates.

35. Groundwater down-gradient of the percolation ponds shows some degradation with respect for salinity. Average EC and TDS concentrations in down-gradient wells at 776 to 856 umhos/cm and 456 to 500 mg/L, respectively, are significantly higher than up-gradient monitoring wells, though they are just at or below the lower recommended secondary Maximum Contaminant Levels (MCLs) for EC and TDS of 900 umhos/cm and 500 mg/L. Sodium and chloride concentrations in down-gradient monitoring wells MW-2, MW-3, and MW-6 are also elevated above background levels at concentrations ranging from 63 to 94 mg/L and 33 to 36 mg/L, respectively.

36. This degradation appears to be the result of the previous discharge of high salinity wastewater to unlined ponds at the Facility as discussed in Finding 4. As presented in Finding 22, the salinity of the wastewater as a measure of the EC has been reduced since completion of the tasks required by CDO R5-2008-0113. Since 2010, the average EC of the discharge at 445 umhos/cm is less than groundwater quality down-gradient of the percolation ponds and significantly less than previous discharges to the unlined ponds which ranged from about 1,158 to 2,769 umhos/cm.

37. Monitoring wells MW-2 and MW-3 immediately adjacent to percolation ponds 3 and 4 show iron concentrations just at or slightly above the secondary MCL of 0.3 mg/L. However, manganese and arsenic concentrations remain similar to background, and data from MW-6 shows that iron concentrations quickly return to background levels as groundwater moves away from the ponds.

Basin Plan, Beneficial Uses, and Water Quality Objectives

38. The *Water Quality Control Plan for the Tulare Lake Basins, Second Edition, revised January 2004* (Basin Plan) designates beneficial uses, establishes narrative and numerical water quality objectives, contains implementation plans and policies for protecting all waters of the Basin, and incorporates, by reference, plans and policies of the State Water Board. In accordance with Water Code section 13263(a), these requirements implement the Basin Plan.

39. The Facility lies within the Tule Delta Hydrologic Area (558.20) of the South Valley Floor Hydrologic Unit, as depicted on interagency hydrologic maps prepared by the State Water Resources Control Board and the Department of Water Resources, revised in August 1986. The Basin Plan designates beneficial uses for the Tule River (below Lake Success) as: municipal and domestic supply (MUN), agricultural supply (AGR), industrial process supply (PRO), industrial service supply (IND), non-contact recreation (REC-2), warm fresh water habitat (WARM), wildlife habitat (WILD), and groundwater recharge (GWR).

40. The discharge occurs in Detailed Analysis Unit (DAU) 243 of the Tule Basin Hydrologic Unit of the Tulare Lake Basin. The Basin Plan designates the beneficial uses of groundwater in DAU 243 as MUN, AGR, PRO, IND, and WILD.

41. The Basin Plan establishes narrative water quality objectives for chemical constituents, tastes and odors, and toxicity in groundwater. It also sets forth a numeric objective for total coliform organisms.

42. The Basin Plan's numeric water quality objective for bacteria requires that the most probable number (MPN) of coliform organisms over any seven-day period shall be less than 2.2 per 100 mL in MUN groundwater.

43. The Basin Plan's narrative water quality objective for chemical constituents that, at a minimum, requires waters designated as domestic and municipal supply to meet the State drinking water maximum contaminant levels (MCLs) specified in Title 22, California Code of Regulations (CCR). The Basin Plan recognizes that the Central Valley Water Board may apply limits more stringent than MCLs to ensure that waters do not contain chemical constituents in concentrations that adversely affect beneficial uses.

44. The narrative toxicity objective requires that groundwater be maintained free of toxic substances in concentrations that produce detrimental physiological responses in human, animal, plant, or aquatic life associated with designated beneficial uses.

45. The Basin Plan identifies the greatest long-term problem facing the entire Tulare Lake Basin as the increase in salinity in groundwater, which has accelerated due to the intensive use of soil and water resources by irrigated agriculture. The Basin Plan recognizes that degradation

is unavoidable until there is a long-term solution to the salt imbalance. Until then, the Basin Plan establishes several salt management requirements, including:

a. The incremental increase in salts from use and treatment must be controlled to the extent possible. The maximum EC of the effluent discharged to land shall not exceed the EC of the source water plus 500 umhos/cm. When the source water is from more than one source, the EC shall be a weighted average of all sources.

b. Discharges to areas that may recharge good quality groundwater shall not exceed an EC of 1,000 umhos/cm, a chloride content of 175 mg/L, or a boron content of 1 mg/L.

46. Quantifying a narrative water quality objective requires a site specific evaluation of those constituents that have the potential to impact water quality and beneficial uses. The Basin Plan states that when compliance with a narrative objective is required to protect beneficial specific uses, the Central Valley Water Board will, on a case-by-case basis, adopt numerical limitations in order to implement the narrative objective.

47. In the absence of specific numerical water quality limits, the Basin Plan methodology is to consider any relevant published criteria. General salt tolerance guidelines, such as *Water Quality for Agriculture* by Ayers and Westcot and similar references indicate that yield reductions in nearly all crops are not evident when irrigating with water having an EC less than 700 umhos/cm, a sodium of 69 mg/L or less, and a chloride of 106 mg/L or less. There is, however, an eight- to ten-fold range in salt tolerance for agricultural crops, and the appropriate salinity values to protect agriculture in the Central Valley are considered on a case-by-case basis. It is possible to achieve full yield potential with waters having EC up to 3,000 umhos/cm if the proper leaching fraction is provided to maintain soil salinity within the tolerance of the crop.

48. The list of crops in Finding 29 is not intended as a definitive inventory of crops that are or can be grown in the area affected by the discharge but is representative of agricultural practices in the area. Agricultural operations in the area typically irrigate with groundwater or irrigation water from the Lower Tule River Irrigation District, which exhibits good quality with respect to minerals. Based on climate and soil type, it is likely that salt sensitive crops can be grown in the area.

49. The Basin Plan encourages the reuse of wastewater and identifies crop irrigation as a reuse option where the opportunity exists to replace an existing or proposed use of fresh water with recycled water. This Order includes a Provision, requiring the Discharger to periodically report on its efforts to promote opportunities to further recycle or reclaim its wastewater.

Antidegradation Analysis

50. State Water Board Resolution No. 68-16, *Policy with Respect to Maintaining High Quality Water of the State* (the "Antidegradation Policy"), prohibits the Board from permitting the degradation of groundwater unless it has been shown that:

a. The degradation does not result in water quality less than that prescribed in state and regional policies, including violation of one or more water quality objectives;

b. The degradation will not unreasonably affect present and anticipated future beneficial uses;

c. The Discharger employs Best Practicable Treatment or Control (BPTC) to minimize degradation; and

d. The degradation is consistent with the maximum benefit to the people of the State.

51. Constituents of concern in the discharge (those with the greatest potential to affect beneficial uses of receiving water) include nitrogen and salts. However, the discharge is not expected to cause groundwater to exceed water quality objectives because:

a. For nitrogen, groundwater data shows nitrate concentrations up-gradient of the Facility ranging from 0.2 to 2.4 mg/L. With an average total nitrogen concentration of about 18 mg/L, the discharge has the potential to degrade groundwater with respect to nitrates. An antidegradation analysis prepared by Kennedy/Jenks Consultants, evaluated the migration of nitrates through the vadose zone beneath the percolation ponds. Given the nitrogen losses in the ponds as the effluent percolates through the soil, the model projects that nitrate concentrations in the effluent reaching groundwater will be less than 10 mg/L. Recent groundwater data appears to corroborate model findings.

To protect the MUN beneficial use, the Groundwater Limitations in this Order will proscribe the discharge from increasing nitrate (as N) concentrations in groundwater above 10 mg/L.

b. For salinity in general, the Basin Plan includes effluent EC limits of 500 umhos/cm plus source water or a maximum of 1,000 umhos/cm for discharges to areas overlying good quality groundwater. As the Tulare Lake Basin is a closed basin, these limits are designed to control the rate of groundwater degradation with respect to salinity. With an average source water EC of about 214 umhos/cm, the average effluent EC of 445 umhos/cm meets the Basin Plan limits.

EC and TDS concentrations in groundwater up-gradient of the site range from about 150 to 300 umhos/cm and 80 to 200 mg/L, respectively. Given that the average EC and TDS of the effluent is about 445 umhos/cm and 297 mg/L, respectively, the discharge has the potential to degrade groundwater. As discussed previously under groundwater conditions, groundwater down-gradient of the percolation ponds has been degraded as a result of past discharges at the Facility. The Discharger has since implemented several measures which have reduced the salinity of its discharge.

