

The proposed amendments contained in this Attachment A reflect only portions of Order No. R1-2008-0020 which contain changes, modifications, or amendments. Where unchanged, the text and tables have not been presented in their entirety in order to reflect these items in a brief summary form.

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ORDER NO. R1-2008-0020
(Revised January 29, 2009)
NPDES NO. CA0005584
WDID NO. 1B80185OHUM

Table 2. Discharge Location

Discharge Point	Effluent Description	Discharge Point Latitude	Discharge Point Longitude	Receiving Water
004	Condensate and Non-Contact Cooling Water	40' 36" 53"N	124° 12' 09" W	Groundwater

Table 3. Administrative Information

This Order was adopted by the Regional Water Quality Control Board on:	January 29, 2009
This Order shall become effective on:	March 1, 2009
This Order shall expire on:	March 1, 2014
The Discharger shall file a Report of Waste Discharge in accordance with title 23, California Code of Regulations, as application for issuance of new waste discharge requirements no later than:	180 days prior to the Order expiration date (September 2, 2013)

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IT IS HEREBY ORDERED, that [Order No. R1-2008-0020](#) is amended upon the effective date specified in Table 3. This action in no way prevents the Regional Water Board from taking any enforcement action for past violations of the previous permit. If any part of this Order is subject to a temporary stay of enforcement, unless otherwise specified, the discharger shall comply with the analogous portions of Order No. R1-2002-0041, which shall remain in effect for all purposes during the pendency of the stay.

Deleted: this Order supersedes Order No. R1-2002-0041

I, Catherine Kuhlman Executive Officer, do hereby certify that this Order with all attachments is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, North Coast Region, on [January 29, 2009](#).

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B. Facility Description.

Between October 1st and May 15th each year, condensate from the dry condensed milk manufacturing process and non-contact cooling water may be discharged directly from the Facility at Discharge point SN002 (see table on cover page) to the Eel River, a water of the United States, within Ferndale hydrologic subarea of the Eel River watershed. Alternatively, throughout the year, the condensate from the dry condensed milk and non-contact cooling water may be discharged directly by irrigation from Discharge Point SN004 or treated with the rest of the process wastewater generated at the Facility. The treated process wastewater is discharged from Discharge Point SN001 via irrigation to approximately 150 acres of grazed pasture land adjacent to the facility and bordering the Eel River.

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Table 5. Basin Plan Beneficial Uses

Discharge Point	Receiving Water Name	Beneficial Use(s)
SN001, SN003, and SN004	Groundwater	Existing: MUN – Municipal and Domestic Supply IND – Industrial Water Supply PRO – Industrial Process Supply AGR – Agricultural Supply FRSH – Freshwater replenishment to Surface Waters

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B. Land Discharge Specifications – Discharge Points SN 001 and SN 004

1. Final Effluent Limitations – Discharge Points SN 001 and SN 004

The Discharger shall maintain compliance with the following effluent limitations at Discharge Point SN 001 and Discharge Point SN004, with compliance measured at Monitoring Location LND-001 as described in the attached MRP:

2. Interim Effluent Limitations Discharge Point SN 001¹

Footnote 1: ¹ Available data indicates the discharges from SN 004 are not likely to exceed final effluent limitations. Therefore, interim limitations apply only to SN 001.

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c. Facility Capacity Evaluation

The Discharger shall prepare and submit for Regional Water Board staff approval a workplan to conduct an engineering evaluation to determine the hydraulic and biological treatment capacity of the collection, treatment, and disposal facilities associated with Discharge Points SN001, SN002, and SN004.

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- i. By **June 1, 2009**, submit a workplan for a treatment capacity study. The workplan shall be of sufficient scope to provide technical demonstration that current and future waste discharge flows are and will be in compliance with this Order and shall include, but not be limited to the following:

- (a) The maximum flow that can pass through each system while still achieving permit limitations;
- (b) Capability of the WWTF to treat industrial waste streams currently entering the plant as well as those that may enter the plant in the foreseeable future;
- (c) The workplan proposal shall contain milestones and a time schedule for completion of the study. The study time schedule shall be as short as practicable, and in no case, extend beyond two years following the effective date of this Order. The study time schedule should also include provision for the submittal of semi-annual progress reports.

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- ii. By **June 1, 2011**, submit a report describing the findings and conclusions of the capacity study that documents the hydraulic and treatment capacity of the SN001, SN002, and SN004 systems. In addition, the report shall identify tasks and an associated schedule to address any shortcomings identified during the study. The report should include all pertinent information from monitoring, literature searches, engineering study, etc.