A Groundwater Model prepared for the antidegradation analysis, provided in the RWD, evaluated the potential groundwater degradation for salinity over time with respect to the existing degradation and continued discharge of process wastewater to unlined percolation ponds. The Groundwater Model projects that within about two to three years the existing groundwater degradation will improve, and that EC levels beneath the Facility will be less than 700 umhos/cm, which will meet the most stringent water quality goal for protection of agricultural beneficial uses. The Model further projects that within the next 8- to 12-years the salt plume beneath the Facility will stabilize, with

an EC similar to effluent water quality. The discharge is not expected to cause groundwater degradation at the site that exceeds water quality objectives.

c. Concentrations of sodium and chloride in groundwater up-gradient of the Facility are about 10.6 mg/L and 7.8 mg/L, respectively. Given the average sodium and chloride of the effluent is about 40 mg/L and 26 mg/L, respectively, the discharge has the potential to degrade groundwater for these constituents.

There are currently no numeric standards in the Basin Plan for protecting groundwater for agricultural beneficial uses. Interpretation of narrative water quality standards is done on a case-by-case basis. The most stringent water quality goals for sodium and chloride are the agricultural water quality goals of 69 mg/L and 106 mg/L, respectively, for protection of salt sensitive crops based on Ayers and Westcot's *Water Quality for Agriculture*. Given the average effluent concentrations of 40 mg/L for sodium and 26 mg/L for chloride, the discharge is not expected to cause groundwater to exceed these water quality goals.

Two down-gradient monitoring wells MW-2 and MW-3 contain sodium in excess of 69 mg/L, as a result of past discharges at the Facility. However, implementation of salinity reduction measures at the Facility, including the substitution of potassium hydroxide for sodium hydroxide in certain cleaning processes, has reduced the concentration of sodium in the discharge and should prevent further degradation of groundwater for sodium.

Treatment and Control Practices

52. The Discharger provides treatment and control of the discharge that incorporates:

a. Aeration and partial-mixing of the wastewater in ponds to reduce BOD and remove solids;

b. Lining of the treatment ponds;

c. Re-circulating of wastewater and operation of a DAF system to increase BOD and nitrogen removal;

d. Minimizing the use of cleaning chemicals and substituting potassium hydroxide for sodium hydroxide to decrease the salt load in the wastewater;

e. Expansion of the caustic recovery system to reduce the amount of salt added to the wastewater;

f. Operation of wastewater evaporators to treat high salinity waste streams;

g. Blending of lower salinity wastewater with higher strength wastewater to reduce the salinity of the discharge to the percolation ponds; and

h. Removal of concentrated brine from the wastewater evaporators for off-site treatment and disposal.

These treatment and control practices are reflective of BPTC of the discharge.

Antidegradation Conclusions

53. This Order establishes terms and conditions to ensure that the discharge does not unreasonably affect present and anticipated future beneficial uses or result in water quality less than water quality objectives.

54. Economic prosperity of valley communities and associated industry is of maximum benefit to the people of the State and, therefore, sufficient reason exists to accommodate growth and limited groundwater degradation around the Facility, provided that the terms of the Basin Plan are met. The Discharger aids in the economic prosperity of the region by direct employment of about 126 employees, making it the largest employer in the Pixley area. The Facility also provides additional benefits to California and Tulare County by providing a local market for suppliers, farmers, truckers, and dairymen in the area as well as providing a tax base for local and county governments. This Order does authorize some limited degradation of groundwater for nitrates and salinity, but the degradation is not anticipated to result in water quality less than water quality objectives or unreasonably affect beneficial uses.

55. This Order is consistent with the Antidegradation Policy since: (a) the Discharger has implemented BPTC to minimize degradation, (b) the limited degradation allowed by this Order will not unreasonably affect present and anticipated future beneficial uses of groundwater, or result in water quality less than water quality objectives, and (c) the limited degradation is of maximum benefit to people of the State.

CEQA

56. On 17 March 1991, Tulare County, in accordance with the California Environmental Quality Act (CEQA) (Pub. Resources Code, § 21000 et seq.) adopted a Negative Declaration for construction and operation of a Milk Processing Facility near Tipton with discharge of wastewater to unlined ponds and to an adjacent irrigation canal. Central Valley Water Board staff reviewed the Negative Declaration and found compliance with Waste Discharge Requirements would prevent and/or mitigate adverse impacts to water quality.

57. On 10 July 2008, Tulare County adopted a Negative Declaration in conjunction with a Special Use Permit (PSP 06-033) for expansion of the existing wastewater treatment system and addition of five retention ponds for the existing Tipton Milk Processing Facility. The Negative Declaration found that the project, as proposed would not have a significant effect on the environment. Central Valley Water Board staff commented on the Negative Declaration and requested additional details on pond designs and liner specifications, wastewater quality, soil types, and a demonstration on how the ponds will comply with the antidegradation policy. The Discharger submitted this information to the Central Valley Water Board separately.

58. This Order includes specific conditions intended to protect water quality, including, but not limited to:

    a. Flow Limitation B.1, which sets an average daily flow and maximum daily flow limits for discharges to the percolation ponds.

    b. Effluent Limitations C.1, C.2, and C.3 for chloride, boron, pH, and EC for discharges to the percolation ponds.

c. Discharge Specification D.1, which stipulates waste constituents cannot be released or discharged in a concentration or mass that causes violation of this Order's Groundwater Limitations.

Designated Waste and Title 27

59. California Code of Regulations (CCR), Title 27 (hereafter Title 27) contains regulatory requirements for the treatment, storage, processing, and disposal of solid waste, which includes designated waste, as defined by Water Code section 13173. However, Title 27 exempts certain activities from its provisions. Discharges regulated by this Order are exempt from Title 27 pursuant to a provision that exempts wastewater under specific conditions. This exemption, found at Title 27, section 20090, is described below:

> (b) Wastewater – Discharges of wastewater to land, including but not limited to evaporation ponds, percolation ponds, or subsurface leachfields if the following conditions are met:
>
> (1) The applicable regional water quality control board has issued WDRs, reclamation requirements, or waived such issuance;
>
> (2) The discharge is in compliance with applicable water quality control plan; and
>
> (3) The wastewater does not need to be managed according to Chapter 11, Division 4.5, Title 22 of this code as a hazardous waste.

60. The discharge authorized herein is exempt from the requirements of Title 27 in accordance with Title 27, section 20090(b) because:

a. The Central Valley Water Board is issuing WDRs.

b. The discharge is in compliance with the Basin Plan, and;

c. The treated effluent discharged to the percolation ponds does not need to be managed as hazardous waste.

Other Regulatory Considerations

61. The annual fee for the discharge is based on a Threat to Water Quality and Complexity rating of 2B (Title 23, CCR, section 2200), as defined below:

a. Category 2, threat to water quality: "those discharges of waste that could impair the designated beneficial uses of the receiving water, cause short-term violations or water quality objectives, cause secondary drinking water standards to be violated, or cause a nuisance."

b. Category B complexity: "Any discharger not included in Category A that has physical, chemical, or biological treatment systems (except for septic systems with subsurface disposal), or any Class 2 or Class 3 waste management units."

General Findings

62. Pursuant to Water Code section 13263(g), discharge is a privilege, not a right, and adoption of this Order does not create a vested right to continue the discharge.

63. The Central Valley Water Board will review this Order periodically and will revise requirements when necessary.

64. Water Code section 13267(b) states that:

> In conducting an investigation…the regional board may require that any person who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge waste within its region…shall furnish, under penalty of perjury, technical or monitoring program reports which the regional board requires. The burden, including costs, of these reports shall bear a reasonable relationship to the need for the report and the benefits to be obtained from the reports. In requiring these reports, the regional board shall provide the person with a written explanation with regard to the need for the reports, and shall identify the evidence that supports requiring that person to provide the reports.

65. The technical reports required by this Order and monitoring reports required by the attached Monitoring and Reporting Program (MRP) R5-2013-0109 are necessary to assure compliance with these waste discharge requirements. The Discharger operates the facility that discharges the waste subject to this Order.

66. All the above and the supplemental information and details in the attached Information Sheet, which is a part of this Order, were considered in establishing the conditions of discharge in this Order.

Public Notice

67. The Discharger and interested agencies and persons have been notified of the intent to prescribe waste discharge requirements for this discharge, and they have been provided an opportunity for a public hearing and an opportunity to submit their written views and recommendations.

68. All comments pertaining to the discharge were heard and considered in a public meeting.

IT IS HEREBY ORDERED, that Waste Discharge Requirements Order R5-2008-0114, National Pollutant Discharge Elimination System Permit No. CA0082805, is rescinded and that, pursuant to sections 13263 and 13267 of the Water Code, California Dairies, Inc., its agents, successors, and assigns, in order to meet the provisions contained in Division 7 of the Water Code and regulations adopted thereunder, shall comply with the following:

A. Prohibitions

1. Discharge of waste, including storm water containing waste, to surface waters or surface water drainage courses is prohibited.

2. Bypass or overflow of untreated or partially treated wastes, except as allowed by Standard Provisions E.2 in *Standard Provisions and Reporting Requirements for Waste Discharge Requirements*, dated 1 March 1991, is prohibited.

3. Discharge of waste classified as *'hazardous',* as defined in California Code of Regulations, title 22, section 66261.1 *et seq*., is prohibited. Discharge of waste classified as *'designated',* as defined in Water Code section 13173, is prohibited.

4. Discharge of wastewater in a manner or location other than that described herein or in the Report of Waste Discharge is prohibited.

B. Flow Limitations

1. Discharge to the percolation ponds shall not exceed a daily maximum flow of 3.1 mgd or a monthly average flow of 1.3 mgd. [Monitored at EFF-001]

C. Effluent Limitations

1. Effluent shall not exceed the following limitations: [Monitored at EFF-001]

Parameter	Units	Monthly Average	Daily Maximum
BOD_5	mg/L	40	80
Chloride	mg/L	- - -	175
Boron	mg/L	- - -	1.0

2. The pH of the effluent shall not be less than 6.0 or greater than 9.0. [Monitored at EFF-001]

3. The 12-month rolling average EC of the effluent shall not exceed the 12-month rolling average EC of the source water plus 500 umhos/cm, or a maximum of 1,000 umhos/cm, whichever is more stringent. Compliance with this effluent limitation shall be determined monthly. When source water is from more than one source, the EC shall be a weighted average of all sources. [Monitored at EFF-001]

D. Discharge Specifications

1. No waste constituents shall be released, discharged, or placed where it will be released or discharged, in a concentration or in a mass that causes violation of the Groundwater Limitations of this Order.

2. The Discharger shall operate all systems and equipment to optimize the quality of the discharge.

3. The wastewater treatment, storage, and disposal shall not cause pollution or a nuisance as defined by Water Code section 13050.

4. Objectionable odors shall not be perceivable beyond the limits of the Facility at an intensity that creates or threatens to create nuisance conditions.

5. All conveyance, treatment, storage, or disposal systems shall be designed, constructed, operated, and maintained to prevent inundation or washout due to floods with a 100-year return frequency.

E. Solids Specifications

Solids as used in this document, means the solids, semisolid, and liquid residues removed during the wastewater treatment process.

1. Any handling and storage of residual solids shall be temporary and controlled and contained in a manner that minimizes leachate formation and precludes infiltration of waste constituents into soils in a mass or concentration that will violate the Groundwater Limitations of this Order.

2. Any proposed change in solids handling or disposal practice shall be reported in writing to the Executive Officer at least 90 days in advance of the change.

F. Groundwater Limitations

Release of waste constituents from any treatment, reclamation, or storage component associated with the discharge shall not cause or contribute to groundwater containing constituent concentrations in excess of the concentrations specified below or background quality, whichever is greater:

1. Nitrate (as N) of 10 mg/L.

2. For constituents identified in Title 22, the MCLs quantified therein.

G. Provisions

1. The Discharger shall comply with the *Standard Provisions and Reporting Requirements for Waste Discharge Requirements,* dated 1 March 1991 (Standard Provisions), which are part of this Order.

2. The Discharger shall comply with Monitoring and Reporting Program (MRP) R5-2013-0109, which is part of this Order, and any revisions thereto as adopted by the Central Valley Water Board or approved by the Executive Officer.

3. The Discharger shall report promptly to the Central Valley Water Board any material change or proposed change in the character, location, or volume of the discharge.

4. In the event of any change in control or ownership of land or waste treatment and storage facilities presently owned or controlled by the Discharger, the Discharger shall notify the succeeding owner or operator of the existence of this Order by letter, a copy of which shall be immediately forwarded to the appropriate Central Valley Water Board office (currently, the Fresno office).

5. To assume operation under this Order, the succeeding owner or operator must apply in writing to the Executive Officer requesting transfer of the Order. The request must contain the requesting entity's full legal name, the state of incorporation if a corporation, the address and telephone number of the persons responsible for contact with the Central Valley Water Board and a statement. The statement shall comply with the signatory paragraph of Standard Provision B.3 and state that the new owner or operator assumes full responsibility for compliance with this Order. Failure to submit the request shall be considered a discharge without requirements, a violation of the Water Code. If approved by the Executive Officer, the transfer request will be submitted to the Central Valley Water Board for its consideration of transferring the ownership of this Order at one of its regularly scheduled meetings.

6. The Discharger shall keep at the Facility a copy of this Order, including its MRP, Information Sheet, attachments, and Standard Provisions, for reference by operating personnel. Key operating personnel shall be familiar with its contents.

7. The Discharger must comply with all conditions of this Order, including timely submittal of technical and monitoring reports as directed by the Executive Officer. Accordingly, the Discharger shall submit to the Central Valley Water Board on or before each report due date the specified document or, if an action is specified, a written report detailing evidence of compliance with the date and task. If noncompliance is being reported, the reasons for such noncompliance shall be stated, plus an estimate of the date when the Discharger will be in compliance. The Discharger shall notify the Central Valley Water Board by letter when it returns to compliance with the time schedule. Violations may result in enforcement action, including Central Valley Water Board or court orders requiring corrective action or imposing civil monetary liability, or in revision or rescission of this Order.

8. The Discharger must at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) that are installed or used by the Discharger to achieve compliance with the conditions of this Order. Proper operation and maintenance also include adequate laboratory controls and appropriate quality assurance procedures. This Provision requires the operation of back-up or auxiliary facilities or similar systems that are installed by the Discharger only when the operation is necessary to achieve compliance with the conditions of this Order.

9. As a means of discerning compliance with Discharge Specification D.4, the dissolved oxygen (DO) content in the upper one foot of any wastewater pond (other than those that require an anoxic or anaerobic environment for the designed treatment) shall not be less than 1.0 mg/L for three consecutive sampling events. In the event that this occurs, the Discharger will switch to daily DO monitoring and shall report the findings to the Central Valley Water Board in writing within 10 days along with a specific plan to resolve the low DO issue. Daily monitoring for DO shall continue until the issue has been resolved.

10. The Discharger shall maintain and operate surface impoundments in a manner that protects the integrity of containment levees and prevents overtopping or overflows. Unless a California registered civil engineer certifies (based on design, construction, and conditions of operation and maintenance) that less freeboard is adequate, the operating freeboard shall never be less than two feet (measured vertically). As a means of management and to discern compliance with this Provision, the Discharger shall install and maintain a permanent marker with calibration that indicates the water level at the design capacity and enables determination of available operational freeboard.

11. The Discharger shall submit all technical reports and work plans required by this Order for Central Valley Water Board staff consideration and incorporate comments they may have in a timely manner, as appropriate. The Discharger shall proceed with all work required by the following provisions by the due dates specified.

12. All technical reports and work plans required herein that involve planning, investigation, evaluation, or design, or other work requiring interpretation and proper application of engineering or geologic sciences, shall be prepared by or under the direction of persons registered to practice in California pursuant to California Business and Professions Code sections 6735, 7835, and 7835.1. As required by these laws, completed technical reports and work plans must bear the signature(s) and seal(s) of the registered professionals(s) in a manner such that all work can be clearly attributed to the professional responsible for the work. All reports required herein are required pursuant to Water Code section 13267.

13. **By 28 July 2014**, and periodically thereafter, but not less than once every five years, the Discharger shall document its efforts to promote opportunities to further recycle or reclaim its wastewater.

14. If the Central Valley Water Board determines that waste constituents in the discharge have reasonable potential to cause or contribute to an exceedance of an objective for groundwater, this Order may be reopened for consideration of addition or revision of appropriate numerical effluent or groundwater limitations for potential constituents.

15. The Central Valley Water Board is currently implementing the CV-SALTS initiative to develop a Basin Plan amendment that will establish a salt and nitrate management plan for the Central Valley. Through this effort the Basin Plan will be amended to define how the narrative water quality objectives are to be interpreted for the protection of agricultural use. If new information or evidence indicates that groundwater limitations different than those prescribed herein are appropriate, this Order will be reopened to incorporate such limits.

16. The Central Valley Water Board will review this Order periodically and will revise requirements when necessary.

If, in the opinion of the Executive Officer, the Discharger fails to comply with the provisions of this Order, the Executive Officer may refer this matter to the Attorney General for judicial enforcement, and may issue a complaint for administrative civil liability, or may take other enforcement actions. Failure to comply with this Order or with the WDRs may result in the assessment of Administrative Civil Liability of up to $10,000 per violation, per day, depending on the violation, pursuant to the Water Code, including sections 13268, 13350 and 13385. The Central Valley Water Board reserves its right to take any enforcement actions authorized by law.