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d. Compliance Schedule

During the term of this Order, the Discharger shall complete the following tasks for sodium and total dissolved solids and in compliance with the following time schedule to achieve compliance with the final effluent limitations for sodium and total dissolved solids in Section IV.B.1. of this Order by December 1, 2010..

- i. No later than **February 1, 2009**, submit for Regional Water Board staff's approval, a workplan for the evaluation of sodium and total dissolved solids generation, treatment, and effluent concentrations associated with SN001 (LND-001). At a minimum the workplan proposal shall address:
 - (a) Supplemental sample collection;
 - (b) Source identification and source control methodology including review of vendor product data, evaluation of treatment plant processes, and optimization of processes wherever possible;
 - (c) Data evaluation and summary reporting regarding the Humboldt Creamery's ability to achieve final effluent limitations.
 - (d) A time schedule for data collection, evaluation, and reporting.

- ii. If source control efforts do not result in compliance with final effluent limitations for LND-002 the Discharger shall submit, **by February 1, 2010**, for Regional Water Board staff's approval, an implementation plan to achieve compliance with the final effluent limitations for sodium and total dissolved solids.

- iii. By **December 1, 2010**, comply with final LND-001 effluent limitations for sodium and total dissolved solids.

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Figure 3 - Process DiagramSN002

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Figure 4 - Process Diagram SN001

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Table E-1. Monitoring Station Locations

Discharge Point	Monitoring Location	Monitoring Location Description
BOD ₅ Input	INF-002	Biological oxygen demand of the materials entered into the evaporated milk process
SN002	EFF-002	Effluent from non-contact cooling water and evaporative condensate processes, and before contact with Eel River receiving water
SN001	LND-001	Treated wastewater downstream of the settling pond, and before discharge to land irrigation disposal system
SN004	LND-004	Effluent from non-contact cooling water and evaporative condensate processes, and before discharge to land irrigation disposal system
Receiving Water	GWR-1 ¹	Groundwater within the influence of the land disposal irrigation system
Receiving Water	GWR-2 ⁷	Groundwater outside the influence of the land disposal irrigation system representing background conditions
Receiving Water	GWR-3 ⁷	Groundwater within the influence of the land disposal irrigation system
Receiving Water	GWR-4 ⁷	Groundwater within the influence of the land disposal irrigation system
Receiving Water	GWR-5 ⁷	Groundwater within the influence of the land disposal irrigation system
Receiving Water	SWR-001	Eel River surface water upstream of the Humboldt Creamery Facility, beyond influence of any discharge
Receiving Water	SWR-002	Eel River surface water at the point of EFF-002 discharge or other approved location

¹ This monitoring location refers to the numerically similar groundwater monitoring location previously sampled for data submitted in conjunction with the report of waste discharge. Alternative permanent monitoring locations may be substituted upon approval of the Executive Officer.

Discharge Point	Monitoring Location	Monitoring Location Description
Internal Process Function	INT-North ²	Septic system effluent within the north leachfield
Internal Process Function	INT-South ²	Septic system effluent within the south leachfield
Receiving Water	GWR-North ³	Groundwater beneath the north leachfield
Receiving Water	GWR-South	Groundwater beneath the south leachfield

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VI. LAND DISCHARGE MONITORING REQUIREMENTS

A. Monitoring Locations LND-001 and LND-004

1. The Discharger shall monitor treated wastewater downstream of the settling pond at LND-001 and non-contact cooling water and evaporative condensate process water at LND-004 as follows:

Table E-4. Effluent Monitoring Locations LND-001 and LND-004

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Biochemical Oxygen Demand ⁴	mg/L	24-hr Composite	Monthly	Standard Method 5210B
Ammonia Nitrogen	mg/L	24-hr Composite	Monthly	title 40, section 136
Nitrite Nitrogen	mg/L	24-hr Composite	Monthly	title 40, section 136
Nitrate Nitrogen	mg/L	24-hr Composite	Monthly	title 40, section 136
Total Dissolved Solids	mg/L	24-hr Composite	Monthly	Standard Method 2540C
Sodium	µg/L	24-hr Composite	Monthly	ICPMS ⁵
Aluminum	µg/L	24-hr Composite	Monthly	ICPMS
Manganese	µg/L	24-hr Composite	Monthly	ICPMS
Visual Observations	---	---	Daily	Visual

² This monitoring location refers to the three foot deep piezometer location installed within the corresponding leachfield to measure function of the leachfield trench distribution system.

³ This monitoring location refers to the nine foot deep monitoring well location installed within the corresponding leachfield to measure groundwater beneath the leachfield trench distribution system.