Any person aggrieved by this action of the Central Valley Water Board may petition the State Water Board to review the action in accordance with Water Code section 13320 and California Code of Regulations, title 23, section 2050 and following. The State Water Board must receive the petition by 5:00 p.m., 30 days after the date of this Order, except that if the thirtieth day following the date of this Order falls on a Saturday, Sunday, or state holiday, the petition must be received by the State Water Board by 5:00 p.m. on the next business day. Copies of the law and regulations applicable to filling petitions may be found on the Internet at:

http://www.waterboards.ca.gov/public_notices/petitions/water_quality/

or will be provided upon request.

I, PAMELA C. CREEDON, 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, Central Valley Region, on 26 July 2013.

Original signed by:

PAMELA C. CREEDON, Executive Officer

Order Attachments:
A Location Map
B Facility Map
C Flow Schematic

Monitoring and Reporting Program R5-2013-0109
Information Sheet
Standard Provisions (1 March 1991)

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

MONITORING AND REPORTING PROGRAM R5-2013-0109

FOR

CALIFORNIA DAIRIES, INC.
TIPTON MILK PROCESSING FACILITY
TULARE COUNTY

This Monitoring and Reporting Program (MRP) is required pursuant to Water Code section 13267.

The Discharger shall not implement any changes to this MRP unless and until the Central Valley Water Board adopts, or the Executive Officer issues, a revised MRP. Changes to sample location shall be established with concurrence of Central Valley Water Board staff, and a description of the revised stations shall be submitted for approval by the Executive Officer.

All samples shall be representative of the volume and nature of the discharge or matrix of material sampled. All analyses shall be performed in accordance with ***Standard Provisions and Reporting Requirements for Waste Discharge Requirements***, dated 1 March 1991 (Standard Provisions).

Field test instruments (such as pH) may be used provided that the operator is trained in the proper use of the instrument and each instrument is serviced and/or calibrated at the recommended frequency by the manufacturer or in accordance with manufacturer instructions.

Analytical procedures shall comply with the methods and holding times specified in the following: *Methods for Organic Chemical Analysis of Municipal and Industrial Wastewater* (EPA); *Test Methods for Evaluating Solid Waste* (EPA); *Methods for Chemical Analysis of Water and Wastes* (EPA); *Methods for Determination of Inorganic Substances in Environmental Samples* (EPA); *Standard Methods for the Examination of Water and Wastewater* (APHA/AWWA/WEF); and *Soil, Plant and Water Reference Methods for the Western Region* (WREP 125). Approved editions shall be those that are approved for use by the United States Environmental Protection Agency or the California Department of Public Health's Environmental Laboratory Accreditation Program). The Discharger may propose alternative methods for approval by the Executive Officer.

If monitoring consistently shows no significant variation in magnitude of a constituent concentration or parameter after at least 12 months of monitoring, the Discharger may request this MRP be revised to reduce monitoring frequency. The proposal must include adequate technical justification for reduction in monitoring frequency.

A glossary of terms used within this MRP is included on page 8.

Monitoring Location Name	Monitoring Location Description
EFF-001	Location where a representative sample of the Facility's effluent can be obtained after all treatment units, prior to discharge to unlined percolation ponds.
PND-003 through PND-009	Opposite inlet to each unlined percolation pond.
SPL-001 and SPL-002	Water supply wells.
G-001 through G-006	Groundwater monitoring wells.

EFFLUENT MONITORING

The Discharger shall monitor the effluent from the Facility at EFF-001 as follows:

Frequency	Constituent/Parameter	Units	Sample Type
Daily	Flow	mgd	Continuous
Weekly	pH	pH Units	Grab
Weekly	EC	umhos/cm	Grab
Monthly	BOD_5	mg/L	Grab
Monthly	TDS	mg/L	Grab
Monthly	Nitrate (as N)	mg/L	Grab
Monthly	Ammonia (as N)	mg/L	Grab
Monthly	Total Kjeldahl Nitrogen	mg/L	Grab
Monthly	Total Nitrogen	mg/L	Computed
Quarterly	General Minerals[1]	mg/L	Grab

1 At a minimum the General Mineral analysis shall include alkalinity, bicarbonate, boron, calcium, carbonate, chloride, hardness, magnesium, potassium, phosphorus, sodium, and sulfate.

POND MONITORING

Permanent markers (e.g., staff gages) shall be placed in all percolation ponds. The markers shall have calibrations indicating water level at the design capacity and available operational freeboard. Pond monitoring at PND-003 through PND-009 shall include at least the following:

Frequency	Constituent/Parameter	Units	Sample Type
Weekly	DO	mg/L[1]	Grab
Weekly	Freeboard	Feet[2]	Observation
Weekly	Odors	- - -	Observation
Weekly	Berm Condition	- - -	Observation

1. Samples shall be collected at a depth of one foot opposite the inlet from each pond in use. Should objectionable odors be detected or the DO be below 1 mg/L for three consecutive weekly sampling events, the Discharger shall take all reasonable steps to correct the problem and commence daily DO monitoring in the affected ponds until the problem has been resolved.
2. To the nearest tenth of a foot.

The Discharger shall inspect the condition of the percolation ponds weekly and record visual observations in a bound logbook. Notations shall include observations of whether weeds are developing in the water or along the bank, and their location; whether grease, dead algae, vegetation, scum, or debris are accumulating on the surface of the pond and their location; whether burrowing animals or insects are present; and the color of the water (e.g., dark green, dull green, yellow, gray, tan, brown, etc.). A summary of the entries made in the log shall be included in the subsequent monitoring report.

SOURCE WATER MONITORING

The Discharger shall monitor the Facility's source water supply at SPL-001 and SPL-002 as follows:

Frequency	Constituent/Parameter	Units	Sample Type
Annually	Flow-Weighted EC	umhos/cm	Computed Average
Annually	Flow-Weighted TDS	mg/L	Computed Average
1/three years[1]	General Minerals	mg/L	Grab

1 Sample to be collected from all water supply wells and analyzed for general minerals once every three years. Starting the season following adoption of this Order.

GROUNDWATER MONITORING

After measuring water levels and prior to collecting samples, each monitoring well shall be adequately purged to remove water that has been standing within the well screen and casing that may not be chemically representative of formation water. Depending on the hydraulic conductivity of the geologic setting, the volume removed during purging is typically from 3 to 5 well casing volumes.

The Discharger shall monitor the wells in its monitoring well network at G-001 through G-006 and any subsequent additional monitoring wells as follows:

Frequency	Constituent/Parameter	Units	Sample Type
Quarterly	Depth-to-Water	Feet[1]	Measured
Quarterly	Groundwater Elevation	Feet[2]	Calculated
Quarterly	pH	s.u.	Grab
Quarterly	EC	umhos/cm	Grab
Quarterly	TDS	mg/L	Grab
Quarterly	General Minerals[3]	mg/L	Grab
Quarterly	Nitrate (as N)	mg/L	Grab
Quarterly	Ammonia (as N)	mg/L	Grab
Quarterly	Total Kjeldahl Nitrogen	mg/L	Grab

Frequency	Constituent/Parameter	Units	Sample Type
Quarterly	Total Nitrogen	mg/L	Calculated
Quarterly	Iron[4]	mg/L	Grab
Quarterly	Manganese[4]	mg/L	Grab
Quarterly	Arsenic[4]	mg/L	Grab
Quarterly	Total Organic Carbon	mg/L	Grab

1 To the nearest tenth of a foot.
2 Groundwater elevation shall be calculated based on depth-to-water measurements from a surveyed measuring point.
3 At a minimum the General Mineral analysis shall include alkalinity, bicarbonate, boron, calcium, carbonate, chloride, hardness, magnesium, potassium, phosphorus, sodium, sulfate, and a cation/anion balance..
4 Samples collected for metals analysis shall be filtered with a 0.45 micron filter prior to preservation, digestion, and analysis.

REPORTING

All monitoring results shall be tabulated and submitted in **Quarterly Monitoring Reports,** which shall be due by the first day of the second month after the calendar quarter. Therefore, monitoring reports are due as follows:

First Quarter Monitoring Report	**1 May**
Second Quarter Monitoring Report	**1 August**
Third Quarter Monitoring Report	**1 November**
Fourth Quarter Monitoring Report	**1 February**

The Discharger shall continue to submit electronic self-monitoring reports (eSMRs) using the State Water Board's California Integrated Water Quality System (CIWQS) Program web site (http://ciwqs.waterboards.ca.gov/). The Discharger shall maintain sufficient staffing and resources to ensure it submits eSMRs during the effective duration of this Order. This includes provision of training and supervision of individuals (e.g., Discharger personnel or consultant) on how to prepare and submit eSMRs. The CIWQS web site will provide additional directions for eSMR submittals in the event there will be service interruption.

The Discharger shall submit eSMRs in accordance with the following requirements:

1. When CIWQS does not provide for entry into a tabular format within the system, the Discharger shall electronically submit the data as an attachment under the Attachments tab.

2. Monitoring information shall include the applicable Reporting Limit (RL) or Practical Quantitation Limit (PQL) and the current Method Detection Limit (MDL). If the regulatory limit for a given constituent is less than the RL (or PQL), then any analytical results for that constituent that are below the RL (or PQL) but above the MDL shall be reported and flagged as estimated.

3. The Discharger shall attach all laboratory analysis sheets, including quality assurance/quality control information, with all its eSMRs for which sample analyses were performed.

4. The Discharger shall either attach or enter a cover letter with each eSMR submittal. The information contained in the cover letter shall clearly identify violations of the WDRs; discuss corrective actions taken or planned; and the proposed time schedule for corrective actions. Violations must also be entered into the CIWQS web site under the Violations tab for the reporting period in which the violation occurred.

5. eSMRs must be submitted to the Central Valley Water Board, signed and certified as required by the Standard Provisions, through the CIWQS web site.

All monitoring reports shall comply with the signatory requirements in Standard Provision B.3. For a Discharger conducting any of its own analyses, reports must also be signed and certified by the chief of the laboratory.

All monitoring reports that involve planning, investigation, evaluation, or design, or other work requiring interpretation and proper application of engineering or geologic sciences, shall be prepared by or under the direction of persons registered to practice in California pursuant to California Business and Professions Code sections 6735, 7835, and 7835.1.

A. All Quarterly Monitoring Reports, shall include the following:

Wastewater Reporting:

1. Tabulated results of effluent monitoring specified on page 2.
2. For each month of the quarter, calculation of the maximum daily and monthly average daily discharge flows to the percolation ponds.
3. For each month of the quarter, calculation of the 12-month rolling average EC of the discharge to the percolation ponds. The calculations shall be made using the EC values for the month averaged with the EC values for the previous 11 months.
4. A listing of any effluent violations identified during the quarter, and descriptions of actions taken or planned and a time schedule to bring the discharge back into compliance.

Pond Reporting:

1. For each quarter, the percolation ponds that are in use.
2. Results of the monitoring specified on pages 2 and 3 for each percolation pond in use.
3. A summary of the notations made in the Pond monitoring log. The entire contents of the log do not need to be submitted.

Groundwater Reporting:

1. The results of groundwater monitoring specified on pages 3 and 4. If there is insufficient water in the well(s) for sampling the monitoring well(s) shall be reported as dry for that quarter.
2. For each monitoring well, a table showing groundwater depth, elevation, and constituent concentrations for the five previous years, up through the current quarter.

3. A groundwater contour map based on groundwater elevations for that quarter. The map shall show the gradient and direction of groundwater flow. The map shall also include the locations of all monitoring wells and wastewater storage and/or disposal areas.

B. Fourth Quarter Monitoring Reports:

Facility Information:

1. The names and telephone numbers of persons to contact regarding the discharge for emergency and routine situations.
2. A statement certifying when the flow meter and other monitoring instruments and devices were last calibrated, including identification of who performed the calibrations (Standard Provision C.4).
3. A summary of any changes in processing that might affect waste characterization and/or discharge flow rates.

Wastewater Reporting:

1. A summary of tabulated results of effluent monitoring specified on page 2.
2. Calculation of the maximum daily flow, monthly average flow, and cumulative annual flow.

Solids Reporting

1. Annual production totals for solids (excluding trash and recyclables) in dry tons or cubic yards.
2. A description of disposal methods, including the following information related to the disposal methods used. If more than one method is used, include the percentage disposed of by each method.

    a. For landfill disposal, include: the name and location of the landfill, and the Order number of WDRs that regulate it.

    b. For land application, include: the location of the site (field identification), and the Order number of any WDRs that regulate it.

    c. For incineration, include: the name and location of the site where incineration occurs, the Order number of WDRs that regulate the site, the disposal method of ash, and the name and location of the facility receiving ash (if applicable).

    d. For composting, include: the location of the site, and the Order number of any WDRs that regulate it.

    e. For animal feed, include: the location of the site, and the Order number of any WDRs that regulate it.

Source Water Reporting

1. The results of annual monitoring for EC, TDS, and general minerals (if required) as specified on page 3. If multiple wells are used the Discharger, shall calculate the flow-weighted average concentrations for the specified constituents. Results must include supporting calculations, if required.

The Discharger shall implement the above monitoring program on the first day of the calendar quarter following adoption of this Order.

Original signed by:

Ordered by: _____
PAMELA C. CREEDON, Executive Officer

26 July 2013
(Date)

GLOSSARY

BOD_5	Five-day biochemical oxygen demand
CBOD	Carbonaceous BOD
DO	Dissolved oxygen
EC	Electrical conductivity at 25° C
FDS	Fixed dissolved solids
NTU	Nephelometric turbidity unit
TKN	Total Kjeldahl nitrogen
TDS	Total dissolved solids
TSS	Total suspended solids
Continuous	The specified parameter shall be measured by a meter continuously.
24-Hour Composite	Samples shall be a flow-proportioned composite consisting of at least eight aliquots.
Daily	Samples shall be collected every day.
Twice Weekly	Samples shall be collected at least twice per week on non-consecutive days.
Weekly	Samples shall be collected at least once per week.
Twice Monthly	Samples shall be collected at least twice per month during non-consecutive weeks.
Monthly	Samples shall be collected at least once per month.
Bimonthly	Samples shall be collected at least once every two months (i.e., six times per year) during non-consecutive months.
Quarterly	Samples shall be collected at least once per calendar quarter. Unless otherwise specified or approved, samples shall be collected in January, April, July, and October.
Semiannually	Samples shall be collected at least once every six months (i.e., two times per year). Unless otherwise specified or approved, samples shall be collected in April and October.
Annually	Samples shall be collected at least once per year. Unless otherwise specified or approved, samples shall be collected in October.
mg/L	Milligrams per liter
mL/L	Milliliters [of solids] per liter
ug/L	Micrograms per liter
umhos/cm	Micromhos per centimeter
mgd	Million gallons per day
MPN/100 mL	Most probable number [of organisms] per 100 milliliters
General Minerals	Analysis for General Minerals shall include at least the following:

Alkalinity	Carbonate	Phosphorus
Bicarbonate	Chloride	Potassium
Boron	Hardness	Sodium
Calcium	Magnesium	Sulfate

General Minerals analyses shall be accompanied by documentation of cation/anion balance.

INFORMATION SHEET

INFORMATION SHEET - ORDER R5-2013-0109
CALIFORNIA DAIRIES, INC.
TIPTON MILK PROCESSING FACILITY
TULARE COUNTY

Background

California Dairies, Inc., (CDI or Discharger) is a milk marketing cooperative formed in 1999, which combined and merged California Milk Producers, Danish Creamery Association, and San Joaquin Valley Dairyman. The Discharger operates a milk processing facility (Facility) near Tipton in Tulare County, where it processes raw milk into milk powder, butter, cream, skim milk, condensed milk, and ultra-filtered whole and skim milk concentrates. The Facility began operation in 1994, processing approximately three million pounds of fluid milk per day. Over the years the Facility has expanded its operation. Current processing capacity at the Facility is approximately 10 million pounds of fluid milk per day.

On 31 July 2008, the Discharger was issued a Cease and Desist Order (CDO) R5-2008-0113. The CDO required the Discharger to cease discharging wastes in violation and threatened violation of Waste Discharge Requirements (WDRs) Order R5-2008-0114 and set a time schedule and tasks to implement proposed upgrades and modifications at its Facility to reduce salinity and increase treatment capacity. The Discharger has since completed the tasks required in the CDO. CDO R5-2008-0113 will be rescinded by a separate Order.

The Facility is currently regulated by WDRs Order R5-2008-0114, National Pollutant Discharge Elimination System (NPDES) Permit No. CA0082805, which authorizes the discharge of treated wastewater to percolation ponds and to surface water. This Order will expire on 31 July 2013.

On 25 February 2013, the Discharger submitted a Report of Waste Discharge (RWD) and technical report to revise WDRs for the Facility. The RWD addresses operational changes at the Facility completed in response to the requirements of CDO R5-2008-0113, including upgrades and modifications to its Wastewater Treatment System to increase treatment capacity and reduce the salinity of the discharge. The RWD also addresses changes to its wastewater disposal options, specifically cessation of discharge to surface waters starting in May of 2009.