⁴ Biochemical Oxygen Demand 5-Day @ 20°C (BOD₅)

⁵ Inductively Coupled Plasma/Mass Spectrometry

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Table E-7. Receiving Water Monitoring Requirements – GWR-001 - GWR-005

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Depth to Groundwater	0.01 feet	Grab	Quarterly	Measurement

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Table E-8. Monitoring Requirements – INT-North, INT-South, GWR-North, GWR-South

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Depth to Groundwater	0.01 feet	Grab	Quarterly	Measurement

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Table 1. Facility Information

Land Disposal Permitted Flow SN001 and SN004	Combined Average 249,000 gpd; Combined Maximum 450,000 gpd
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C. The Discharger filed a report of waste discharge and submitted an application for renewal of its Waste Discharge Requirements (WDRs) and National Pollutant Discharge Elimination System (NPDES) permit on October 10, 2006. Supplemental information was requested on May 29, 2008 and received on June 3, 2008. A site visit was conducted on April 10, 2008 to observe operations and collect additional data to develop permit limitations and conditions. Order No. R1-2008-0020 was adopted on September 11, 2008. During the public hearing on September 11, 2008, the Regional Water Board recognized the Discharger's desire for modifications to discharge and monitoring locations. These modifications address a separate land discharge and monitoring location associated with condensate from the dry condensed milk process, and non-contact cooling water. The Discharger submitted a revised application for renewal of WDRs on October 21, 2008.

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B. Discharge Points and Receiving Waters

Between October 1st and May 15th each year, condensate from the dry condensed milk manufacturing process and non-contact cooling water may be discharged directly from the Facility at Discharge point SN002 to the Eel River, a water of the United States, within Ferndale hydrologic subarea of the Eel River watershed. Alternatively, the condensate from the dry condensed milk and non-contact cooling water may be discharged directly via irrigation at Discharge Point SN004 or treated with the rest of the process wastewater generated at the Facility. The treated process wastewater is discharged from Discharge Point SN001 via irrigation to approximately 150 acres of

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grazed pasture land adjacent to the facility and bordering the Eel River. Recognition of Discharge Point SN004 allows the Discharger to divert condensate from the dry condensed milk and non-contact cooling water away from the rest of the process wastewater generated at the Facility, but does not allow any increase or alteration in the overall Facility's waste discharge.

Between May 16th and September 30th each year, the condensate from the dry condensed milk and non-contact cooling water cannot be discharged to the Eel River and must either be discharged directly via irrigation at Discharge Point SN004 or treated with the rest of the process wastewater generated at the Facility. The treated process wastewater is discharged from Discharge Point SN001 via irrigation to approximately 150 acres of grazed pasture land adjacent to the facility and bordering the Eel River.

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Table 3. Basin Plan Beneficial Uses

Beneficial Use (s)	Receiving Water Name Discharge Points	
	Eel River	Groundwater
	002	001, 004
Municipal and Domestic Water Supply (MUN)	E	E
Agricultural Supply (AGR)	E	E
Industrial Service Supply (IND)	E	E
Industrial Process Supply (PRO)	P	P
Groundwater Recharge (GWR)	E	
Freshwater Replenishment (FRESH)	E	
Navigation (NAV)	E	
Hydropower Generation (POW)	P	
Water Contact Recreation (REC-1)	E	
Non-contact Water Recreation (REC-2)	E	
Commercial and Sport fishing (COMM)	E	
Cold Freshwater Habitat (COLD)	E	
Wildlife Habitat (WILD)	E	
Preservation of Rare, Threatened or Endangered Species (RARE)	E	
Marine Habitat (MAR)	P	
Migration of Aquatic Organisms (MIGR)	E	
Spawning, Reproduction, and/or Early Development (SPWN)	E	
Shellfish Harvesting (SHELL)	E	
Estuarine habitat (EST)	E	
Aquaculture (AQUA)	P	P
Native American Culture (CUL)	E	E
Subsistence Fishing (FISH)	E	

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Table 7. Summary of Final Effluent Limitations – Discharge Points SN001 and SN004

Parameter	Units	Effluent Limitations
		Average Monthly
Biochemical Oxygen Demand	lbs/ac/day	60
Ammonia Nitrogen	mg/L	1.5
Nitrite	mg/L	1.0
Nitrate	mg/L	10
Total Dissolved Solids	mg/L	450
Sodium	ug/L	60,000
Aluminum	ug/L	1,000
Manganese	ug/L	200

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4. Monthly monitoring requirements at LND-001 and LND-004 have been established for biological oxygen demand, ammonia nitrogen, nitrite, nitrate, total dissolved solids, sodium, aluminum, and manganese to assess compliance with newly established effluent limitations.