Existing Plant and Discharge

The Facility receives fluid whole milk from its member dairies in Tulare, Kings, Kern, and Fresno Counties. Milk received at the Facility is transferred into stainless steel storage silos. The raw milk is then separated into cream, and skim milk. The cream is pasteurized, stored in silos and either shipped out as cream or churned to create butter. The butter is packaged in bulk containers and placed in cold storage prior to shipment. Skim milk and other fluid milk are processed through evaporators to produce condensed milk products such as dry powdered milk. Condensate from the milk evaporators is cooled and condensed forming “COW” water. COW water is then stored and reused throughout the Facility wherever possible as makeup or equipment wash down water. COW water is low in organics and salinity with an EC of 5 to 50 umhos/cm and a BOD of less than 5 mg/L. Excess COW water not reused within the Facility is discharged to the Wastewater Treatment System and blended with higher strength wastewater.

The Facility has two waste streams. The first (Waste Stream 1) consists of COW water, condensate, and “clear water” streams including boiler blow down, cooling tower blow down, vacuum pump seal

water, final flushes, and other waste streams that do not contain large concentrations of organic matter. Brine generated from the Facility's two water softeners is included with the boiler blow down. The second (Waste Stream 2) consists of process wastewater, which includes wash water from the clean-in-place system, and milk product spillage.

The Wastewater Treatment System for the Facility consists of a pond system, with a series of four aerated treatment ponds (Ponds A, B, 1A, and 1B), three partial-mix facultative treatment ponds (Ponds 2A, 2B, and 2C), and seven percolation ponds (Ponds 3 through 9). The aerated and facultative treatment ponds are lined with 60 mil high-density polyethylene (HDPE) liners over an engineered subgrade.

Process wastewater (Waste Stream 2) is collected and routed to a pump station. High salinity waste streams are diverted to equalization tanks for the Mechanical Vapor Recompression Evaporator System (wastewater evaporators). The wastewater evaporators treat the wastewater by evaporating and then condensing the wastewater. The resulting low salinity condensate is returned to the waste stream. Concentrated brine from the wastewater evaporators is transported to the East Bay Metropolitan Utility District for further treatment and disposal.

Process wastewater not diverted to the wastewater evaporators is directed through a splitter box to the aerated treatment ponds and then into the first of the three facultative treatment ponds (Pond 2A) operated in series. Pond 2A is where the "clear water" discharges (Waste Stream 1) including excess COW water and condensate from the wastewater evaporators normally enters the waste stream, though they can also be added at Ponds 2B and 2C as well. After treatment the wastewater is discharged into one of seven percolation ponds. The percolation ponds have a combined capacity of about 64 million gallons operating with two feet of freeboard. Discharge to the ponds is rotated to allow sufficient loading and resting cycles to enhance nitrification and denitrification in the soil. In addition, the rotation provides sufficient resting periods to dry the bottom of the ponds so that they can be tilled or ripped to remove surface sealing.

Groundwater Conditions

The Facility is on the floor of the San Joaquin Valley in the southern portion of Tulare County. Surface topography slopes gently to the southwest with surface elevations at the site ranging from 270 to 275 feet above mean sea level. According to Department of Water Resources Groundwater Elevation Maps (Spring 2010), first-encountered groundwater in the vicinity of the site occurs in an unconfined aquifer at about 140 to 160 feet below ground surface (bgs), and flows to the southwest.

In 2006, the Discharger installed three monitoring wells (MW-1 through MW-3) at the site. The monitoring wells were completed to depths of 160 to 168 feet bgs. Monitoring well MW-1 was installed to the southeast of the treatment ponds, and monitoring wells MW-2 and MW-3 were installed immediately adjacent to percolation ponds 3 and 4. In 2010 three additional monitoring wells (MW-4 through MW-6) were installed at the site to expand the monitoring well network. Monitoring wells MW-4 and MW-5 were installed up-gradient of the Facility and the percolation ponds, while monitoring well MW-6 was installed along the southern boundary of the Facility down-gradient of the treatment and percolation ponds.

The following table presents groundwater data for monitoring wells MW-1 through MW-6:

Constituent/Parameter	MW-1[1]	MW-2[1]	MW-3[1]	MW-4[2]	MW-5[2]	MW-6[2]
pH	7.5	7.0	7.2	7.7	7.7	7.2
EC (umhos/cm)	444	856	840	168	251	776
TDS (mg/L)	266	500	488	106	156	456
Alkalinity (mg/L)	197	476	456	88	118	398
Nitrate as N (mg/L)	5.1	2	2	0.7	2	4
Ammonia as N (mg/L)	0.4	0.4	0.3	<0.2	<0.2	<0.2
Calcium (mg/L)	55	94	82	24	33	91
Magnesium (mg/L)	7.9	14	13	2.8	4.4	12
Sodium (mg/L)	31	84	92	7.3	12	63
Chloride (mg/L)	16	33	36	2.9	7.5	33
Sulfate (mg/L)	17	10	9.3	2	5.5	7.1
Iron (mg/L)	0.12	0.3	0.34	0.13	0.16	0.09
Manganese (mg/L)	0.02	0.01	0.07	0.01	<0.01	<0.01
Arsenic (mg/L)	0.004	0.003	0.004	0.004	0.003	0.003
Total Organic Carbon (mg/L)	2	1.2	1.6	1.1	0.5	0.6

1. Average constituent concentrations from May 2006 through May 2012.
2. Average constituent concentrations from July 2010 through May 2012.

Groundwater data from up-gradient monitoring wells MW-4 and MW-5 indicates that the groundwater in the area is of good quality with respect to salinity and nitrates.

Groundwater down-gradient of the percolation ponds shows some degradation with respect for salinity. Average EC and TDS concentrations in down-gradient wells at 776 to 856 umhos/cm and 456 to 500 mg/L, respectively are significantly higher than up-gradient monitoring wells, though, they are still below the lower recommended secondary Maximum Contaminant Levels (MCLs) for EC and TDS of 900 umhos/cm and 500 mg/L. Sodium and chloride concentrations in down-gradient monitoring wells MW-2, MW-3, and MW-6 are also elevated above background levels at concentrations ranging from 63 to 94 mg/L and 33 to 36 mg/L, respectively. This degradation appears to be the result of the previous discharge of high salinity wastewater to unlined ponds at the Facility. The Discharger has since implemented several measures which have reduced the salinity of the discharge. Since 2010, the average EC of the discharge at 445 umhos/cm is less than groundwater quality down-gradient of the percolation ponds and significantly less than previous discharges to the unlined ponds which ranged from about 1,158 to 2,769 umhos/cm.

Monitoring wells MW-2 and MW-3 immediately adjacent to percolation ponds 3 and 4 show iron concentrations just at or slightly above the secondary MCL of 0.3 mg/L. However manganese and arsenic concentrations remain similar to background, and data from MW-6 shows that iron concentrations quickly return to background levels as groundwater moves away from the ponds.

Basin Plan, Beneficial Uses, and Regulatory Considerations

The Facility lies within the Tule Delta Hydrologic Area (558.20) of the South Valley Floor Hydrologic Unit. Local drainage is to the Tule River.

The *Water Quality Control Plan for the Tulare Lake Basin, Second Edition*, revised January 2004 (Basin Plan) designates beneficial uses, establishes narrative and numerical water quality objectives, and contains implementation plans and policies for protecting all waters of the Basin. Beneficial uses often determine the water quality objectives that apply to a water body. The receiving water for this discharge is groundwater. The beneficial uses of groundwater in the area include municipal and domestic supply (MUN), agricultural supply (AGR), industrial process supply (PRO), industrial service supply (IND), and wildlife habitat (WILD).

The Basin Plan identifies the greatest long-term water quality problem facing the entire Tulare Lake Basin is increasing salinity in groundwater, a process accelerated by man's activities and particularly affected by intensive irrigated agriculture. The Basin Plan recognizes that degradation is unavoidable until there is a long-term solution to the salt imbalance. Until then, the Basin Plan establishes several salt management requirements, including the following discharge limits:

a. The incremental increase in salts from use and treatment must be controlled to the extent possible. The maximum EC of the effluent discharged to land shall not exceed the EC of the source water plus 500 umhos/cm. When the source water is from more than one source, the EC shall be a weighted average of all sources.

b. Discharges to areas what may recharge good quality groundwater shall not exceed and EC of 1,000 umhos/cm, a chloride content of 175 mg/L, or boron content of 1.0 mg/L

Antidegradation

State Water Resources Control Board Resolution 68-16 requires the regional water boards to maintain high quality waters of the State until it is demonstrated that any change in quality will not result in water quality less than that described in State and Regional Water Board policies or exceed water quality objectives, will not unreasonably affect beneficial uses and is consistent with the maximum benefit to the people of the State.

Constituents of concern in the discharge (those with the greatest potential to affect beneficial uses) include nitrogen and salts. However, the discharge is not expected to cause groundwater to exceed water quality objectives because:

a. For nitrogen, groundwater data shows nitrate concentrations up-gradient of the Facility ranging from 0.2 to 2.4 mg/L. With an average total nitrogen concentration of about 18 mg/L, the discharge has the potential to degrade groundwater with respect to nitrates. An antidegradation analysis prepared by Kennedy/Jenks Consultants, evaluated the migration of nitrates through the vadose zone beneath the percolation ponds. Given the nitrogen losses in the ponds as the effluent percolates through the soil, the model projects that nitrate concentrations in the effluent reaching groundwater will be less than 10 mg/L. Recent groundwater data appears to corroborate the model findings.

   To protect the MUN beneficial use, the Groundwater Limitations in this Order will proscribe the discharge from increasing nitrate (as N) concentrations in groundwater above 10 mg/L.

b. For salinity in general, the Basin Plan includes effluent EC limits of 500 umhos/cm plus source water or a maximum of 1,000 umhos/cm for discharges to areas overlying good quality groundwater. As the Tulare Lake Basin is a closed basin, these limits are designed to control

the rate of groundwater degradation with respect to salinity. With an average source water EC of about 214 umhos/cm, the average effluent EC of 445 umhos/cm meets the Basin Plan limits.

EC and TDS concentrations in groundwater up-gradient of the site range from about 150 to 300 umhos/cm and 80 to 200 mg/L, respectively. Given that the average EC and TDS of the effluent is about 445 umhos/cm and 297 mg/L, the discharge has the potential to degrade groundwater. As discussed previously, groundwater down-gradient of the Facility has already been degraded as a result of past discharges at the Facility. The Discharger has since implemented several measures which have reduced the salinity of the discharge.

A Groundwater Model prepared for the antidegradation analysis, provided in the RWD, evaluated the potential groundwater degradation for salinity over time with respect to the existing degradation and continued discharge of process wastewater to the unlined percolation ponds. The Groundwater Model projects that within about two to three years the existing groundwater degradation will improve, and that EC levels beneath the Facility will be less than 700 umhos/cm, which will meet the most stringent water quality goal for protection of agricultural beneficial uses. The Model further projects that within the next 8- to 12-years the salt plume beneath the Facility will stabilize, with an EC similar to effluent water quality. The discharge is not expected to cause groundwater degradation that exceeds water quality objectives.

c. Concentrations of sodium and chloride in groundwater up gradient of the Facility are about 10.6 mg/L and 7.8 mg/L, respectively. Given the average sodium and chloride of the effluent is about 40 mg/L and 26 mg/L, the discharge has the potential to degrade groundwater for these constituents.

There are currently no numeric standards in the Basin Plan for protecting groundwater for agricultural beneficial uses. Interpretation of narrative water quality standards is done on a case-by-case basis. The most stringent water quality goal for sodium and chloride are the agricultural water quality goals of 69 mg/L and 106 mg/L, respectively for protection of salt sensitive crops based on Ayers and Westcot's *Water Quality for Agriculture*. Given the average effluent concentrations of 40 mg/L for sodium and 26 mg/L for chloride, the discharge is not expected to cause groundwater to exceed these water quality goals.

Two down-gradient monitoring wells MW-2 and MW-3 contain sodium in excess of 69 mg/L, as a result of past discharges at the Facility. However, implementation of salinity reduction measures at the Facility, including the substitution of potassium hydroxide for sodium hydroxide in certain cleaning processes, has reduced the concentration of sodium in the discharge and should prevent further degradation of groundwater for sodium.

This Order does authorize some limited degradation of groundwater for nitrates and salinity, but the degradation is not anticipated to result in water quality less than water quality objectives or unreasonably affect beneficial uses.

The Discharger employs treatment and control measures that includes: (a) treatment, including aeration and partial-mixing of the wastewater to reduce BOD and remove solids, (b) lining of the treatment ponds, (c) re-circulating of wastewater and operation of a DAF system to increase BOD and nitrogen removal, (d) minimizing the use of cleaning chemicals and substituting potassium hydroxide for sodium hydroxide to decrease the salt load in the wastewater, (e) expansion of the caustic

recovery system to reduce the amount of salt added to the wastewater, (f) operation of wastewater evaporators to treat high salinity waste streams, (g) blending of lower salinity wastewater with higher strength wastewater to reduce the salinity of the discharge to the percolation ponds, and (h) removal of concentrated brine from the wastewater evaporators for off-site treatment and disposal.

Economic prosperity of valley communities and associated industry is of maximum benefit to the people of the State and, therefore, sufficient reason exists to accommodate growth and limited groundwater degradation around the Facility, provided that the terms of the Basin Plan are met. The Discharger aids in the economic prosperity of the region by direct employment of about 126 employees, making it the largest employer in the Pixley area. The Facility also provides additional benefits to California and Tulare County by providing a market for local suppliers, farmers, truckers, and dairymen in the area as well as providing a tax base for local and county governments.

This Order is consistent with the Antidegradation Policy in that the Discharger has implemented BPTC to minimize degradation, the limited degradation allowed by this Order will not unreasonably affect present and future beneficial uses, or result in water quality less than water quality objectives, and the limited degradation is of maximum benefit to people of the State.

CEQA

On 17 March 1991, Tulare County, in accordance with the California Environmental Quality Act (CEQA) (Pub. Resources Code, § 21000 et seq.) adopted a Negative Declaration for construction and operation of a Milk Processing Facility near Tipton with discharge of wastewater to unlined ponds and to an adjacent irrigation canal to supplement irrigation water. Central Valley Water Board staff reviewed the Negative Declaration and found compliance with Waste Discharge Requirements would prevent and/or mitigate adverse impacts to water quality.

On 10 July 2008, Tulare County adopted a Negative Declaration in conjunction with a Special Use Permit (PSP 06-033) for expansion of the existing wastewater treatment system and addition of five retention ponds for the existing Tipton Milk Processing Facility. The Negative Declaration found that the project, as proposed would not have a significant effect on the environment. Central Valley Water Board staff commented on the Negative Declaration and requested additional details on pond designs and liner specifications, wastewater quality, soil types, and a demonstration on how the ponds will comply with the antidegradation policy. The Discharger submitted this information to the Central Valley Water Board separately.

Title 27

Unless exempt, the release of designated waste is subject to full containment pursuant to Title 27 requirements. Here, the discharge is exempt from the requirements of Title 27 pursuant to the wastewater exemptions found at Title 27, sections 20090(b), since:

a. The Central Valley Water Board is issuing WDRs;
b. The discharge is in compliance with the Basin Plan; and
c. The treated effluent does not need to be managed as hazardous waste.

Proposed Order Terms and Conditions

Discharge Prohibitions, Specifications and Provisions

The proposed Order prohibits discharge to surface waters and drainage courses. The proposed Order sets a maximum daily flow limit of 3.1 mgd and a monthly average flow limit of 1.3 mgd for discharges to the percolation ponds. The proposed Order includes effluent limits for pH, EC, chloride, and boron. The proposed Order also includes an effluent limit for BOD_5 of 40 mg/L as a monthly average and 80 mg/L as a daily maximum carried over from the previous Order to ensure proper operation of the Wastewater Treatment System to remove organics consistent with industry standards for secondary treatment with discharge to unlined ponds.

The proposed Order requires monitoring of the discharge for BOD, nitrate, TKN, ammonia, total dissolved solids and general minerals. The Order also requires weekly inspections of the percolation ponds as well as weekly monitoring for dissolve oxygen, and freeboard within the ponds that are in use. In addition, the proposed Order includes a provision that requires the Discharger to periodically report on efforts to promote recycling and beneficial reuse of its wastewater.

The proposed Order would prescribe groundwater limitations that implement water quality objectives for groundwater from the Basin Plan. The limitations require that the discharge not cause or contribute to exceedances of these objectives or natural background water quality, whichever is greater. The proposed Order sets a groundwater limit for nitrate at the Primary MCL of 10 mg/L.

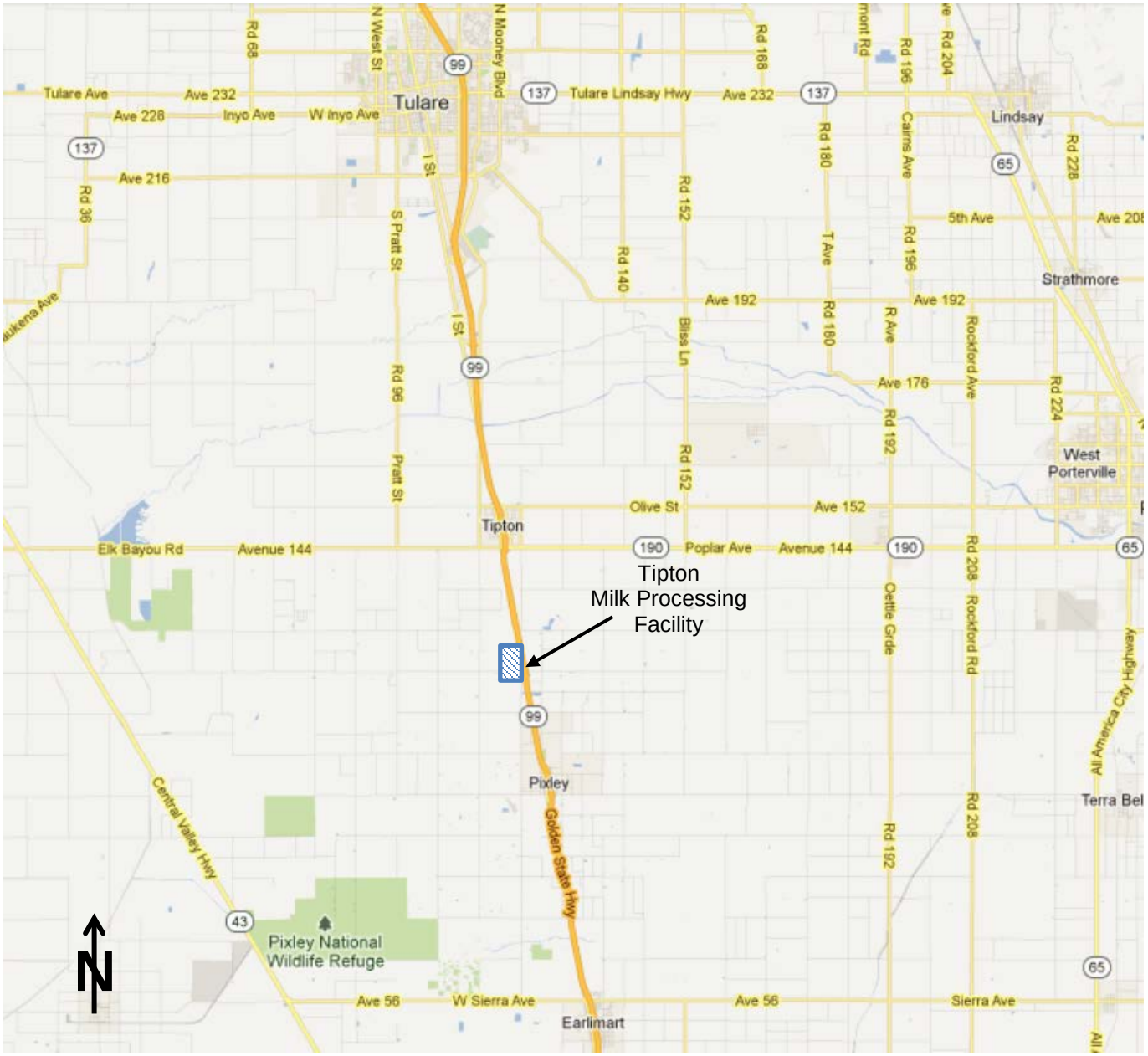
Monitoring Requirements

Water Code section 13267 authorizes the Central Valley Water Board to require monitoring and technical reports as necessary to investigate the impact of a waste discharge on waters of the State. In recent years there has been increased emphasis on obtaining all necessary information, assuring the information is timely as well as representative and accurate, and thereby improving accountability of any discharger for meeting the conditions of discharge. Water Code section 13268 authorizes the assessment of administrative civil liability where appropriate. The proposed Order includes effluent and pond monitoring requirements. In addition, the proposed Order requires groundwater monitoring in and around the treatment and percolation ponds. This monitoring is necessary to characterize the discharge, and evaluate compliance with effluent limitations and discharge specifications prescribed in the Order.

The Discharger currently submits electronic self-monitoring data (eSMRs) using the State Water Board's California Integrated Water Quality System (CIWQS), as required under its NPDES Permit. The proposed Order will continue the requirement for the Discharger to submit its self-monitoring data electronically as part of its MRP.

Reopener

The conditions of discharge in the proposed Order were developed based on currently available technical information and applicable water quality laws, regulations, policies, and plans, and are intended to assure conformance with them. It may be appropriate to reopen the Order if new technical information is provided or if applicable laws and regulations change.



LOCATION MAP

WASTE DISCHARGE REQUIREMENTS ORDER R5-2013-0109
FOR
CALIFORNIA DAIRIES, INC.
TIPTON MILK PROCESSING FACILITY
TULARE COUNTY

ATTACHMENT A

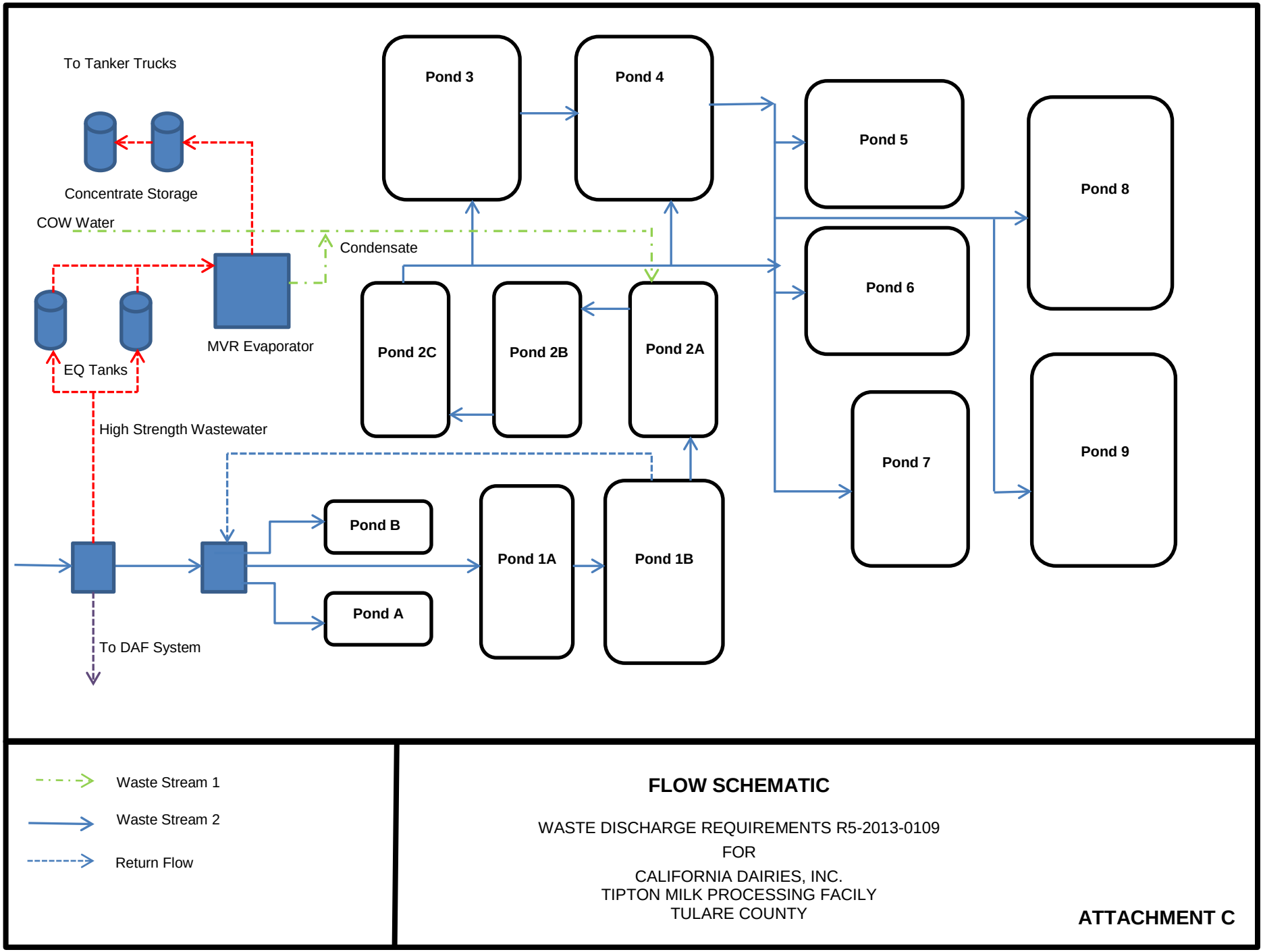
FACILITY MAP

WASTE DISCHARGE REQUIREMENTS ORDER R5-2013-0109

FOR

CALIFORNIA DAIRIES, INC.
TIPTON MILK PROCESSING FACILITY
TULARE COUNTY

ATTACHMENT B



FLOW SCHEMATIC

WASTE DISCHARGE REQUIREMENTS R5-2013-0109

FOR

CALIFORNIA DAIRIES, INC.
TIPTON MILK PROCESSING FACILY
TULARE COUNTY

ATTACHMENT C